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**A SURVEY OF EMPLOYMENT TRENDS IN CATTLE RAISING  
FARMS**

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## **INTRODUCTION**

Every branch of production thus agriculture over the years of economic and social changes has attempted to find the opportunities brought about the changed circumstances to exploit them, its existing resources in order to maintain its competitiveness in the long run. Hungarian agriculture within a complex and complicated market economy has lost its significance traditionally represented for long. Its role in the national economy has gradually decreased together with its position in employment.

Cattle raising has always had a major part in domestic agriculture, and in food supply. It provides cultivation with indispensable organic farmyard manure, uses stringy fodder and due to permanent production and revenues/ income ensures financial stability for the agriculture compared to husbandry requires major investments and is rather inflexible considering technological changes.

Human resources manifested by daily work done by employees in cattle raising farms can significantly influence and change the use of other resources, thus efficiency, successful production -that is economic competitiveness.

Attitude towards work depends on many factors such as economic, psychological and sociological.

When speaking about the employment in cattle raising farms one must consider who the employees are, what the employers' circumstances are, what the aim of employment is, what the content of the employment is, and what the sectoral and individual prospects are like. This way we can analyse the reasons and future trends.

Demand and supply make up the labour market. In this special market organizations and companies, the cattle raising farms stand as demand side. Their demand for labour is usually specific for certain jobs in given circumstances with specific scope of activities.

Supply is represented by those employees who at the given time and place in the given job for a certain disbursement are willing to take on the job, that is they sell their skills, professional knowledge at a bargained price.

Vocational training inevitably joins the system, which is supposed to ensure to meet the demand for employment in the national economy.

At present economic problems and difficulties, unemployment, the domestic and international state of agriculture, the question of rationality, the vocational training system, and at global level the food supply are crucial economic and political issues.

These issues are being dealt with in this study drawing attention to timely issues.

## **OBJECTIVES**

The research examines the labour force of the Hungarian cattle raising farms, their specific features and processes done by the employees with the help of system analysis.

The main objective is to define

- certain demographic features of the group of employees in question:
  - their age
  - the ratio of sexes,
  - their qualifications,
- jobs in milk cattle raising:
  - names of jobs,
  - content of jobs,
  - group of jobs
- changes in farm based jobs having taken place due to technological advancements:
  - orders of activities,
  - orders of activities and their corresponding jobs
- opportunities offered by the present vocational training:
  - content of vocational training and that of non-system training
  - content of training within educational system and non system
  - regional location and realization ,
- employees' self assessment and personal motivation.

An aim of the research is that the findings of the research and analysis will be available for the employment and vocational training policy and the human

resources will obtain crucial role in the field of long term employment and vocational training development in husbandry as well.

## **MATERIAL AND METHOD**

Secondary and primary data procession and multi-fold survey have been carried out. The analysis is broken down into 4 parts.

Data concerning cattle raising, employment and training in the given field, based on central resources are analysed, resources and data were published by Central Statistics Office and National Institute of Vocational and Adult Education and in-house working materials and analyses complied by staff of CSO and NIVE .

In the second phase data of 8 cattle raising farms were analysed. During sampling such cattle raising farms were selected which size fall within the national average. Sampling does not correspond to representation requirements due to the rigidity of geographical location.

5 out of 8 are located in Győr-Moson-Sopron County, while 3 in Csongrád County. Selection of counties was done based on necessity and expedience. Besides the originally selected western Danube County the choice of other ones shows distortion caused by Hungarian difference in regionality.

Labour-related data show those of labour force register containing their age, qualification and employment data.

Data of Farm 6 and 7 are given together in the analysis since they differ regarding geographically and technologically, but their labour and farming activities are common and their employees are not closely related to any of the farms.

In phase 3 and 4 the selected farms were surveyed. The survey includes questionnaires for the blue collar workers, while the members of the management were personally interviewed with the help of deep interview method. With regard to personal interviews in writing there were no inaccessible questionnaires, so 3059 questions answered by 161 blue collar workers were assessed.

Interviews were carried out along set questions; they took each 1 and 1,5 hours surveying 14 managing persons.

In phase 4 parallel with phase 3 work done by the farm workers was surveyed. Individual work-day register was carried out – 169 workers' work days in minimum 8 hours per day.

It contains the elements of their day work done which totals 1527 working hours covering every element of the work done in the plant.

