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AGRICULTURAL DEVELOPMENT
IN
YUGOSLAVIA

Beograd
1958

**PUBLICITY AND PUBLISHING ENTERPRISE
JUGOSLAVIJA BEOGRAD, Terazlje 31.**

This publication is based upon studies, publications (pamphlets, articles etc.) and official statistics published in Yugoslavia

INTRODUCTION

Particular attention is being paid to the development of agriculture in Yugoslavia.

The present situation and prospects for future development in this economic branch are a subject of careful study and analysis, while a ten year long-range programme of agricultural development has already been worked out and discussed among the public. A parallel increase of agricultural investments is also foreseen, while a series of regulations providing a more suitable basis and better conditions for the further development of agriculture have been enacted.

One of the reasons underlying this keen interest in agriculture is that the latter lags behind the other economic branches, particularly industry, in its development, and is hence unable to satisfy home requirements in foodstuffs, insure adequate supplies of raw materials to the processing industry, and provide sufficient export surpluses. Such a state of affairs is primarily a result of the pre-war inheritance when agriculture, although the most important economic branch, was neglected in every respect. Apart from this, industry enjoyed priority during the immediate post-war period.

The ravages of World War II further reduced the already meagre inheritance of the FPRY in the field of agriculture.

SURVEY OF AGRICULTURE IN PRE-WAR YUGOSLAVIA

1. Importance of agriculture

In the inter-war period Yugoslavia had a total surface area of 24,893,700 hectares of which 55% were farmed. According to official estimates, this area was inhabited by 15,839,000 persons, so that the average density of population per square kilometer amounted to 63 inhabitants. This density revealed a steady upward trend, however, as Yugoslavia with an annual population increment of 16% and a high birth rate, was second in Europe after the Soviet Union.

Urban population accounted for 13% of the total number of inhabitants, while the remaining 86.1% were directly dependent on agriculture for a livelihood. Agriculture absorbed 76.3% of the total active working population which amounted to 6,682,615 according to the census of March 31, 1931, while only 10.7% were employed in industry and the crafts. All this made Yugoslavia a predominantly agrarian country.

In view of the fact that the vast majority of the population was engaged in agriculture and that almost 11,000,000 inhabitants depended on this economic branch for their livelihood in 1931, agriculture represented the most important sector of economy in pre-war Yugoslavia. This importance is also reflected in the formation of national income and exports where agriculture accounted for over 50% of their aggregate value etc.

However, in spite of its immense significance agriculture was considerably neglected. Consequently backwardness and ill-management prevailed in every branch of agriculture in prewar Yugoslavia and due to this the country was among the last in Europe as regards the productivity of agriculture.

2. Fundamental characteristics of agriculture

a) *Hyperpopulation of rural areas*

Agricultural surfaces accounted for 13,694,285 hectares of the total area, of which 7,076,481 hectares were arable, while the rest consisted of orchards, vineyards, meadows and pastures.

In view of the climate and other natural conditions a thriving and progressive agriculture could have been created on this area with advanced farming, livestock raising, fruit cultivation etc., which was also rendered imperative by the markedly agricultural character of the country in which 4-5% of the active working population was employed in agriculture and about 2/3 of its population depended on the proceeds yielded by this economic branch.

The living conditions of such a numerous population under the circumstances marked by a low level of agricultural development were extremely difficult, while the underdeveloped industry which was unable to absorb the vast labour surpluses from the rural areas prevented a solution to be devised in the country. The difficult position of the peasant population is best illustrated by the fact that Yugoslavia belonged to the most densely populated countries in the world as regards the available agricultural areas, particularly arable areas. The average density of agricultural population was 192 persons per 100 hectares of arable land, which, as illustrated by the following comparative survey

notably exceeded the average in the majority of other countries.

Canada — 11 persons per 100 hectares of agricultural surface.

USA — 17 persons per 100 hectares of agricultural surface.

France — 48 persons per 100 hectares of agricultural surface.

Germany — 52 persons per 100 hectares of agricultural surface.

Austria — 64 persons per 100 hectares of agricultural surface.

Hungary — 72 persons per 100 hectares of agricultural surface.

Yugoslavia — 114 persons per 100 hectares of agricultural surface.

Bulgaria — 116 persons per 100 hectares of agricultural surface.

