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Arrangement, Renewal and Development of Rural Areas and Agricultural Resources of the Republic of Croatia

INTRODUCTION

Until recently, rural development was considered in the developed countries to be a synonym for agricultural development, namely the rural area was considered to be the area which sells or offers the (primary) agricultural products to the urban settlements¹. However, due to a gradual increase in living standards and leisure time, rural areas are undergoing changes, particularly in regard to economic behaviour. These changes are also affected by a reduction in agriculture regarding human resources — that is the number of people directly and exclusively involved in agricultural production.

AGRICULTURAL STRUCTURE AND THE CROATIAN RURAL AREA — HISTORY

It should be emphasised that the changes which took place in agricultural production and rural areas in the late fifties, only recently occurred in Croatia. Unfortunately, due to historical and political circumstances, the development of the Croatian economy and agriculture since 1918, has not kept pace with the rest of Europe, but was affected by 'balkanization' and later on by 'socio-realistic' dogmas which had a damaging effect on human and production resources.

¹ The term 'rural' is used in the spatial category, a synonym for the term 'agriculture' in an economic sense, and antonym to the term 'urban'.

Croatia, as a typical agricultural country — according to all its socio-economic, spatial and other characteristics, has changed its course and taken the path of industrial and other nonagricultural development. With respect to economic relations, this transition was characterised as a change in economic structure of population, gradual abandonment of traditional activities and an acceptance of the concept of industrialization. The agricultural fall started, both in absolute and relative terms, along with a comparative decrease in agricultural contribution to the GDP and national income.

The changes have been caused by transition to the development of industrial and other nonagricultural activities. New job opportunities caused an intensive deagrarization of the high agricultural overpopulation. Although Croatia, compared with other areas of the same state (the former Yugoslavia), had a comparatively higher developed economic structure, the centralised planning of the economy caused essential changes in rural areas, predominantly in the agricultural sector.

Table 1

Croatian agricultural population

	1900	1910	1931	1953	1971	1981	1991
Thousands	2,588	2,719	2,635	2,220	1,432	715	410
% of total	82.1	78.6	69.6	56.4	32.4	15.5	9.1

Source: Statistički Ijetopis RH DZS, Zagreb (Census)

The early sixties brought more intensive urbanization, and consequently the increase in urban population. The rural areas were subject to intense emigration, particularly from the undeveloped mountainous regions and the hinterland of the Adriatic belt and islands, as well as from the marginal lowlands of Slavonia and Baranja.

The abandonment of agriculture as a profession and the family farms as a place to live and work has considerably changed the image of the rural areas.

We could primarily speak of the disintegration of farming population as the social class and changes in what was once the farming economy and way of life. The changes embraced production methods, land ownership sense and role, rural community transformation.

Due to inappropriate economic and agricultural policy, mostly affected by the attitudes of the former socio-economic system, Croatia had a very high rate of deagrarization. During the period 1948–1991, over two million people left agriculture, which had considerable demographic, economic and social consequences on rural areas, particularly where agriculture was the

predominant activity. The young were almost completely abandoning the rural areas, particularly during the initial stage of this process.

Table 2

Croatian rural and urban population

Year	Rural (thousands)	Urban (thousands)	Share	
			rural %	urban %
1953	2,984	952	75.8	24.2
1961	2,878	1,282	69.2	30.8
1971	2,605	1,821	58.9	41.1
1981	2,264	2,337	51.6	48.4
1991	2,187	2,597	45.7	54.3

Emigration takes a complete natural population growth, and somewhat more. Therefore this was one of the essential causes of the regional imbalance in Croatia.

At that stage, agriculture was the focal point of economic development in the majority of the regions, but, it should be pointed out, in a negative sense in the case of family farms. The examples are the forced and (fortunately) unsuccessful collectivization of agriculture, considerable limitations with respect to land ownership and use (land reform and land maximum), bans on the purchase of machinery and the use of outside labour on family farms, inequality from the political and economic aspect (representation on administrative bodies, access to investment and credit funds), discontinuations of institutions useful for farmers, such as the extension services and co-operatives.

Additionally, the very 'model' of industrial development which was centralised rather than localised, caused difficulties through inadequate exploitation of the rural resources, and the problems of urbanization, housing and other municipal services.

