

DILEMMAS OCCURRING DURING THE TRANSITIONAL PERIOD OF LIVESTOCK PRODUCTION IN CENTRAL AND EASTERN EUROPE - THE CASE OF SLOVENIA**E. Erjavec, J. Turk, M. Rednak**

The main economic trends that mould the transitional period of Slovene livestock production are discussed. Some dilemmas emerging during the process of agricultural policy reform are exposed.

Macroeconomic Aspects of Agricultural Development

Short-term economic trends indicate that for the first time after five years real GDP in 1993 would not fall below the level of the preceding year (Table 1). The collapse of traditional markets in the countries of the former Yugoslavia has most probably reached its bottom. The year 1993 marks the end of the transformation process from the regional to a national economy (IMAD, 1993). The prospects for the global economic recovery are not that remote. The process of privatisation and hence overall restructuring of the economy is well under way, however, with the unemployment expected to rise further.

The significance of agricultural production in Slovene economy is relatively small. Nevertheless, it seems that agriculture plays important role in the transitional period of Slovene economy by alleviating social problems (unemployment and low income). This is the reason why the small agricultural plots remained in production and why the profound subsistence nature of farm production in Slovenia has still not faded away. Structural changes in agriculture are therefore going on with the slow pace. In addition, investments in Slovene agriculture are negligible. On the whole, it can be argued that the impact of positive economical changes, which currently take place (rise in GDP, inflation brought under control), on the performance of agriculture is still insignificant.

Integration of Slovenia into world economies may have substantial effects on the agricultural development. Slovenia has become a member of various economical and political institutions, such as: UNO, IMF and FAO; it has also officially applied for joint membership with GATT. Free trade arrangements with several East-European countries are already agreed (Macedonia, Czech Republic, Slovakia, Hungary) or are just to be discussed (Poland, Lithuania). The economic association agreement between

Rad je priopćen na FOUR EAAP ROUND TABLE ON LIVESTOCK PRODUCTION IN CENTRAL AND EASTERN EUROPE, April, 22.-24.1994., Zagreb

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the European Union and Slovenia is also at the final stages. A very important aim in all these negotiations is to ensure the Slovene agriculture a special protective status. There are several reasons for such policy orientation; most notably: aggravated production conditions in marginal areas (Table 2) and highly fragmented agricultural land in the private farm sector.

Table 1 - REPUBLIC OF SLOVENIA - THE MAIN MACROECONOMIC INDICATORS

	1992	1993 estimate	1994 forecast
Area (km ²)	20.251		
Population	1.996.800		
Demographic growth (real growth rates in %)	-0,2		
Ljubljana - No. of inhabitants in capital	274.350		
Gross domestic product (real growth rates in %)	-6,0	0,0	1,0
GDP per capita (in US\$)	6133	5770	5820
Industrial production (real growth rates in %)	-13,2	-5,0	-2,0
Agricultural production (real growth rates in %)	-10,1	-5,0	7,0
Rate of unemployment (% of labour force)	11,1	14,1	15,0
Retail prices (real growth rates in %)	92,9	25,0	13,0
Share of agriculture (in %)			
- GDP	5,3		
- Labour force	11,5 ¹		
- Export	1,2		
- Import	3,2		

Note: ¹ 1991;

Sources: Institute for Macroeconomic Analysis and Development, Statistical Office of Slovenia

Table 2 - BASIC DATA ON SLOVENE LIVESTOCK PRODUCTION

	Unit	Year	Value
Agricultural land AL	ha	1992	863.945
- share of meadows and pastures	%	"	64,8
- share of marginal areas	%	"	70
- share of private ownership/lease	%	"	93,1
Agricultural production AP	%	1992	100
- livestock production total	%	"	60,24
- cattle	%	"	29,5
- pig	%	"	19,6
- poultry	%	"	10,6
Private family farms - number		1991	156.549
- average size of private farms	ha AL/farm	"	3,2
- share of private farms till 10 ha AL	%	"	82,3
- share of private farms in AP - cattle prod.	%	1990	83,3

	Unit	Year	Value
- share of private farms in AP - pig prod.	%	1990	52,3
- traded milk per cow	kg milk	1992	2.007
Agricultural enterprises - number		1992	214
- share of AL	%	1992	6,9
- average size	ha AL/enterp.	"	282
- traded milk per cow	kg milk	1992	6.007
The self sufficiency rate ¹ - agriculture	%	1992	92,7
- grains	%	"	56,1
- cattle (milk - meat)	%	"	101,9
- pigs	%	"	80,1
- poultry (meat, eggs)	%	"	152,8