The backward agriculture and impoverished villages were unable to play the part which would otherwise have been theirs in pre-war Yugoslav economy. Moreover their retarded state had a negative effect on economic life as a whole, and together with the other insufficiently developed economic branches made Yugoslavia one of the most backward capitalist countries with a low standard of living.

b) *Partitioning of holdings*

According to the 1931 census the structure of the holdings was as follows:

<i>Category of holdings</i>	<i>Number</i>	<i>% of total no.</i>	<i>Area in hectares</i>	<i>% of total area</i>
up to 5 hectares	1,346,000	67.8	2,977,570	28,0
5—20 ha	579,000	29.3	5,253,000	49,3
20—50 ha	49,000	2.5	1,388,000	13,0
over 50 ha	11,000	0.4	1,027,000	9,7
Total	1,985,000	100%	10,645,570	100%

It ensues therefrom that there were holdings on the 10,645,570 hectares lowered by census in Yugoslavia. The magnitude of this number will be best illustrated by the fact that Argentina, one of the leading agricultural producers in the world had only 306,603 holdings on an area of 57,000 hectares.

The large category of the small holding became a major obstacle for the achievement of progressive agriculture in Yugoslavia. Yielding negligible market surpluses, and often no surpluses at all, this category maintained agriculture in the stadium of subsistence farming and did not offer any possibilities whatsoever for the creation of the necessary financial resources for investments which were urgently required in all sectors. It is interesting to note that holdings of over 100 hectares which numbered 1,800 accounted for 6.4% of agricultural surface, while 670,000 holdings under 2 hectares covered only 6.5% of this area.

Capitalist relations prevailed in the category of large holdings: exploitation of hired labour, market speculations, further expansion of the estates by the expropriation of medium and small holders etc. Pre capitalist feudal and semi feudal relations with various forms of exploitation, with rent in kind and labour and monetary rent still survived in some areas and on some holdings of the categories mentioned above.

c) Insufficient technical equipment

There were only 438 iron plows and 182 wooden plows per 1000 holdings in pre-war Yugoslavia. Consequently 380 holdings per thousand were without steel and wooden plows, while the suppression of wooden plows as an obsolete and primitive farm implement progressed very slowly indeed at the rate of 0.8% annually. There was only the following agricultural machinery in 1939:

tractors	2,300
threshers	18,400
harvesters and cutters	41,400

The low level of agricultural mechanisation is indicated by the following comparative survey of machinery consumption per capita in Yugoslavia and other countries in 1937:

Yugoslavia	23 dinars
Belgium	336 “”
Denmark	235“”
Hungary	125 “”

The reasons for such a low level of technical equipment in agriculture are numerous of which we will mention only the most important ones:

— The low purchasing power of the peasants caused by the negligible volume of market production, the broad disproportion between the prices of industrial and agricultural products to the detriment of the latter, and substantial fiscal obligations.

— Agrarian hyperpopulation and cheap labour exerted a negative influence on the introduction of mechanisation, because the promotion of the latter together with the low level of (industrial development would only aggravate the pressure of the agrarian surplus population.

The low level of education was manifested in the preservation of traditional primitive methods of land cultivation and the obstruction of (new production methods and processes in agriculture.

The partitioning of the holding and its frequent fragmentation into small plots also prevented the enforcement of mechanisation which requires large, homogenous holdings. It is estimated that harvesters operate at full advantage only on holdings from 75 to 100 hectares, tractors on holdings of 100 hectares, and combines or harvesters on holdings of over 1000 hectares.

The configuration of the soil, which is mountainous and hilly in many areas was likewise unsuitable for that time mechanisation.

The use of artificial fertilizer was on the whole negligible.

e) Insufficient specialisation

Specialisation in agriculture implies the cultivation of those crops which, in view of the climate, soil, market and other conditions in a specific area, have the best prospects for success.

There where applied, specialisation contributes notably to the increase of labour

productivity.

In capitalist countries with a developed agriculture, specialisation is widely applied, and with sufficient use of artificial fertilizer rose to a higher level, i. e. the monoculture of one particular crop.

In pre-war Yugoslavia however, specialised farming was not applied on a larger scale, which also had a negative effect on labour productivity in agriculture. Instead of this, primitive cropping patterns prevailed which maintained the Yugoslav villages on a subsistence level and in a state of autarky, and thus impeded their more active participation on the market.

The cropping pattern in 1939 was as follows:

Wheat	87.0%
Industrial crops	3.5%
Vegetables	4.1%
Fodder crops	5.4%

Very small farming surfaces were sown by industrial crops, although the conditions of soil and climate were most suitable for the cultivation of a broad variety of such crops as for instance sugar beet. rape. flax, tobacco, cotton etc. This was also a symptom of the backward and primitive state of agriculture, in view of the fact that the cultivation of these crops inevitably obliges the producers to market the entire quantities produced, thus enabling them to acquire more progressive conceptions of agriculture and profitability of agricultural output. Vegetable cultivation proceeded along much the same lines although many small-holds located in favourable climate conditions could have been profitably engaged in this sector, particularly the raising of early vegetables and thus realize substantially higher incomes through the market than those derived by the cultivation of cereals, where the low yields, far from enabling participation on the market, were even insufficient to satisfy individual and local requirements.

