



Measures in Slovenian cattle production at integration into the European Union

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ABSTRACT

The paper deals with the role and economic status of cattle production in Slovenian agriculture. The number of cattle and cows for market milk production decreased by 23% and 24.3% during the last twelve years. Nevertheless, in the same period milk production increased nearly by 8%. The purchase of milk per cow increased by more than a half. One of the most important measures for adjustment to the European Union are such conditions that the number of cattle could increase to 500,000 and of cows to 200,000. Number of suckler cows and at the same time beef production should be stimulated by payments.

(Keywords: cattle production, milk, meat, economic measures)

ZUSAMMENFASSUNG

Maßnahmen in der slowenischen Rinderzucht in Rahmen der Integration in die Europäische Union

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Die vorliegende Arbeit erörtert die Rolle und die ökonomische Lage der Rinderzucht in der slowenischen Landwirtschaft. Die Zahl der Rinder und der Milchkühe hat sich in letzten zwölf Jahren um 23 und 24,3% verringert und dennoch ist die Milchproduktion in derselben Zeit um 8% angestiegen. Gleichzeitig ist die verkaufte Milchmenge pro Kuh um 50% angestiegen. Die wichtigsten Maßnahmen im Rahmen des Beitrittes zur EU ist die Sicherung solcher ökonomischer Grundlagen, die zur Erhöhung der Rinder- und Kuhzahl auf 500 000 bzw. 200 000 führen. Subventionen werden vor allem für die Erhöhung der Zahl der Mutterkühe und damit für der Rindfleischproduktion verwendet.

(Schlüsselwörter: Rinderzucht, Milch-, Rindfleischproduktion, ökonomische Maßnahmen)

INTRODUCTION

The cattle production is one of the most important agricultural branches in Slovenia because it makes about 35% of all agricultural income. The present economic and market conditions in the Slovenian cattle production are most close to the conditions in the European Union hence the adjustment to the European legislation will not be moot. The main problem of the Slovenian cattle production is unfavorable farm size (average

Slovenian farm size is 4.2 ha) and 72% of agricultural land are less suitable for cultivation due to harsh relief and altitude. Therefore, there are less than 20% of pure farms with farming as the only source of income in Slovenia. All other farms have to find extra income in additional activities or regular employment.

The suitable number of cattle will mean self supply with milk and beef as well as maintaining of grass land, populated countryside and attractiveness of Slovenia for tourists.

Present State And Further Development Of Cattle Production Until The Integration Into The European Union

The integration into the European Union (EU) will not cause essential changes in the cattle production but certain measures should be taken to ease the integration.

Table 1

Number of cattle in Slovenia, quantity of purchased milk per cow (market milk) and total quantity of purchased milk

| Year (1) | All cattle, number (2) | All cows, number (3) | Cows for market milk, number (4) | Suckler cows and cows for nonmarket milk, number (5) | Market milk per cow, l (6) | Purchased milk, million l (7) |
|-------------|------------------------------|----------------------------|----------------------------------------|------------------------------------------------------------|----------------------------------|-------------------------------------|
| 1985 | 577 206 | 253 751 | 175 696 | 78 055 | 1990 | 349.6 |
| 1986 | 580 949 | 252 980 | 181 861 | 71 119 | 1990 | 362.0 |
| 1987 | 556 200 | 245 376 | 176 209 | 69 167 | 2057 | 362.4 |
| 1988 | 548 611 | 245 197 | 169 648 | 75 549 | 2316 | 392.8 |
| 1989 | 546 000 | 242 741 | 166 513 | 76 228 | 2155 | 358.8 |
| 1990 | 546 048 | 255 034 | 161 992 | 93 042 | 2206 | 357.3 |
| 1991 | 532 902 | 230 664 | 165 713 | 64 951 | 2306 | 382.1 |
| 1992 | 483 865 | 220 023 | 158 124 | 61 899 | 2351 | 371.8 |
| 1993 | 477 551 | 210 609 | 148 802 | 61 807 | 2222 | 330.7 |
| 1994 | 477 400 | 213 703 | 138 500 | 75 203 | 2563 | 355.0 |
| 1995 | 495 535 | 215 161 | 132 532 | 82 629 | 2962 | 392.5 |
| 1996 | 486 198 | 212 293 | 130 522 | 81 771 | 2966 | 387.1 |
| 1997 | 445 724 | 192 141 | 122 728 | 69 413 | 3067 | 376.4 |
| 1998* | 453 097 | 184 408 | 117 000 | 67 408 | 3256 | 381.0 |
| 1999* | 460 000 | 187 000 | 112 000 | 75 000 | 3446 | 386.0 |
| 2000* | 470 000 | 190 000 | 108 000 | 82 000 | 3620 | 391.0 |
| 2003* | 500 000 | 200 000 | 100 000 | 100 000 | 4000 | 400.0 |