Parallel with the above mentioned work day register, the analysis of the level of the employees' professional knowledge took place. Its method was carried out based on pre-set topics and the related questions. To phrase the questions and to analyze the answers the NQR professional and exam requirements of the following qualifications were taken into consideration:

Cattle breeder (31 621 01)

Stockbreeder (31 621 03)

Each employee answered 4 -10 questions. The answers were graded between 1-5 corresponding to the assessment method employed in the educational system.

The secondary and primary data are organized in spread-sheets and in graphs. Frequency analysis, mean calculation distribution analysis were used data were organized in Excel data base program.

## **ANALYSIS RESULTS AND THEIR ASSESSMENT**

The survey analyzes cattle raising farms according to 5 aspects. They correlate mutually and influence each other thus they are clear cut fields.

### **1. Employment.**

The analysis of demographical features of employment shows that ageing employees will within a short time pose as problem if the structure of employment can't renew within. The multitudinous outflow of elderly employees from the labour market which will take place in 5 years besides the sudden increase in demand for labour will draw in an other problem: the loss of tremendous professional experience that will leave the market together with the group of ageing employees as well.

The analysis confirms the supposition that the job of cattle breeder is rather for males than females since data show that the number of women employed is decreasing in the cattle raising plants.

Work schedule and the working conditions may contribute to it, however leaders would consider important to employ women in certain jobs as they believe women's attitude and work style would be more appropriate than that of men.

2. The survey of the level of **qualification** and related professional knowledge found that the employment in the given plants fall significantly behind that of the national employment. In relation to national qualification requirements sufficient and rather fair knowledge of trades shows that primarily constant improvement is necessary in the developing fields and that in connection with the complex operation of economy.

The structure of vocational training according to related analysis does not meet the demand for permanent training. It significantly varies from region to region and the professional supply has shifted towards the training of agricultural engineers. According to employees they obtained their professional knowledge not within the educational system but during working.

Consequently the training system should make use of real working circumstances or conditions, it should be practice-oriented, training should be organized and planned accordingly in order to enhance efficiency. Competence based training should not only ensure the dry professional knowledge, more over the content of knowledge should be reduced. Significant elements listed by the managers and employees interviewed during the survey should be incorporated in vocational training to perform the job in question.

3. Analysis of **scope of activities and tasks** revealed how conditions in cattle raising farms have changed their operation and work routine.

The analysis shows that formerly clear cut scopes of activities have faded so today it is advisable to consider jobs in task-groups or in aggregation of jobs.

Work management (organization) supply of labour force dropped out more flexible, faster in-house response can be brought about if the management considers creating 4 groups of jobs (scopes of activities):

- Jobs related to milking

- Jobs related to foddering

- Jobs related to reproduction

- Jobs related top plant management

The survey shows that contractions of jobs are characteristic in the given field. These contractions (mergers) can be planned which take the system of task-scope of authority and accountability and attached competences into consideration, unfortunately such contractions occur which are brought about

by forceful necessity or measures as well. These contractions are advisable to be avoided since they can do more harm to operation and production than what is spared.

4. The analysis of the **order of activities and their content** the research outlines the content frame which is characteristic for the work done in cattle raising farms. Based on these demands by the employers towards the employees can be defined and which fields or jobs can be carried out by employees with general knowledge and which ones need special knowledge and expertise.

The survey shows that the tasks attached to checking animal stock, breeding technology, basic fodder and water supply, operating simple machines are tasks of general character and they occur in every order of activities.

However there are few jobs which need special knowledge such as operation and maintenance of machines, animal healthcare, milking and executive tasks.

5. Surveying the **attitude of management and farm administration** towards employment issues the most important result refers to the requirement profile for the cattle raising farm employees set by the management. Consequently employees are required to possess knowledge of basic biological contexts ethological knowledge, technical skills by the management, other expectations concerning personal-, social- and methodological competences towards employees are much wider and significant. The analysis shows the management's expectations in the following competences: being patient, reliable, the love of animals, personal hygiene, being conscientious, having good senses (sight, hearing, touch) being ready and willing to co-operate with others, precise.