The cultivation of fodder crops was also insufficiently developed. In view of the fact that this branch provides the basis for progressive livestock raising its low level of development also had a negative influence on livestock farming.

The available pastures, meadows and forest areas which, as compared to the total surface areas, notably exceeded arable surface were likewise insufficiently used.

The following comparative data illustrate the number of certain kinds of livestock in pre-war Yugoslavia and some other countries:

<i>Country</i>	<i>Cattle</i>		<i>Pigs</i>		<i>Sheep</i>	
	<i>Per 100 inhab.</i>	<i>Per 100 agric. inhab.</i>	<i>Per 100 inhab.</i>	<i>Per 100 agric. inhab.</i>	<i>Per 100 inhab.</i>	<i>Per 100 agric. inhab.</i>
Yugoslavia	29	42	24	35	62	91

USA	33	326	40	247	20	125
France	36	151	26	66	18	73
Holland	25	209	18	149	4	32
Denmark	71	384	76	407	1	7
Italy	18	42	9	22	22	51
Hungary	22	45	70	143	6	13
Czechoslovakia	32	118	29	106	4	14
Switzerland	33	176	19	105	4	21

It ensues clearly from the foregoing that Yugoslavia lagged behind most of the countries listed above in the raising of those types of live- stock (cattle, pigs) which require intensive human labour.

f) *Low level of labour productivity*

Largely due to the above mentioned deficiencies of agriculture, labour productivity in this field of economy was on a very low level.

Yugoslavia produced 533 kilograms of cereals per capita, this figure being 2-7 times higher in other European countries although the number of people employed in agriculture was substantially lower.

It is obvious, owing to such a state of affairs, that in 1931 only half of the aggregate values of the goods produced in the country derived from the 11,000,000 inhabitants engaged in agriculture, while the other half was provided by the remaining 3,000,000 inhabitants. In spite of the very low level of industrial development, the Yugoslav workers which accounted for merely 1/7 of the working population created 1/3 of the volume of all goods produced in the country. Such a proportion most eloquently reveals the backward state of agriculture and the low level of labour productivity.

Of 348 districts in pre-war Yugoslavia, only 92 showed an active agricultural balance i.e. yielded marketable surpluses. 62 districts were self-sufficient i. e. satisfied their own requirements, while 194 had a passive agricultural balance i. e. were unable to produce the quantities necessary for the subsistence of their inhabitants.

2) **Agrarian policy**

No comprehensive and systematic measures of agrarian policy aiming at the increase of over-all production were undertaken by the Government whose action was confined to the solution of individual problem as they arose, and most frequently when they had already reached a level in which it was impossible to devise a successful solution without broader and radical measures in this field of economy.

Apart from various administrative outlays, only 32,922,705 dinars or 0.38% of aggregate Government expenditure were earmarked for agricultural requirements.

a) *Agrarian reform*

After the breakdown of the Austro-Hungarian monarchy in 1918, under the influence of the revolutionary movements in Europe, (the October Revolution, the Hungarian Revolution, and the general confusion which reigned in the former Monarchy, the people

began seizing the properties of the great landowners on their initiative, particularly those estates from which the foreign owners had fled. In this way the people of a newly liberated country was solving one of their vital problems, for which they had fought and organised revolts in the past, namely the acquisition of land to insure their subsistence.

In order to check this movement of a land-hungry people, a Royal Proclamation was issued on January 1, 1919 in the new State of the Serbs, Croats and Slovenes, asking the peasants to wait in peace until they are allotted land by legal means through the enforcement of land reform, and refrain from the illegal seizure of land.

Soon afterwards, still under the pressure of the revolutionary tendencies of the people, the so-called Parliamentary Provisions of Agrarian Reform were enacted of February 27, 1919 by which:

feudal and semi-feudal relations still existing were abolished with the payment of a compensation to the former landlord. This referred to all *begluks*,¹ *civcijas*,² etc.

all large estates are expropriated providing for a compensation to the owners, while large forest areas likewise pass into state ownership with a compensation to their former owners. The category of large properties included: Holdings of over 100-500 *jutros* (1 *jutro* — 0.6 hectares) of arable land; *fidei comis* properties, i.e. those which passed intact from owner to one heir according to the land-owner's testament thus ensuring the material basis for the preservation of the power and prestige of the respective land-owning family.

The abolishment of feudal relations doubtless improved the economic status of a considerable number of peasants since they were freed from the obligation of sharing their yield with their landlords, at the same time, this had a stimulating effect upon peasants as regards the improvement of land cultivation. The large estates subject to land reform were placed under sequester and the confiscated land was leased to peasants who had previously been the tenants before.

At first the term of lease was set for one year, this also being the term set for the implementation of the reform, while subsequently extended to four years, and later prolonged indefinitely i.e. until the final solution of this problem which was legally approached in 1931.

