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THE DEVELOPMENT OF THE GROWING OF NON-CEREAL FIELD CROPS IN THE SOCIALIST REPUBLIC OF SLOVENIA FROM 1961 UNTIL 1974

1. Basic Agrarian-Economic Characteristics of the Period

The period for which a study is here offered of the growing of non-cereal field crops in the SR of Slovenia coincides with the time in which the country was undergoing rapid changes in its econimic structure and thus from an agrarian country becoming an agrarian-industrial one. This transformation was being accompanied by strong internal migrations and by a rapid restructuring of the population. The percentage of agrarian population had from 30 per cent in 1961 fallen to 18 per cent in 1971. The restructuring of the agrarian population brought as a consequence a rapid decline of purely farming house-holds and an increase of the number of working-farming households: the latter occupy today already ca 70 per cent of all the farms. The introduction of mechanisation in all branches of economy and the increased productivity entailed a new valorization of farmland. A substantial amount of land formerly used for farming has either a steep gradient, or is rocky, or accessible with difficulty only, etc and as such is not suitable for economical mechanisation and was consequently abandoned. This causes a perpetual reducing of the intensively cultivated land. According ot cadastral information, there were in the SR Slovenia in 1954 352.532 hectares of field and garden and in 1974 merely 265.675 hectares, which is ot say that during this period the total amount of fields and gardens had been reduced by almost a fourth. But for a number of reasons the cadastrel records considerably lag behind the actual current situation, and therefore the Bureau of Statistics keeps also estimates. According to these, there were in the SR of Slovenia in 1974 only 258,508 hectares of fields and gardens, which is merely 74.59 per cent of the amount in 1954. But in fact the abandoning of fields is even greater, because during the period in question - through regulation of rivers, drainage works, and in part also through reducing the growth of other kinds of crops - a certain amount of new fields had also been obtained.

The development of the growing of non-creal crops in closely related to the social land-ownership structure. The average size of the privately-owned holding of farmland is in the SR of Slovenia considerably above the Yugoslav

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avarege, which was in 1969 5.8 hectares of land, but in the SR Slovenia 6.2 hectares. In this respect there are also considerable differences between the individual regions. In the densely populated Sub-Pannonian regions the holdings extend over ca. 3 hectares, while in the mountainous and Karst areas, where most of the holding is made up by forest or grassland, larger holdings predominate.

The development of the growing of non-cereal crops is one of the most important parametres in the concrete situation, in the process of agriculture adapting itself to the socioeconomic changes and in the process of searching for possibilities of an economically justified specialization in the existing social land-ownership structure.

Methodology

The crosscut of the development of the non-cereal field crops as exhibited by the situation in 1961 and in 1974 takes into account fields and gardens, hence those tracts of land where the utilization may substantially differ from year to year. The sowed surfaces and the unsowed ones were calculated on the basis of the statistical information: as the basis for all the existing fields and gardens the estimates released by the Bureau of Statistics were used - and not the cadastral data, which for reasons hinted at above lag behind the actual situation. Excluded from the sowed fields were also all those fields which are occupied by permanent plantations, i.e. 3046 hectares of 1,15 per cent of all the fields in the SR of Slovenia, planted by poplar trees, ornamental shrubs and other permanent crops, as well as 4121 hectares of land which were in 1974 left unitilled.

The survey includes all field crops except cereals. These crops are grouped in the same way as used by the Bureau of Statistics, specifically: vegetables, fooder plants, industrial plants.

Vegetables compriese: potatoes, carrots, onions, garlick, peas, lentil, cabbage, paprika, cucumbers, strawberries, raspberries, currants, etc.

Fooder plants include all kinds of clover, lucern, vetch, field pea, fooder cereals, mast, fodder beet and carrots, green food, and others.

Industrial plants include hops, sugar beet, medicinal herbs, and others. The distribution of individual groups of noncereal field crops is presented according to administrative communes. Such a presentation has been made necessary by the fact information according to administrative communes is available whereas data for cadastral parishes, which would be more adequate, for our purpose, are not ecisting.

Year					Vegetables in ha in %				
1961	320,597		71,232		61.552	4.558		137,342	
				22,2	19.2 1.		1.4		42.8
1974	258.508		67.219		52.552	3.770		123.541	
				26.0	20	.2	1,65		47.4
	- 62.089		-4.013		- 9.000	- 788		- 13.801	
		- 19 %	,	- 5.6	5 - 14	.6 -	17.9 %	<u> </u>	10.8 9

3. The Development of the Growing of Non-Cereal Field Crops

On the whole it is characteristic of the SR of Slovenia that during the period under consideration the total amount of sowed fields had been reduced considerably and that parallel to this wint also the reduction of the amount of fields sowed with non-cereal crops, yet it is also characteristic (as the statistics show) thet the amount of fields growing cereals was absolutely and relatively more rapidly reduced than fields growing non-cereal crops. The biggest retrogression in abosolute terms is shown by the vegetables and fodder plants, and in relative terms by industrial plants. The absolute reduction of the growing of fie-Id crops is a consequence of the already mentioned changes in the valorization of the physical conditions for farming and of the relatied abandoning of the less suitable farmland, particularly in mountainous and Karst regions. The rapid discontinuation of the growing of cereals, on the one hand, reflects the re-orienting of farms towards animal husbandry for the market, and on the other, the specific social land-ownership structure: the small farmer who have undergone the process of restructuring stop growing cereals but continue to grow fodder plants and vegetables. As a result, the growing of vegetables was during the period in question not relatively diminished but even increased. The considerable relative increase of the growing of fodder plants reflects the overall tendency to shift away from the multi-crop production and become oriented towards specialized animal husbandry.