The research at the same time shows that the two main tasks for the managers are to motivate the co-workers, where the most frequent forms of incentive is financial and other awards, and conflict management where they can benefit from the plant internal channels of information.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusions drawn from the research.**

1. The employees are ageing. 54,2 % of the employees are over the age of 50.
2. The proportion of males is high. On the whole 78,2% of the employees are men. However considering younger age groups the ratio between men and women tends to be wider.
3. The majority of workers in cattle raising plants work at the same place for long, changing workplaces are not typical of them.
4. The most typical cause for the employees to change workplaces are the vicinity of workplace and love of work.
5. 44,53 % of male workers and 65,73 % of female workers has a primary school education, they don't attain any other professional qualification besides their experience.
6. 41,14 % of the workers have appropriate medium level professional qualification.
7. Present vocational training system offers trainings for cattle raising farms unequally regarding the places of training, the number of trainings for engineering operation is disproportionally high compared to those offered to cattle raising fields.
8. The level of professional knowledge of workers in cattle raising farms can be graded sufficient and satisfactory in every related field, but the biggest defects can be observed in the fields of business and trade.
9. According to the employees' opinion it is not the professional knowledge or experience what is necessary for them to do their job but the love of animals, patience and conscientiousness.

10. Employees consider working conditions and circumstances as the primary source of acquiring their professional knowledge where they can learn from their colleagues.

11. Traditional jobs at cattle raising farms contain more and more new elements, modified content. The orders of jobs in cattle raising farms differ from farm to farm.

12. Previously rigid and well defined jobs are replaced with job groups such as milking, foddering reproduction, plant management.

13. Two basic types of job- contractions and restructuring can be observed:

- In the first case careful consideration of professional aspects by the management preceded the changes, where the new jobs have become more efficient.
- In the second case changes were brought about by the force of necessity consequently efficiency has dropped, plant indicators show certain decline.

14. Examining groups of activities of ordinary daily routines in the cattle raising farms they contain tasks related to animal inspection, foddering, use of tools and machines, animal keeping technology, animal healthcare, maintaining hygiene, labour safety and protection of environment.

15. Special, rarely occurring activities compared to the whole set of activities particularly attached to jobs are the following: maintenance of prime movers and machines, use of machines with licence only, making up fodder, animal healthcare tasks, milking, milk treatment, administration, file keeping.

16. Expectations by the employers towards employees concern knowledge: biological processes, ethological and technical knowledge, and personal features such as patience, reliability, the love of animal, personal hygiene, conscientiousness, good senses, being precise, and co-operative skills.

**Based on conclusions drawn from the results of the analysis the recommendations are as follows:**

1. Managers of cattle raising farms in order to find sustainable solution for medium and long term employment supply should realize careful labour supply planning and scheming. They should survey the demand for training and new employees.

I strongly advise to create close cooperation with such vocational training schools with profiles compatible to release qualified young labourers to work in agriculture namely in husbandry.

2. Order and structure of activities at cattle raising farms should be reviewed and time should be spared to execute logistics tasks. Rationalisation (shakeout) should consider infrastructural and technical and human resource circumstances, habits prevailing for long and employees' own experiences should not be neglected either.

3. Labour force convertibility is a major competitive edge and it is a rightful expectation at cattle raising farms. It needs a certain general professional knowledge and experience, creating working teams merging and coordinating jobs or activities with similar contents employees' substitution can increase which will mean job stability.

According to my recommendation 3 productive fields of work should be created ensuring permanent operation. These groups of jobs should involve foddering milking reproduction.

If such groups of jobs are created it is important that individual workers within the groups should attain the relevant basic and special knowledge.

Daily routine organized in rotation provides opportunity for permanent training and upgrading and enlarging knowledge besides monotony of work routine can be decreased it contributes to peer-group learning of what workers declared the most beneficiary.

4. Recommendation of the survey referring to vocational training system is not only applicable for stock rising but also at planning and organizing the entire vocational training for husbandry. Accordingly the present vocational training should be organized into 2 stages. The goal of the first stage or level should be to train a worker with complex knowledge, who can perform basic activities in breeding, is familiar with basic breeding tasks and activities, elementary biological and ethological relationship and able to operate technical technological device and machines. Besides the fields at least with the same importance and listed in adult training as well, personal competences indispensable to become a good cattle breeder like the love of animals, conscientiousness, precision, patience, problem-solving skills should be developed.

Since developing these competences is not unambiguously defined, or it falls beyond the scope of the vocational training recruiting and selection should precede and be a part of training a qualified good worker.

Leaving the present situation of vocational training to provide appropriate supply of labour force and efficient practical training the spread of apprentice contracts should be urged, training providers should find such training forms which are attractive and satisfy the territorially scarce and scant demand for training as well.

## **LATEST AND NOVEL SCIENTIFIC RESULTS**

The latest and novel scientific results of the research are the follows.