The essential changes in agricultural structure, both in ownership and land, were initiated by land reform (1945 and 1953). The political system created a land fund on state-owned — later socially owned — agricultural farms (and co-operatives, which, in the early sixties, through their mergers with the processing, trading and other industries, transformed into agricultural (industrial) conglomerates ².

² The history of large agricultural estates leads us to interesting comparisons and information essential for future organisation of such organisational units.

The agricultural organisation in Croatia can be observed on the estates of the Middle-

The unilateral development of these large companies, supported by the system through the agricultural policy measures, marked further changes in rural areas and land ownership relations in Croatian agriculture. The state-owned sector of agriculture has been constantly favoured by the state due to its dogma and one-sided attitude. The large, socially owned enterprises have been established under the effect of administration, political 'integration' rather than as an outcome of economic relations. These enterprises had a monopoly position and considerable financial support which led to an uneven allocation of resources, inadequate production structure and subsidised exports based on these principles.

We could speak of the two processes related to the organization of the land area unrolling at that time in parallel with each other. First, an increase in the land area of the socially-owned enterprises which reached its peak in the early sixties (1963-65), was facilitated by attractive loans for the acquisition of privately owned land. Secondly, the process of further fragmentation of family farm land was under way simultaneously, which increased the disproportion between their number and agricultural areas, and their further and stricter restrictions (since 1953), by implementation of the land maximum of ten hectares.

The measures that could have helped alleviate the problem of fragmentation, primarily the land reclamation measures have mainly been introduced into the then socially-owned sector, with the strong financial support of the state.

The agricultural production of large farms has been generally oriented towards plant growing — generally of field crops — which served the increasing and often oversized processing capacities. Since the majority of these enterprises was established in quality lowland areas, the conditions were very favourable for this type of production. From the technological point of view, growing of field crops was in a narrow crop rotation, often

—European (in the northern regions) and colonate (in the southern regions) type, in the feudal system, on the landed properties and large estates, on the state-owned experimental farms and peasant farms between the two wars, and finally the agricultural co-operatives and family agriculture in the recent period.

Generally, the open fields system lasted in the majority of the continental European countries about eight centuries. If the organisation of some Croatian landed properties in the later period of the feudal system is analysed, the sensible organisation is noticed of land area and agricultural production under the then conditions of the feudal rent, undeveloped market and poor transportation links. In comparison with new creations called combinates and 'socialistic agriculture', such an organisation, which has its time-related, economic and legal limitations, proves to be superior both regarding the organisation of production and preservations of natural and land resources, and the rural space. The system of interconnection of all the sectors of agriculture, from field crop growing to cattle breeding, fruit and vine growing and fish breeding to processing and distribution, was a model based on experience, tailored throughout centuries and successful under the then conditions in all respects.

monoculture, because the participation of cattle breeding was lower and almost exclusively oriented towards intensive production (stable breeding)³.

Regardless of all the land resource reclamation measures introduced simultaneously (agricultural and hydro amelioration, construction of road infrastructure and other), the technological inconsistency in forcing high yields, often non-economic (involving high costs) caused a gradual deterioration of physical/chemical properties and depletion of the soil and environment degradation (imbalance in nature, chemicals, drying out of swamps and destruction of fauna habitats etc.), and equally high production costs.

AGRICULTURAL LAND STATUS AND POTENTIALS IN CROATIA

The total area of agricultural land in Croatia is 3,208 million ha, from whence 467 thousand hectares are used by the state owned sector (14.6%), mainly within the enterprises, and 2,014 million hectares is owned by the family farms. The remaining 727 thousand hectares is the so called non-organised general nationally owned land (mainly pastures in the hilly mountain areas).

With its 0.45 ha of arable land per capita, Croatia falls among the group of states which is relatively rich in land.

Table 3

Agricultural areas as per forms of ownership in Croatia in 1991

	Total	Family farms	Agricultural companies and cooperatives	National land
Agricultural area - total	3,208	2,014	467	727
Arable land - total	2,020	1,572	394	54
- plough land and gardens	1,466	1,097	354	15
- orchards	70	65	5	-
- vineyards	71	63	8	-
- meadows	413	347	27	39
Pastures	1,155	441	49	665
Reeds, pools, fish ponds	33	1	24	8

Source: Statistički ljetopis RH DZS, Zagreb

³ According to the yield of the basic field crops per hectare, the combines are reaching or even exceeding the level of the average production of the most advanced agricultures in the world, but they depart from them because of lack of profit.