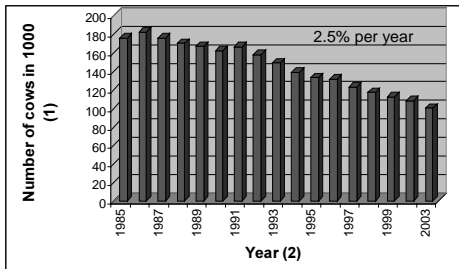
*Projection (*Prognose*), Source (*Quelle*): Statistical report of Slovenia, Annual reports of Cattle Breeding Service

1. Tabelle: Rinderbestand in Slowenien, Menge der verkauften Milch/Kuh (Milch für den Markt), Gesamtmenge der verkauften Milch

Jahr(1), Rinderbestand gesamt(2), Gesamter Kuhbestand(3), Anzahl Milchkühe(4), Anzahl der Mutterkühe und Milchkühe zur Selbstversorgung(5), Vermarktete Milch/Kuh(6), Vermarktete Milch gesamt(7)

Figure 1

Number of cows for market milk production in Slovenia

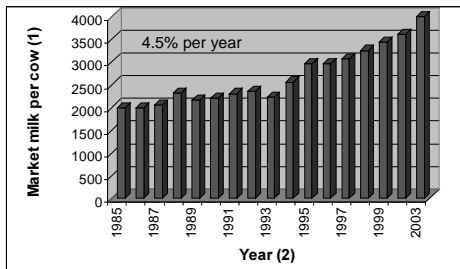


1. Abbildung: Anzahl der Milchkühe in Slowenien, die für den Markt produzieren

Bestand der Milchkühe(1), Jahre(2)

Figure 2

The quantity of purchased milk per cow per year



2. Abbildung: Menge der vermarkteten Milch pro Kuh und pro Jahr

Vermarktete Milch/Kuh(1), Jahre(2)

Table 1 shows that the number of cattle in Slovenia decreased by nearly 23% from 1985 to 1997, which means 1.9% per year. It is the critical point of number of cattle to use the grass from the land that has been overgrowing. The number of all cows decreased even quicker in the same period, namely by 24.3% or 2% per year. The number of cows for milk purchase decreased the most rapidly, by 30% or 2.5% per year. Nevertheless, milk purchase increased from 350 mil. to 376 mil. of liters, which is nearly 8%. It means that milk purchase per cow increased very quickly, from 1,990 liters in 1985 to 3,070 liters in 1997. The increase was 54% in twelve years, which is favorable even though the milk purchase per cow in the West European countries is still much higher. But the best farms, that are included in AP recording, have with 5570 l milk in standard lactation already achieved the level of average West European farms.

Measures and interventions that will be required at integration into the EU until 2003 will also help to increase the number of cattle up to 500,000 and the number of all cows up to 200,000. The number of cows for market milk production will decrease to 100,000 cows. Milk will not be purchased from another 100,000 cows. Most of those cows will be suckler cows and less than a quarter of them will give milk for self supply only.