Consequently temporary sequestration lasted for 12 years which had an extremely unfavourable effect on agriculture, as the peasants who held the sequestered land in leasehold had no guarantee that it would finally become their own; therefore were not particularly concerned with the Improvement of land. The great landowners, of course, profited by this provisional situation to consolidate their position in the newly formed state and thanks to the strong influence they exerted upon the government, succeeded in notably modifying certain provisions of the land reform in their favour.

Therefore the Law on the Liquidation of Agrarian Reform of June 19, 1931 set the agrarian maximum exempt from Reform at 174, i.e. 868 *jutros* and enabled the retention of a surplus up to 1,300 *jutros* on properties with livestock farms, model farms, stables, game preserves, fisheries etc.

¹ A *begluk* consisted of land belonging to a *beg* (*bey*) (Turkish feudal landlord and governor of a minor district) which he either leased or cultivated himself.

² *Civcijas* were serfs, i.e., peasants in feudal servitude.

The land pool created by this agrarian reform amounted to approximately 700,000 jutros of which:

530,000 jutros were expropriated from 369 landowners of which 310 were foreign citizens, and only 59 Yugoslavs.

170,000 jutros were expropriated from municipalities.

This land was distributed to about 215,000 applicants: volunteers in World War II, local applicants and colonisers (settlers).

The colonisation schemes comprised 23,000 families.

No assistance was extended to the beneficiaries of this agrarian reform in agricultural equipment, credits, technical assistance advice etc., as they were entirely left to their own resources, so that by legal or illegal sale, this land frequently became the property of rich peasants, often their former owners, as the beneficiaries were unable to subsist on it. Apart from this, a large number of beneficiaries never intended to remain on the land allotted them, and soon began selling it.

Such an agrarian reform was unable to solve the problem of landless peasants, as could be seen from the already mentioned official data from 1937, which established the existence of 200,000 landless peasants families. Its postponement exercised a negative influence on agriculture as a whole: instead of being put to profitable use in the quantitative and qualitative advancement of agricultural output, the forces of the people, material resources, and time were lost on intrigues, bribery, interventions etc., regarding the expropriation and distribution of land.

4) Ravages of war in agriculture

Agriculture in pre-war Yugoslavia) was such an economic field in which everything had to be built anew, because unnumerable problems had to be settled in order to achieve progress.

These difficult conditions were even more aggravated still further by the ravages of war which particularly affected rural population and their property. Of 2,131,000 persons killed or wounded during World War II in Yugoslavia the majority were peasants.

Furthermore the greatest number of the 3,500,000 houses burned and demolished and furniture destroyed belonged to peasants.

289,000 holdings were destroyed together with their entire equipment and livestock.

Destroyed or plundered:

Plows (iron or wooden)	40.2%
Tractors	66.5%
Threshers	69.7%
Fruit trees	24.2%
Horses	61.6%
Cattle	55.6%
Sheep and goats	63.3%
Pigs	58.7%

Destroyed, plundered or carted off from the country:

cereals and other crops	1,910,364 car loads
wool	1,766 “ “
milk	252,212“ “
eggs	1,900,000,000“ “

Consequently, after the liberation of the country in 1945, the new State inherited not only a backward but also an entirely devastated agriculture.

AGRICULTURE IN THE FEDERAL PEOPLE'S REPUBLIC OF YUGOSLAVIA

In spite of the priority assigned to industry in the economy of the new State, and the immense efforts and material resources given first for the reconstruction and rehabilitation, and subsequently for the development- agriculture has not been neglected, all the more so as it is confronted with three important tasks on whose fulfilment not only the economic but to entire life of the country depends. These tasks are as follows:

1) To provide the necessary food supplies for the population. This task assumed an increasingly complex character as the social structure of the population changed. The rapid industrialisation resulted in a steady increase of the non-agricultural population, while agriculture was faced with the necessity of reaching and surpassing the pre-war production level while employing less manpower.

The change in the social structure of population is best illustrated by the fact that while the total number of inhabitants rose in 1953 by 7.6% as compared to 1939, non-agricultural population increased by 39%-

2) The supply of raw materials to industry. The steady development of the processing and manufacturing industries, requires a parallel increase of production of agricultural raw materials both of vegetal (hemp, flax, cotton, tobacco etc.) and animal origin (leather, fur, wool etc.), which are indispensable if the full use of the available (industrial capacities is to be ensured without substantial imports of raw materials from abroad, as this would have an adverse effect on economy as a whole.

3) The ensuring of export surpluses. One part of the foreign exchange necessary for the purchase of technical equipment, etc. is derived from the exports of agricultural products, without which the rate of industrialisation would have to be notably slowed down.