Note: ¹Share of agricultural product (final production) in total domestic consumption.
Sources: Statal Office of Slovenia, Agricultural Institute of Slovenia

The Supply and the Price Trends of Livestock Products After 1990

Since 1990, the growth of agricultural product has been exhibiting a declining tendency. Livestock production clearly follows this trend (Table 3). The loss of former Yugoslav market has the most negative effects on the poultry production, where a fall in the production of meat (20%) and in the production of eggs (13%) is noticed - as compared to the period among 1986 and 1990. As a result, the production orientation in poultry has changed considerably (the production of turkeys on many individually owned agricultural holdings). With reference to the same period, the number of cattle (cows in particular) has diminished by 7,7%, live weight gain by 5,1% and total milk production by 4,1%. On the other hand, there is no significant change to be seen in the production potential of pig farming. Marketed share of pig products is considerable and represents approximately one half of the total production on the agricultural estates rearing hogs. It must be stressed that the number of middle-sized private farms rearing pigs has increased slightly, as a consequence of quite favourable economic climate that private pig producers are currently encountering (home-produced fodder).

Livestock production is the most important branch of agricultural production in Slovenia (Table 2). A negative growth in the overall agricultural production has therefore had the most negative effect especially on the development of livestock production (meat production). In 1992 aggregate rate of food self sufficiency fell below 90%!

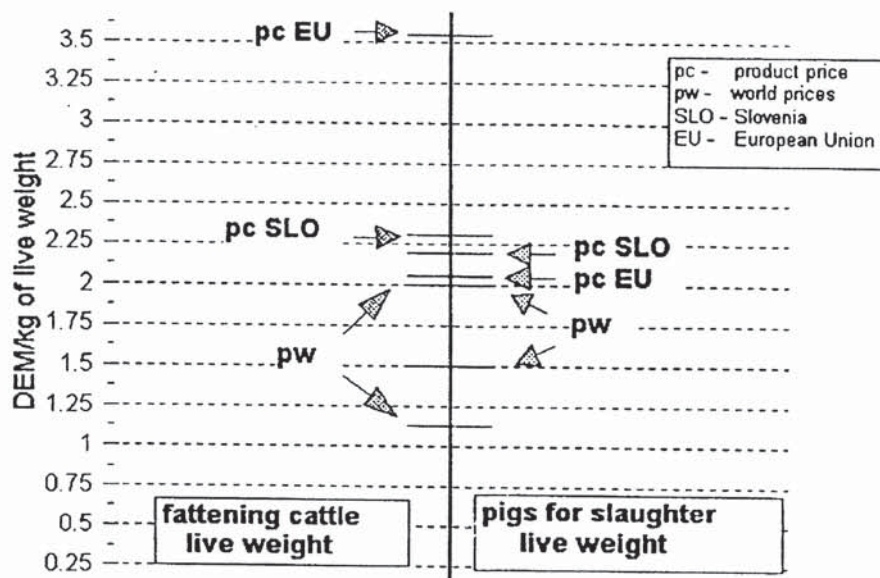
The best indicator of the situation in Slovene agriculture is the level of agricultural prices. By comparing them, with the retail prices of industrial products, it is apparent that most farm product prices have been exhibiting a continuous declining tendency in last decade (KIS, 1993). Long-term falling trend in agricultural prices is traces also for the all major livestock products.

Table 3 - THE MAIN DEVELOPMENTAL FEATURES OF SLOVENE LIVESTOCK PRODUCTION

Livestock production	Unit	1986-1990	1990	1991	1992
Cattle					
Number of cattle	1.000	546	533	484	504
Live weight gain	1.000 t	92	88	82	87
Number of cows	1.000	248	255	231	220
Milk production	mio 1	587	579	624	563
Traded milk	mio 1	362	361	375	354
Poultry					
Number	1.000	13.373	12.766	13.134	11.424
Live weight gain	1.000 t	108	108	108	88
Number of egg hens	1.000	2.434	2.340	2.440	2.323
Production of eggs	mio	412	411	458	360
Pigs					
Number of pigs	1.000	585	588	529	602
Live weight gain	1.000 t	79	77	76	73
Sheep and goats	1.000	24	20	29	21
Horses	1.000	12	10	11	9