The majority of arable land is used for cereals (45%), less by fodder crops (9%), and vegetables (9%). The vineyards and orchards occupy 7%, and the meadows 20% of arable land. The size of farms is limited to the number of cattle, thus only 4.2% of farms have more than five cows, 5.3% more than ten pigs, 2.6% more than 20 sheep.

Table 4

Agricultural farms in Croatia 1960–1991

Farms	1960	1969	1981	1991	Index 1991/1961
Family	653,374	614,803	569,221	534,266	82
Socially- (state-) owned	1,440	414	682	666*	46**
– enterprises	227	173	534	500	220
– co-operatives	1,213	241	148	166	14

*1989, **1989/1961

Source: J. Kraljičković, J. Juračak, *Struktura obilježja proizvodnih resursa poljoprivrednih gospodarstava u Hrvatskoj*

The majority of production capacity in Croatian agriculture, primarily of agricultural land, is owned by family farms. The mentioned limitations hindering development of family farms and agriculture caused inadequate exploitation of resources in agriculture with an unfavourable effect on economic development in this sector, its productivity, demographic and socio-economic structure etc.

The dual agricultural sector includes some 400 large agricultural enterprises (1989) owning on average a land area of somewhat more than one thousand hectares within a large range of 50 ha to 20,000 ha and the majority of about 534,000 more or less traditional family farms.

One third of these farms is below one hectare, and only a very small fraction (2.5%) of farms are above ten hectares. One quarter are exclusively agricultural as regards their income, while the large majority are part time family farmers who combine agricultural and nonagricultural income, namely employment.

Such a situation in the family farms distribution with respect to land size is the consequence of institutional measures (land reform and land maximum and others) rather than economic relations. The family farms have survived all the Scyllas and Charybdis of the dogmatic communist utopia, land reform, and maximums negation of capital, entrepreneurship and market forces, but they are bearing deep scars which are reflected in land structure, economic backwardness and a deep distrust of all state implemented measures, regardless of what they may be.

Table 5

Family farms in Croatia as per land area

Used area	No.	%	Area (ha)	%	Average size (ha)
Below 1 ha	185,922	34.8	90,864	6.3	.5
1–5 ha	265,434	49.7	670,557	46.6	2.5
5–10 ha	69,587	13.0	478,588	33.3	6.7
Over 10 ha	13,323	2.5	198,817	13.8	14.9
Total	534,266	100.0	1,438,827	100.0	2.7

Source: Statistički ljetopis RH DZS, Zagreb

The enterprises, the invention of the soc—realistic system, were formed as an antidote to the privately owned agriculture and initiative, carrying along the patterns and schematic agricultural production schedule. An inadequate crops rotation which did not involve cattle breeding, inefficient bureaucratic administration, overpopulation etc.

This should be rounded off with the damages caused by inadequate use of heavy machinery, oversized and economically unjustified quantities of fertiliser and other chemical agents, which impaired the physical/chemical characteristics of soil, and often irresponsible reclamation projections.

All of this is reflected in inadequate land use. Using the best (often virgin) agricultural land and unlimited financial incentives, those agricultural organizations were used to prove the advantages of the system but, as should have been expected from the non market economy, through physical rather than economic production indicators.

Table 6

Agricultural enterprises and cooperatives in Croatia as per land size, 1989

Land size	No.	%	Area (ha)	%	Average area (ha)
Below 100 ha	157	39.2	5,309	1.1	34
100–500 ha	122	30.4	29,995	6.4	246
500–2000 ha	255	13.7	68,842	14.8	1,252
2000–5000 ha	42	10.5	140,133	30.1	3,337
Over 5000 ha	25	6.2	221,688	47.5	8,868
Total	401	100.0	465,967	100.0	1,162

Source: Statistički ljetopis RH DZS, Zagreb

CURRENT SITUATION

The Croatian state inherited numerous land related problems, particularly within the context of privatization, namely the issues such as land privatization and de-nationalisation, lots fragmentation, land cadastre and land registries, their exactness and up to dateness, legal issues related to land inheritance, land market, leasing and concessions, taxation and protection of good farmland against change in its dedicated use. All of the issues require separate and thorough analysis and the proposals for their solution to be based on scientific research. This is accompanied by the social aspect of the present status and future aging of agricultural population and the workers, and consideration of possibilities that the young be involved in modern agricultural production and more rational land use.