The role of agriculture in this respect will be diminished when industry becomes capable of producing greater quantities for exports, and when its requirements in technical equipment become considerably lower. Until then agricultural products will constitute one of the major headings in Yugoslav exports as indicated by the following survey of their share in the value of exports during the post-war period:

1947	37%
1948	50%
1949	41%
1950	38%
1951	27%
1952	37%

In view of the tasks cited above, and other less important objectives of agriculture in economy as a whole, it is understandable that agriculture still participates by over 40% in the formation of national income in spite of its underdeveloped state which has still not been wholly remedied so far, and the rapid pace of industrialisation.

Owing to the significant role of agriculture, the state was obliged to devote corresponding attention to this economic branch notwithstanding the fact that the greatest efforts of the community were concentrated on industrial development. This was

necessary due to the constant threat of a serious disproportion between industrial and agricultural development, in which case the backward state of agriculture would have constituted a stumbling block on the road to industrial progress.

The agrarian and political measures of the state since the liberation up to now have been directed towards the creation of socialist producer relations in this economic branch and the maximum development of the producing forces.

Effect on producer relations in agriculture

The post-war farm policy and agricultural development can be divided into two phases: the first covers the period from 1945 till the enactment of the Law on the Management of State Economic Enterprises and Higher Economic Associations by the Workers and Employees in July 1950, and the second covers the period from 1950 up to now.

I Phase 1945-1950

The centralistic organisation and administrative system of management, modelled on the Soviet pattern both in outline and detail, constitute the dominant characteristic of Yugoslav economy at this stage.

All measures of farm policy and all developments in -the field of producer relations at this stage, doubtless reflected such an economic organisation and management system.

a) Agrarian Reform and Colonisation

Land Reform and Colonisation which was carried out in accordance with the Law on land Reform and Colonisation of August 23, 1945, marked the first action of the people's authorities which had a powerful effect on the producer relations in agriculture.

The enactment of this Law and its prompt enforcement was dictated by the following reasons: the necessity of allotting land to poor and landless peasants, and the necessity of freeing the agricultural population, as had already been done in the case of the urban, from exploitation and influence of rich peasants.

The fundamental principle of the above-mentioned law which later also became a constitutional principle was that *the land should belong to those who cultivate it themselves*. This prevented the private ownership of larger surfaces whose cultivation would require the employment of hired labour to a large extent, as well as the exploitation of land by various institutions by means of hired labour, rent etc. Those who received land also are obliged to till it themselves, and refrain from selling, leasing or mortgaging it for a twenty year period.

The following properties were subject to Land Reform and expropriation according to the legal provisions of the Law on Land Reform:

large estates in their entirety and without compensation with the entire equipment and livestock. installations and buildings. This provision referred to all properties whose surface exceeded 25-35 hectares of arable land (fields, meadows. orchards, vineyards. or 45 hectares total surface, and were exploited by means of hired labour or leasehold. The republican laws were entitled to reduce this maximum, if they considered it necessary:

properties belonging to banks. enterprises. stock companies. legal private subjects, without compensation, which belonged to the above listed legal subjects and were intended for industrial building, cultural and other socially useful purposes were exempt from this law:

properties belonging to churches, monasteries. religions institutions and suchlike foundations which exceeded 20 hectares. In exceptional cases these institutions are allowed to retain 30 hectares of arable land and 30 hectares of forest if they are of major historical significance;

properties under the fixed maximum belonging to non-agriculturers (merchants, craftsmen, employees etc.). The owners are allowed to retain 3-5 hectares;

properties belonging to agriculturers which exceeded the legally fixed maximum. The surplus expropriated was compensated by the payment of one year's gross profit of the land forfeited.

Land reform was carried out within this framework until the autumn of 1946, and the land pool thus created was completely distributed until the end of March 1948. This land pool, together with the confiscated land of German citizens, persons of German nationality, and enemies of the people amounted to 1,556,374 hectares which consisted of:

- 68.2% arable land
- 24.4% forests and forest complexes
- 4.8% pastures
- 2.6% unfertile land

The land from this pool was distributed as follows:

47.27% was handed over free of charge to poor and landless peasants. Priority was given to the fighters of the people's Liberation Army and Partisan Detachments and Yugoslav Army, disabled ex servicemen from World Wars I and II the families and orphans of fallen soldiers and victims of fascist terror and their families.

In most cases the applicants received land in their place of habitation, provided there was land for distribution. If this were not the case, the respective persons received land on the territory of their republic, and even in other republics to which they migrated in accordance with the implementation of colonising schemes.

In this way 316,435 families received an average of over 2 hectares, while 60,000 of these families were resettled by colonisation schemes.

The agrarian applicants particularly colonisers received aid in equipment and livestock: dwelling houses and outbuildings, livestock, tools, agricultural implements etc., as well as the indispensable instruction as regards the cultivation of land. The value of material aid is estimated at approximately 1,180,000,000 dinars.