Regional Characteristics of the Development of the Growing of Individual Groups of Non-cereal Field Crops

<u>Fodder plants</u>. The basic changes as regarding the regions in which fodder plants are grown are a true reflection of the vew valorization of natural conditions of farming. In the north-eastern, Sub-Pannonian Slovenia, where the conditions for growing cereals are more favourable, the percentage of fodder plants is absolutely falling; in Central Slovenia, on the other hand, particularly in those communes which occupy mostly hilly of Alpine ground, the percentage of fodder plants, again determined by the new orientation towards specialized animal husbandry, is markedly on the increase. There are thus outside the Sub-Pannonian region in Slovenia only two communes where the growing of fodder plants has diminished. The fodder plants taken together ocupied in 1961 22.2 per cent but in 1974 26.0 per cent of the sowed fields. With regard to the amount of noncereal field crops, they occupied in 1961 51.9 per cent but in 1974 54.4 per cent of tilled surfaces.

In the period under consideration the percentage of surfaces gro-Vegetables. wing vegetables had risen from 19.1 to 20.32 per cent in all the sowed fields. But with reference to fields growing non-cereal field crops only the percentage of vegetables had decreased from 44,8 to 42,5 per cent. The regional distribution of vegetables is strongly dependent on natural conditions. Two aspects are here to be taken into account: first, the natural conditions favourable for growing these crops, and second, the generally less favourable conditions for agriculture. In both cases the percentage of vegetables is indeed high, even if resulting from different conditions. In regions where there is comparatively little of farmland suitable for agriculture in general, e.g. the communes of Tolmín, Radovljica, Tržič, Ilirska Bistrica, and Ravne na Koroškem, the growing of vegetables in widespread, mostly for domestic use, or there is such a scarcity of farmland that most of it is used for growing vegetables. But in regions with more favourable natural conditions, in particular on gravel plains, the growing of these crops is intended for the market.

Industrial plants. As regards the growing of industrial plants, big changes occurred during the period in question. A great many communes which have less favourable conditions for growing industrial plants had abandoned the growing of these crops completely. On the other hand, in regions with more favourable conditions the amount of fields sowed with these crops had increased. In 1961 industrial plants occupied 1.4 per cent of all sowed fields, in 1974 1.6 per cent. Also with regard to non-cereal field crops the changes are not significant: in 1961 3.05 per cent, and in 1974 3.32 per cent of fields.

<u>Common Characteristics of the Growing of Non-cereal Field Crops.</u> Taken as a whole, the common regional characteristics of the development of the growing of non-ceral field crops reflects the new valorization of natural conditions for agriculture in general as well as in respect of the varying social land--cwnership. With its better natural conditions for agriculture, the north-eastern Slovenia maintained the same or even increased the production of cereals, whereas the entire remaining part of Slovenia had become reoriented towards the growing of non-cereal field crops - the poorer the natural conditions for agriculture, the more had individual regions become oriented in this line of production. Razvoj gojitve nežitnih poljščin v SR Sloveniji med leti 1961 in 1974

Za obravnavano obdobje je v SR Sloveniji značilen porast deleža nežitnih poljščin, kar je povezano s hitrim prestrukturiranjem iz agrarne v agrarno-industrijsko deželo, povezano z zmanjšanjem deleža kmečkega prebivalstva in odselitvijo podeželskega prebivalstva na sploh.

Glede na katastrske podatke je bilo v SR Sloveniji 1954 leta 352.532 ha njiv in vrtov, leta 1974 pa le 265.675 ha, torej le še 74,0 %. Da bi raziskali prostorske komponente teh sprememb smo spremljali spreminjanje površin pod nežitnimi poljščinami med leti 1961 in 1974. Nečitne poljščine smo razdelili v naslednje skupine: povrtnine, krmne rastline, industrijske rastline.

Regionalne spremembe teh treh skupin so bile naslednje:

- Krmne rastline so dosegle največje spremembe tam, kjer se je kmetijstvo najbolj preusmerilo. V Severovzhodni Sloveniji, subpanonski Sloveniji je delež pod krmnimi rastlinami najbolj nazadoval, v Osrednji Sloveniji pa v primeru usmeritve kmetijskega gospodarjenja v živinorejo delež raste. V Subpanonski Sloveniji kažeta le dve občini porast površin pod krmilnimi kulturami, od 22,2 % na 26 %.
- 2. Povrtnine so v obravnavanem obdobju napredovale od 19.1 % na 20,3 % njivskih površin. Toda glede na nežitne poljščine se je njihov delež zmanj-šal od 44,8 % na 42,5 %. Regionalna opredelitev povrtnin je bolj navezana na naravne pogoje. Precejšen delež teh površin pa je odvisen tudi od dolo-čene usmeritve, ali za domačo porabo, ali za odkup, ali pa za direktno prodajo na trgu.
- 3. Industrijske rastline so površinsko porastle, od 1,4 % na 1,6 % obdelovalnih površin, glede na nežitne poljščine pa od 3,05 % na 3,32 %, zlasti močneje v področjih, ki so za poljedelstvo bolj ugodna.

Na splošno je regionalni razvoj površin zasejan z nežitnimi poljščinami odvisen od sprememb v splošnem vrednotenju naravnih pogojev za kmetijsko proizvodnjo.