Source: Statistical Office of Slovenia

Fig. 1. PRODUCT PRICES OF CATTLE AND PIGS - AVERAGE 1993



Sources: EUROSTAT, Statistical Office of Slovenia

Structural Policy Issues in Slovene Agriculture

A development of the private farming has been during an entire post-war period hindered by the state. Agricultural policy was designed which favoured state agricultural enterprises. The average small size of private farms is the key issue in Slovene agriculture (for example the size of more than 99% of all individually run agricultural holding does not exceed 20 hectares). Given that, it is not difficult to understand why the diffusion of technical innovation (progress) in Slovene private farm sector is so limited; the process that is reflected through low productivity levels there. Small average size of private farms, low land productivity as well labour productivity and inconsistent agricultural price policy regime have all led to income disparity in private farming. Many Slovene peasant farmers were thus forced to seek for an employment opportunity outside the agriculture. Agricultural production in most areas with aggravated production conditions is abandoned and influx of mainly young population to urban areas has given rise to a demographic deficit in many rural areas. Unfavourable economic climate for private farming has obviously resulted not only in poor performance of most individual agricultural producers (income disparity) but also in dismantling the production completely in marginal regions where the prospects of promoting efficient grazing system (goats and sheep, for example) are not to be underestimated.

"Agricultural enterprises" evolved from the formerly "social" agricultural estates. Much higher production potential and the ability to exploit available production factors, more effectively than are on average the case with the private farm sector are two major characteristics of these newly emerging enterprises. Land and labour productivity achieved by these farms approach the productivity of West European agriculture. The increase in productivity levels in turn brings the positive economic returns for the farmers where unit production costs do not increase relatively faster than the quantity of output produced (economies of size). The situation which in Slovene relations especially applies to hog and milk producing farms, and less to farms involved in beef and poultry production. Unfortunately, there are still no clear legislative assurances given to these new agricultural enterprises concerning their ownership status. Namely, according to the Law on Denationalisation, all previously confiscated farm land belongs now to the original owners. The land operated so far by the agricultural enterprises has now become the property of the state. The state sponsored organisation "Fund for Distributing Agricultural Land" gives now the opportunity to all agricultural enterprises to get into leasing agreements. The privatisation of agricultural enterprises is carried out in the same way as the privatisation of all other economic subjects. Because of the ambiguous situation prevailing in the ownership of the agricultural land, there are no investments in farming and the migration of agricultural experts from these enterprises is considerable.

Agricultural Policy Reform

While Slovenia was in the past given a space to carry out structural policy reform measures in agriculture independently, the economic policy regulative were set by the Yugoslav federal authorities. Having become independent country, Slovenia had found

itself in a position to design its own agricultural policy. In spring 1993., the Parliament enacted the "Strategy of Agricultural Development in Slovenia" (Ministry of Agriculture and Forestry, 1992), where the main policy objectives are laid down. The policy goals do not differ from those already set by the European Union countries. In short, new Slovene agricultural policy, so called "eco-sociological policy", should primarily aim at increasing farm incomes and simultaneously enhancing the existing efficiency and productivity levels. A special emphasis is also given on promoting the "unproductive function of Slovene agriculture" (settlement issues - regional policies, ecological aspects, social welfare). As such, the document does not define the status of either type of farm production unit (private family farm/agricultural enterprise) and does not clarify the current ambiguity surrounding the issue of agricultural privatisation in Slovenia.