52.73% of the pool were earmarked for the creation and strengthening of the socialist sector in agriculture, i.e. state owned farms and peasants cooperatives, thus laying the foundations of collective farming in agriculture.

Contemplated from the economic standpoint, land reform yielded both positive and negative results.

It was positive so far as it liquidated the last remnants of feudalism in Yugoslavia, thus enabling the abrogation of large scale exploitation of hired labour which is inevitable on large agricultural estates, and the creation of socialist holdings which marked the beginning of the future socialist sector in agriculture.

Its chief shortcoming was that it provided for the further partitioning of the already fragmented structure of holdings.

The distribution of the large estates among the poor and landless peasants ultimately resulted in the increase of the number of holdings which rose from the 1,985,725 as registered by the 1939 census, to 2,407,007 holdings including the peasant cooperatives and state farms.

Land reform particularly changed the property structure, as the number of holdings under 5 hectares rose considerably at the expense of the large properties. As is well known, small- holds have a lesser producing power, and are as a rule unable to produce for the market, and therefore have little or no possibilities to satisfy home requirements in agricultural products.

On the other hand, colonisation still enhanced the adverse effects of land reform, as the new immigrant owners, which were most numerous in the most fertile areas, lacked the experience necessary for the cultivation of the land allotted them, so that the yields invariably fell short of the targets foreseen.

In Vojvodina, however, where large surfaces were abandoned by the Germans and members of the Hungarian and German national minorities who fled with the occupying forces, colonisation represented a positive economic measure, as it enabled production on the abandoned holdings.

b) *The socialist sector*

The organisational forms in which the socialist sector in agriculture was created were: state farms and peasants cooperatives.

State Farms

A substantial portion of the land pool was set apart and used for the creation of the socialist sector in agriculture.

From 95.860 hectares or 0.7% accounted for by this sector according to the 1931 census, the latter rose to 3,831,000 hectares or 24.2% of total agricultural surface in 1950, and was used for the establishment of the following types of holdings.

state owned farms	858
collective farms belonging to enterprises	1,435
collective farms belonging to government institutions and social organisations	8,232

State farms were the largest among these holdings as they averaged 435 hectares of agricultural surface. The means of production on these farms belonged to the state, while the farms operated *along* much the same principles as the state economic enterprises.

These farms were of notable significance for agriculture, particularly during the first

post-war years when agricultural producer cooperativism was still underdeveloped. They served as model farms in which all advantages of large-scale commodity output were manifested: the organization and division of labour, application of mechanisation and *agrotechnical* measures, suitable cropping patterns etc., and consequently the achievement of a high level of labour productivity. Apart from their educational purpose, the state farms were *also* confronted with the practical task of producing selected seed and livestock for breeding purposes, supplying cities and industrial settlements with the necessary foodstuffs, and thus helping the reduction of prices of these products on the market.

Equipped with agricultural machinery, with greater possibilities for the use of artificial fertilizer, weed killers and insecticides, Yugoslav state farms succeeded in achieving higher yields than the cooperatives and individual farmers, as illustrated by the following comparative survey which shows a normal crop year (1949) and a drought year (1952):

<i>Sector</i>	<i>Year</i>	<i>Yield per hectare In metric centners</i>					
		<i>Wheat</i>	<i>Maize corn</i>	<i>Sugar beet</i>	<i>Potatoes</i>	<i>Tobacco</i>	<i>Clover</i>
State owned	1949	15.8	19.8	110.2	88.3	10.8	37.8
	1952	10.2	9.9	89.2	54.7	7.2	27.6
Cooperative	1949	14.5	18.6	123.2	94.3	8.7	34.6
	1952	8.5	7.4	69.0	42.0	5.0	23.1
Private	1949	14.0	16.3	122.6	88.0	9.0	33.6
	1952	9.3	6.1	65.5	48.1	5.2	22.7

However, despite of all the positive though: modest results achieved in raising crop yields, these farms, viewed as a whole, did not fulfil the tasks set before them by the social community to a sufficient degree.

Their activities on the agricultural market, aiming at the prevention of speculative tendencies among the individual peasants, was far from proportionate with their actual economic possibilities while falling short of their role of model farms to such an extent that they became largely dependent on government subsidies for their maintenance.

Peasant cooperatives

In view of certain cooperative traditions created in pre-war Yugoslavia, cooperativism represented a considerable degree a well-established rural economic organisation.

As a simple, understable and acceptable form of peasants economic association, cooperatives appeared under the new social and economic system as a suitable form of uniting the small agricultural producers with the purpose of raising agriculture to a higher level.