In resolving these issues, the foreign and our own historical experience can be applied, as well as the new solutions, particularly those suitable for individual segments of agricultural structure and area.

The regional aspect of agricultural development fully reveals its importance. The Agricultural Development Strategy underscores that Croatia 'has not so far introduced regionalization of agricultural space... although there had been some studies and attempts towards agricultural regionalization ⁴'. Consequently, the criteria like soil type, and geological substrata, natural vegetation, climate and other variables are set for agricultural regionalization. The agricultural production system, and the characteristics of agricultural farms generally developed on these factors. In conceiving the agricultural policy and other measures for the future sustainable regional and total development, it is necessary to have a good knowledge of these factors as well as of other demographic, socio-economic and other factors.

The characteristic features and comparative advantages of rural areas, such as its nature itself, the agricultural products with a mark, cultural heritage, tradition in crafts and handicrafts, rural tourism and other, are the essential background for modern development. In the future, the sustainable development of agricultural shall be increasingly becoming the must of rural development, for the development to be sensible and planned in comprehension of all its essential components.

One of the major negative features is the loss of productive areas in agricultural caused by urbanization and often inadequate relations towards

⁴ *Review of state and agricultural development strategy for the Republic of Croatia*, Zagreb, 1994, pp. 32–33

According to the Strategy, the following regions are determined in Croatia:

1. Pannonian region: a) eastern, b) central, c) western, d) north-western.
2. Mountain region: a) pre-mountain and b) mountain.
3. Mediterranean region: a) northern, b) central c) southern.

land as a nonrenewable resource. During the war between the bulldozer and plough which lasted from 1965 to 1990, the total of about 200,000 ha of agricultural, primarily arable land was urbanised i.e. about 8,000 ha of land annually, which is a considerable area.

The uncritical concept of abundant resources (land, minerals, water etc.) which has been constantly promoted in the past, created the wrong image, and resulted in an ungrounded public understanding of 'wealth'. Had the above mentioned loss of agricultural land have been continued at the same pace, we would soon have found ourselves poor in land, particularly in some areas where there are strong aspirations for construction of infrastructural facilities (Adriatic region, Zagreb region, etc).

Inadequate area planning and disrespect of the agricultural profession in the process of passing the area and town development plans, rather mild regulation on land quality protection, lack of law enforcement, and town plans implementation supervision (illegal building), all caused change in the intended use of best agricultural land in comparatively good agro-ecological areas and their development for nonagricultural purposes⁵.

The total balance of agricultural land in a comparatively short period of time of 25 years is negative, as the consequence of unplanned building and use of land for nonagricultural purposes. Had this trend been continued, Croatia would be left with no arable land within less than 500 years. The wrong social climate and ideas about the abundant agricultural land capital ought to be changed. The agricultural land, natural and man made capital request rational use and conservation, which includes the environmental protection and improvement. This can be achieved through agricultural land zoning, preparation and acceptance of land consolidation and reclamation plans, strict supervision of enforcement of bans on construction of nonagricultural facilities within the first five land classes. The leisure cottages and similar buildings in the rural areas should be built on the land which is not suitable for agricultural activities, and the areas of marginal significance for agriculture should be afforested. One of the preconditions for sensible agricultural policy is up to date and effective recording and monitoring of all land utilization forms.

One of the most frequently mentioned limitations to Westernization of the Croatian agriculture and its adaption to the market economy with respect to agricultural resources and comparative advantages of agriculture within the national economy is fragmentation of lots and family farms in

⁵ The example of such a policy, particularly applicable to the first decades of industrial development, is the Kaštelansko polje (Split-Trogir) which is ideal for agricultural production — particularly of spring fruits and vegetables, flowers), due to climactic conditions. The same is the destiny of the Velika Gorica area, suitable for horticultural production and cattle breeding, which services the big stomach of the city of Zagreb. The examples are numerous.

general. The larger number of separate land pieces is generally taken as the barrier to better economic efficiency in agricultural production ⁶.

The 1991 Census recorded that the average family farm (2.7 ha) consists of five fragments with the area of half a hectare (ranging between 0.4 and to 1.24 ha). One of the important factors affecting fragmentation of land lots is the system of family farm inheritance by which one owner may have several heirs. In some parts of Croatia, the right of the first born (or the sole heir) is usually in force, which results in less intensive fragmentation.