Table 2 displays beef production which differs significantly from milk production. The beef yield in the Slovenian slaughter houses (market meat) increased by 10.4% from 1985 to 1990 following by rapid decrease (35.4%) to reach the lowest level in 1994 with only 31.58 thousand tons of meat

The mentioned amount was warning as it represented only 85% of self supply. The government introduced extra payments with no great effect due to BSE in England. In 1998 the beef production increased by 2.26 thousand tons, which was 7.1%. The structure of slaughter is unreal because it shows that 80% of slaughtered animals were young cattle while the percentage of slaughtered calves and cows is too low. It means that many calves and cows were slaughtered at home.

Considering favorable natural conditions the beef production should show a surplus of 15% according to agrarian economists (*Kavcic et al.*, 1996) before the integration into the EU. Beef production should increase till 2003 to reach 39 thousand tons.

Table 2

Produced beef in Slovenia (thousands of tons)

| Year (1) | Σ Beef (2) | Veal from calves under 6 months (3) | Beef from young cattle under 3 years (4) | Beef from cows and other cattle (5) |
|----------|-------------------|-------------------------------------|------------------------------------------|-------------------------------------|
| 1985 | 44,29 | 0.49 | 38.38 | 5.42 |
| 1986 | 42,14 | 0.31 | 37.21 | 4.61 |
| 1987 | 47,88 | 0.56 | 43.11 | 4.21 |
| 1988 | 45,31 | 0.44 | 41.39 | 3.48 |
| 1989 | 43,83 | 0.43 | 40.17 | 3.22 |
| 1990 | 48,90 | 0.64 | 43.58 | 4.68 |
| 1991 | 46,60 | 0.60 | 38.10 | 7.89 |
| 1992 | 37,80 | 0.56 | 32.10 | 5.13 |
| 1993 | 35,65 | 0.97 | 29.62 | 5.06 |
| 1994 | 31,58 | 0.63 | 28.58 | 4.38 |
| 1995 | 33,43 | 0.83 | 27.63 | 4.97 |
| 1996 | 32,37 | 1.16 | 25.70 | 5.52 |
| 1997 | 33,71 | 1.31 | 26.88 | 5.52 |
| 1998 | 33,84 | 1.67 | 26.88 | 5.29 |
| 1999* | 35.00 | | | |
| 2000* | 36.00 | | | |
| 2003* | 39.00 | | | |

2. Tabelle: Rindfleischproduktion in Slowenien (in tausend t)

Jahr(1), Fleisch gesamt(2), Kalbfleisch von Kälbern unter 6 Monaten(3), Fleisch von Jungrindern unter 3 Jahren(4), Rindfleisch von Kühen und anderen Rindern(5)

Necessary measures in cattle production until the integration into the european union

Economic conditions in last twelve years were in cattle production worse in comparison with pig production and poultry that can be proved by decreased number of cattle and especially of beef production. Therefore the most important measures are those which will enable the increase of number of cattle up to half a million of animals and consequently the usage of grass land.

Because the 120% of self supply with milk is provided by lower and lower number of cows for market milk production such tendency is probable till the integration into the EU. The number of cows for market milk production will be about 100,000 at the time of integration into the EU.

Measures and payments should primarily stimulate beef production and export of meat and meat products as well as the increase of number of animals, export of breeding animals, and the increase of export of milk and milk products. In future the

production in aggravated conditions in mountainous regions and in Karst should be stimulated as well.

Table 3 shows what measures should be stimulated and the amounts of payments with regard to the production conditions. Those payments are significantly lower than in the EU and should be brought into line with those in the EU until 2003. Special attention should be paid to the number of suckler cows on which the amounts and quality of produced beef will depend in future. The criteria of suckler cows should consider the quality of beef. It means that payments will be awarded for suckler cows of beef breeds, crossbreeds with beef breeds and dual purpose breeds sired with beef breed bulls or with beef type bulls of dual purpose breeds.