1. The methodology of the survey what is the complex order of analysis of employment it contains the analysis of demographic data, the survey referring to training, the survey and analysis of work done and research on personal references, attitude, motivation and expectations with the help of questionnaires.
2. Cattle raising farms total up to a major part of milk production, their employees compared to national demographic average show significant ageing. This situation within 3-5 years may threaten to maintain production unless this trend changes.
3. Employees' motivation and system of expectations show though they belong to a socially sensitive and utterly vulnerable layer it is not the material disbursement what matters first for them. It is rather the content of work and working with animals their closeness what counts. This being recognized is of significant importance in motivation and recruiting new employees.
4. Four job groups can be separated in cattle raising farms which contain those jobs which are considered to be homogeneous regarding their content, conditions, economic goals impact on production and the scope of knowledge necessary to perform tasks these are jobs in connection with milking (animal products) farm or farm management .Practical utility of job groups (activities) in labour force planning and human resource development strategy is significant.
5. The research defined the frequency and significance of work activities, the number of workers carrying out the activities that is the degree of specialization in cattle raising farms in Hungary. Accordingly it is necessary to

separate almost each general or special activity done by each employee or group of employees the scopes of activities.

6. The comprehensive analysis of vocational training shows that trainings providing qualifications for employees at cattle raising farms pose only as possibilities but their realization in time and content is unbalanced and does not serve labour force supply.

## **PUBLICATIONS RESULTING FROM THE RESEARCH**

### **1. Supervised scientific articles published in scientific periodical**

- Kovács Anikó (2005): **A konvertálható munkaerő képzésének lehetőségei az állattenyésztésben.**

in. Fenntartható fejlődés, fenntartható társadalom és integráció tanulmánykötet II. kötet 197-202. pp.

Kodolányi János Főiskola és az MTA Veszprémi Területi Bizottság,  
ISBN 963 9558 48 6

- Kovács Anikó (2006): **A munkaráfordítás racionalizálási lehetőségei tejtermelő szarvasmarha telepeken.**

Gazdálkodás – Agrárökonómiai Tudományos Folyóirat,  
2006/16. special edition 96-103 pp.

- Kovács Anikó (2006): **A nagyüzemi szarvasmarhatelepek fizikai munkaerő utánpótlása.**

Gazdálkodás – Agrárökonómiai Tudományos Folyóirat  
2006/20. special edition 52-63 pp.

- Kovács Anikó (2010): **A review on vocational training in Hungarian husbandry with regard to physical workforce supply for the bovine plants**

Acta Agronomica Ovariensis 2011/2. 59-68 pp.

### **2. Supervised conference publications**

- Kovács Anikó: **Emberi erőforrások az állattenyésztésben**

MTA VEAB Magyarország és a 21. század kihívásai az Európai Unióban, Komárom 2004. április 28-29. (CD-kiadvány)

- Kovács Anikó: **Az állattenyésztésben bekövetkezett változások hatása a munkaerő képzettségére**  
MTA VEAB Városterzéségi egyenlőtlenségek Európában, megújulási válság és leküzdése, Komárom 2006. április 28.(CD kiadvány)
- Kovács Anikó: **The rationalisation facilities of the jobs on dairy farms**  
Within the European Union III. Nemzetközi Konferencia, Mosonmagyaróvár, 2006. április 6-7. (CD kiadvány)
- Kovács Anikó: **A munkaerő konvertálhatóságának és képzési lehetőségeinek vizsgálata az állattenyésztésben**  
DOSZ – MTA „Tavaszi Szél” konferencia, Debrecen, 2005. május 5-8. (konferencia kiadvány)

### **3. Conference publications**

- Kovács Anikó: **Humán tényezők vizsgálata szarvasmarha telepeken**  
IX. Nemzetközi Agrárökonómiai Tudományos Napok, Gyöngyös, 2004. március 25-26. (konferencia kiadvány, CD kiadvány)
- Kovács Anikó: **Humán tényezők a Lajta-Hanság Rt. Tehenészeti telepein**  
X. Ifjúsági Tudományos Fórum, Keszthely, 2004. április 29. (CD kiadvány)
- Kovács Anikó: **Questions of developing cattle farm-organization**  
Sustain Life – Secure Survival II. Nemzetközi Konferencia, Prága, 2004. szeptember 22-25.(CD kiadvány)
- Kovács Anikó: **Szarvasmarha telepek szervezetfejlesztési kérdései**  
XXX. Óvári Tudományos Napok, Mosonmagyaróvár, 2004. október 7.