The present regional overview of allocation of the agricultural land is an inheritance of the historical conditions and differences in the management system, as well as the result of demographic factors (population and density).

There is no formal land market in Croatia. The land transactions between individuals were based on settlements and the prices, due to high capital transfer taxes, have not been realistic. It was not until recently that the land trade dynamics intensified, due to the changes caused by the war and aggression and reduction of taxes ⁷.

In addition to the said land market factors and their impact on changes in the ownership and land structure, the effect of the tradition factor should be pointed out, primarily that of strong bonds of the people, the land owners who are not necessarily the farmers with the land. This bond is the consequence of an attitude on family continuity, psychological reasons which often exceed the logic of economy. Selling the land, the patrimony, in some parts of our country the rural community considers a sign of personal business failure. Also, for old farmers, the land provides certain economic security so this aspect of change in the ownership and structural relations is considerably affected by the pension scheme. The present scheme is not a factor which would stimulate intensification of land transactions and, consequently farmland enlargement and production expansion, therefore it should be changed.

⁶ The ownership structure of family farms in agriculture is unfavourable, even worse than in the previous period. About 80% of farms below 10 ha, and if the large agricultural enterprises — in the process of privatization — are taken into consideration, then over 40% of agricultural areas are on farms with areas over 10 ha, but this area ranges from 10 ha to 20,000 ha and more. If this is taken into consideration, then Croatia has a somewhat more favourable position in the international comparisons of average farm size.

⁷ The land is bought and leased by the refugees and displaced persons, farmers from the temporarily occupied parts of Croatia and other regions from which the Croatian population was evicted.

CONCLUSIONS

The change in the economic and political system in the independent state of Croatia in the early nineties, the transition to the market economy and the present institutional changes (privatization, namely transformation of socially-owned agricultural enterprises into more effective forms), require thorough revaluation of the agricultural production resources. Therefore, it is necessary to initiate preparations for thorough evaluation of agricultural as well as general land potential of the state.

The researches conducted so far have been only partial, mainly those on soil characteristics, but there is no systematic and comprehensive investigation into this issue, particularly in respect of the economic aspects for the Croatian territory.

The land management includes two important components, i.e. the area planning of land use and the related legislation. The previous practice (from the former political system) had not adequately evaluated the land, i.e. it was not included in the theory of capital as in the market-oriented national economics. The time has come to change this attitude, and the procedures are urgently required for the land price re-evaluation, as well as the prices of lease and concessions along with the other measures essential for rational land use⁸.

The issue of return of land to their former private owners (before 1945) or the compensation for its value is the subject of legislation on denationalization which has not yet been passed. The second part of this problem is the issue of the state owned land which is presently used in agricultural production of large companies. The essential issue is that of whether the land from the agricultural enterprises shall remain at their disposal, or if it will be distributed between the family farms and interested entrepreneurs, companies and similar. This question can be answered only

⁸ *Rural land sector survey*, 1994, pp. 4–5. According to the World Bank report, it is necessary to conduct extensive research into land resources in rural areas, which would encompass the arable land, pasture land, forestry and other protected areas — such as national parks. This research would answer the topical question related to national land management, as per the below sections and issues:

i) a) Land fragmentation; b) inheritance; c) cadastral surveys and land titling and registration; d) land taxation; e) land market; f) subsidies in agriculture and their impact on the process of land ownership patterns restructuring; and g) land legislation.

ii) The future use and ownership of the state owned land. This includes the issues of a) return of the land or some other solution for land expropriated after 1945, and b) the issue of future ownership and utilisation of this state owned land.

iii) Social issues associated with land ownership and transfer, in two basic points, i.e. a) aging of the rural population and their influence on land productivity and b) opportunities for young farmers to gain access to the land — introduce modern agricultural production.

after meticulous investigations which would encompass determination of advantages and disadvantages of the land distribution, namely maintenance of the present enterprises.

In practice, there are various requirements and opinions, from those advocating distribution of the land of the former co-operatives among the farmers, to those which are for maintenance of the present status.

From the agro-economic standpoint, there is no single answer to all the issues involving the agricultural enterprises. The analysis should include the existing (and the possible) production system which would be capable of responding with the most suitable form of organization. The investigations of this problem should involve the issues related to the farm size and the production level and type, as well as the assumed capital investment, cost of basic infrastructure, and a number of the social issues.