Therefore ever since its formation the new state has devoted great attention to cooperativism extending assistance and facilities to cooperative organisations, as set up by constitution. Shortly after the liberation of the country, the Government brought a

series of measures in this field and enacted the Fundamental Law on Cooperatives on July 18, 1946, which *remained* in power as regards peasant cooperatives until the middle of 1949, when it was replaced by the new Fundamental Law on Peasant Cooperatives of June 6, 1949.

The association of peasants in cooperatives, particularly those where collective cultivation of the soil was applied, i.e. in work cooperatives, was not carried out without considerable difficulties. The backwardness of the peasants, in sense the ownership, the distrust of all new methods of soil cultivation, the difficulties in the equipment of cooperatives with modern means of production etc., necessitated a gradual approach to the (introduction of socialist producer relations in agriculture. This gradual rate was reflected in the existence of different types of cooperatives, which should each in their own way, contribute to the elimination of prejudice inherited by the peasants from the capitalist social system and enable them to acquaint themselves with the advantages of collective labour on large farms.

Two types of agricultural cooperatives operated at this stage:

General Type Peasant Cooperatives

These cooperatives are universal economic organisations, i.e. such organisations which unite in themselves all forms of agricultural economic activities: production, processing, sale and purchase. Thus crop farms, livestock farms, breeding stations, orchards, workshops for the processing of agricultural products, gave ample scope to such cooperatives, and insured the necessary possibilities for the sale of agricultural and the purchase of industrial products etc. The possibility for such varied economic activities rendered these cooperatives a suitable instrument for the introduction of socialist elements in agriculture, even if this were effected through any of the secondary producer activities.

The peasant members of these cooperatives, retain the status of individual peasants, private owners of their land and means of production, and in so far as they worked on the cooperative farm they were remunerated in the same way as in those peasant cooperatives which represent collectivised holdings. As members of the cooperative they were entitled to use its organisation for the joint sale of their products on the market, the purchase of means of reproduction (seed, fertilizer etc), agricultural machinery for common use etc.

Consequently the organisation of this cooperative form and the mode of operation coordinates the deep seated owner mentality of the Yugoslav peasant with the gradual introduction of socialist elements in agriculture. The ultimate aim, however, was to convince the peasants through the economic results of collective work in the cooperative and make them realize the advantages of collective labour over individual, and thus in due time effect the transition into a higher type of cooperative, such as the peasant work cooperative was considered to be.

The general type peasant cooperative consequently represented a kind of practical school in which the cooperative consciousness of the peasants was fostered. Their functions would cease once this consciousness reached a certain level, and 'be integrated

into a more advanced cooperative organisation: the peasant work cooperative.

In practice, however, these cooperatives did not fulfil the task assigned them. Their activities were largely limited to commodity traffic, where they differed very little from the former sales-purchase village cooperatives while failing to devote sufficient efforts to the promotion of agricultural production. Therefore they were also unable to carry out their educational task successfully.

There were 8,000 such cooperatives in 1950 with 3,540,339 members and about 13,000 consumers. They included:

small industrial enterprises	1,259
artisan workshops	3,424
catering enterprises	3,081
collective farms	1,148
agricultural machinery stations	767
livestock farms	58
fruit and vine plant nurseries	82
breeding livestock centres	324
veterinary stations	71

Peasant Work Cooperatives

Peasant work cooperatives are economic organisations which usually comprise larger numbers of former individual or landless peasants, with the purpose of collective cultivation of the land entered in the cooperative i.e. collective agricultural production in general.

The pooling of a large number of individual holdings in one entity aimed at the creation of such an exploitable agricultural unit which would have all the advantages of a large agricultural estate over the small-hold. In this way the small and medium holdings which were unable to emerge from the narrow limits of subsistence farming or in the best case yielded small market surpluses, were joined into large estates capable of market production.

As agricultural holdings which invariably disposed with notable means of production (agricultural machinery, draft animals etc.) apart from large cultivable surfaces and where abundant labour was also available, the Peasant Work Cooperatives had the material possibilities of raising agricultural production to a considerably higher level. Besides, substantial Government aid in every respect opened the most favourable prospects for their development.

Due to all their characteristics listed above the Peasant Work Cooperatives were considered the most suitable means for the introduction of socialist producer relations in *agriculture* and the *socialist* transformation of the village in general.

As distinct from the *General Type Peasant Cooperatives*, the fundamental operational principle of the peasant work cooperatives is the collective cultivation of the soil, i. e. collectivised farming. Therefore, when joining these cooperatives the members of such cooperatives are due to enter all their means including land, while only retaining an

individual land plot for their personal use.

The individual land plot or household plot, as it is sometimes called, is the individual property of members of the work cooperatives, on which they are entitled to work only during their spare time, and can consist of a maximum of one hectare of cultivable surface, or up to one hectare of pastures in livestock raising areas, a dwelling! house with courtyard, outbuildings for individual farming, one or two cows with calves, hogs for breeding with pigs and the necessary number of fatted pigs for the requirements of their families, a maximum of 5 sheep or goats, ten beehives and an unlimited number of poultry and rabbits.