Amounts of market milk, beef and suckler cows should be negotiated with the EU before the integration into the EU. The amounts will be determined on the base of available areas for meadows and pastures.

Table 3

Payments for production and exports in cattle production in Slovenia in 1999

| Payments (1) | Lowlands (2) | Highlands (3) | Mountainous and Karst region (4) |
|-------------------------------------------------------|--------------|---------------|----------------------------------|
| Production for breeding or slaughter, DEM/kg gain (5) | | 0.25 | 0.4 |
| Suckler cows production, DEM/cow (6) | 180 | 215 | 240 |
| Dairy cows for market milk production, DEM/cow (7) | | 100 | 150 |
| Mountain pastures for cattle, DEM/animal (8) | | | 55 |
| Fattening of calves to higher mass, DEM/kg (9) | 150 | 150 | 150 |
| Slaughter of primiparus cows, DEM/kg (10) | 200 | 200 | 200 |
| Pohorje beef, DEM/kg (11) | | 200 | 200 |
| Export payments (12) | | | |
| - breeding animals, DEM/animal (13) | 700 | 700 | 700 |
| - beef and beef product exports, DEM/kg (14) | 0.75-2 | 0.75-2 | 0.75-2 |
| - milk, DEM/l (15) | 0.09-0.145 | 0.09-0.145 | 0.09-0.145 |
| - cream, butter, cheese, DEM/kg (16) | 0.18 | 0.18 | 0.18 |

3. Tabelle: Produktions- und Exportwerte der Rinderproduktion in Slowenien 1999

Finanzieller Wert(1), Tiefebene(2), Hochland(3), Bergland und Karstregion(4), Zucht- oder Schlachttierprodukte DEM/kg Einnahme(5), Mutterkühe DEM/Kuh(6), Milchkühe DEM/Kuh(7), Rinder von Bergweiden DEM/Rind(8), Mastkälber DEM/kg(9), Schlachtwert von "primiparus" Kühen DEM/kg(10), Rindfleisch DEM/kg(11), Exportwerte(12), Zuchttiere DEM/Tier(13), Rindfleisch und Rindfleischprodukte DEM/kg(14), Milch DEM/kg(15), Sahne, Butter, Käse DEM/kg(16)

In view of production increase and improvement of beef quality special attention should be paid to trade marks like veal "Golden grain", beef "Pohorje beef" and others. Veal trade marks should stimulate fattening of calves to higher body mass so that lower

number of fattened calves produce more veal. Some quality traits of veal from weightier calves exceed the quality of veal from lighter calves.

Before the integration into the EU, we plan to establish some new trade marks for beef produced in sustainable economic conditions in Karst, highlands and mountainous regions. In Slovenia more consumers ask for products produced in sustainable way due to frequent cases of harmful additives found in animal foods.

Legislation concerning milk quality and beef carcass quality, which has already been harmonized with the EU, was passed in 1994 so we are not behind the EU in this respect while the screening of legislation concerning milk and beef production is in progress.

More attention should be focused on export of breeding animals and beef, to reach the former level. Also the organisation of cattle breeders will have to be harmonised to EU legislation. Slovenia lag behind in structural changes. So the most important measures that will have to be taken are those that will stimulate increase farm size and so the number of cattle on the farm.

CONCLUSIONS

- Economic conditions in cattle production lagged behind the conditions in other branches of animal production in the last twelve years.
- Consequently the number of cattle and beef production decreased by 23% in the mentioned period.
- Due to favourable prices of milk in comparison with beef the amounts of market milk even increased by 8% in this period while the purchase of milk per cow increased by 54%.
- The objective of intervention measures and payments in the last years was to increase the number of cattle, especially suckler cows as well as to increase and improve quality and amounts of beef production.
- Special attention is and will be paid to sustainable beef production of diverse trade marks that will be asked for in future.
- Legislation on quality of milk and beef has already been harmonized with the EU. Other legislation concerning cattle production has been screened as well.

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