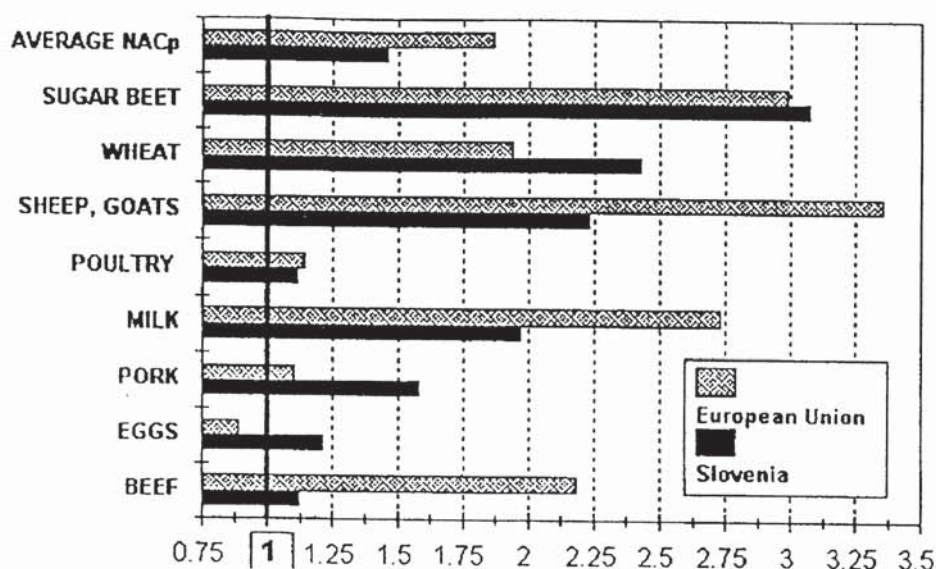
Generally speaking, Slovenia decided to adopt the protectionist agricultural policy of the Western European style. Nonetheless, the macroeconomic policy run by the Slovene government has not always followed that pattern. Efforts exerted by government to "contain" the inflation resulted in quite liberal agricultural policy (liberalisation of farm prices). The import of all staple livestock products has been relaxed which has subsequently led to unstable and relatively low prices in product markets (see Figures 1,2). The result of a political dialogue between the private farmer interest organisations and the government was the introduction of import levies for live animals, meat, milk products, eggs and wine in August 1993. In addition, all necessary arrangements for the market organisation for grains are also made. Adopted foreign agricultural trade arrangements emulate the regulative foreign trade mechanisms in European Union countries (for example, imports levy as a difference between the target and import price). It must be mentioned here that the price levels for grains and milk are set by the government. All feasible distortions that may occur on the supply side of these products are hence subject of governmental interferences in the market.

There are not only price policy measures but also structural policy measures intended to support development in Slovenia. In 1992, Slovene agricultural budget amounted to 93 million US\$. This references 48 US\$ per capita (European Union 193 US\$, USA 250 US\$) and 108 US\$ per hectare of agricultural land (European Union 481 US\$, USA 146 US\$). 69 million US\$ of the total agricultural budget were the amount given for agricultural policy interventions, where the input subsidies contributed to more than 40% budget expenses (capital items, intermediate inputs, fuel, etc.). One third of the budget went for the promotion of extension services in agriculture, R&D, etc. Ultimately, the costs of given agricultural price support represent around 15% of all budget expenses.

Agricultural Institute of Slovenia (1993), by adopting the OECD methodology of evaluating the extent of agricultural protection, evaluated that Producer Subsidy Equivalent (PSE) for Slovene agriculture in 1992 was 31%. The obtained value of this standardised indicator of agricultural protection exceeds the PSE value in U.S.A. (28%), but lags behind the PSE values in OECD countries (44%) and European Union countries (47%). Figure 3 illustrates the differences in agricultural policy protection levels between Slovenia and European countries, by individual farm products. NACp (Nominal Assistance Coefficients for Producer) indicators are used to demonstrate the

relationship between the existing effective producer prices including all assistance with respect to valid world prices. If the domestic effective producer prices were relatively the same as the world prices of these products, NACp would be equal 1. Our measurements show that the level of agricultural protection was higher in crop production than in animal husbandry. Especially low levels of agricultural protection are traced in beef production.

Fig. 3. LEVEL OF PROTECTION BY PRODUCT - (1992, NACp *- OECD indicator)



Sources: OECD, Agric. Institute of Slovenia
 NACp - Relationship between the effective producer price including all assistance and the world prices.

Concluding Remarks

Taking into account gravely distorted relations in Slovene agriculture which resulted in inefficient agricultural structure, it is obvious that such policy reform has to be adopted which will improve overall economic efficiency of farming and increase significantly the gained farm income levels. This can be achieved by changing small average size of private family farms. It is therefore clear that such policy measures should be implemented by which efficient agricultural structure will be eventually restored.

The key agricultural policy issue is, however, whether the existing market price policy can contribute to higher farm income levels. In this light, we speculate that the imposition of import duties for the main agricultural products could bring about the

necessary stabilisation in domestic product prices; the process which may in turn guarantee higher farm income gains. The level of protectionism will be confined with the forthcoming international agreements and the expected macroeconomic objectives of Slovene government. Direct payments, as an instrument of the income policy, do not appear to be a real solution to the problem of this sort at the present due to the low potential of the budget.

However the "transitional" problems which Slovenia faces in agriculture are not dramatic. If the global economic recovery will be achieved and a sound agricultural policy will be employed, very soon the problems of agriculture in Slovenia will not be much different from problems of EU agriculture.

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Priljeno: 16. 5. 1994.