The means of production entered in the cooperative are paid off to the cooperative members according to their value assessed within a 10—15 year period, the only exception being 1 and which the members entered into the cooperative and over which they retained ownership rights.

The organization of work in cooperatives was based on the brigade-group system. The gist of this system consisted in the fact that the members were divided into brigades i. e. groups which were assigned individual plots of land for cultivation and the necessary agricultural implements and draft animals for this purpose. The remuneration of cooperative members for the work effected in the cooperative was carried out according to the workday system.

Various funds were foreseen which were financed from the regular annual contribution deducted from the net income of the cooperative in order to ensure smooth operation of the cooperatives, their progress and the advancement of production. These funds are as follows:

- Fixed fund capital, i. e. land and means of production which serve for reproduction in the cooperative:
 - Depreciation fund for the renewal and Restoration of the fixed capital headings.
 - Working funds which consist of seed, fodder, and other resources (money) and serve the -regular operation of the cooperative.
 - Reserve fund: seed, cattle feed and human foods (carryover stocks in case of bad crops, floods and other emergencies).
 - Social fund for the assistance of members incapable of work, old people, parturients, the treatment of invalids etc.
 - Cultural and educational fund for the education of the peasants — members of cooperatives — and their cultural advancement.

The establishment of peasant work cooperatives proceeded at a rapid rate, as the latter rose steadily both in number and strength from the initial 31 created until the end of 1945, as can be seen from the following survey.

<i>Year</i>	<i>No. of cooperatives</i>	<i>No. holdings</i>	<i>% of total number of</i>	<i>Cultivable surface In hectares</i>	<i>% of total surface</i>
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1947	808	40,670	—	191,608	0.5
1948	932	48,052	2.1	223,603	0.5
1949	4,263	72,286	3.1	1,017,336	10.3
1950	6,545	351,022	14.7	1,903,816	19.4

The number of cooperatives increased rapidly. Under such conditions it was inevitable that a certain number of peasant work cooperatives were formed, which economically speaking, lacked the necessary conditions for development, and as shown by subsequent events, proved more a burden than a benefit to the social community.

c) *Private Sector*

As has already been stressed, the socialist sector, (state farms and peasant work cooperatives) repressed the individual producer because it was both better equipped and achieved higher yields; however when this sector was . at its climax (1950/51), the individual mode of cultivation still predominated in agriculture.

About 87% of all agricultural holdings and 61% of over-all agricultural surface still belonged to the individual peasants. But as distinct from the situation in pre-war Yugoslavia, the private holding could no longer exceed the legal maximum of 45 hectares of agricultural, i.e. 25-35 hectares of cultivable land as fixed by the Law on Land Reform and Colonisation of August 23. 1945. Although providing a substantial guarantee against the exploitation of the poor peasants by the rich on the one hand, on the other hand, this law increased the number of smallholds by distributing land from the agrarian reform pool to landless peasants thus exerting an adverse influence on agricultural output as a whole.

Consequently the further measures of farm policy in this period in the private sector in agriculture aimed at the suppression of capitalist elements in rural areas, i.e. the assistance of poor peasants. A series of regulations were enacted for this purpose among which only the most important ones will be mentioned.

— The Law on the Final Liquidation of Peasant Debts, of October 27, 1945 according to which pre-war peasant debts under 5,000 dinars were cancelled. The debts incurred by fighters, families of fallen soldiers of the Liberation Army, supporters of the Liberation struggle who were economically ruined were written off regardless of their amount, while the remaining debts were to be paid within a six month term from the date the Law came in power, i.e. until May 16, 1946 according to a parity of 10 pre-war to 1 post-war dinar.

— The system of progressive taxation according to which the main burden was borne by the wealthier peasants. Thus for instance in 1947, 54.2% of total income tax derived from agriculture was levied from holdings with an income of 50,000 dinars, which accounted for 8.2% of the total number of all holdings, while only 10.7% of all taxes were levied from holdings with a 16,000 dinar income which were the most numerous.

The system of compulsory deliveries in which progressive delivery quotas were fixed according to the size of the holdings. Thus in 1948 these obligations were as follows:

Holdings from
2-3 hectares 10-20% of the yield

2-10 “ 15-55% yield
68-85% yield

Such a farm policy consolidated the links between the small and medium peasants and the workers class this being a logical sequel of the policy pursued during the People's Liberation struggle, and proved itself entirely justified under the new conditions in view of the wish of the new authorities to derive their support from the broadest strata of the people.

STAGE 1950 UP TO THE PRESENT

The dominant characteristic of the Yugoslav economy in general, and agriculture in particular is the gradual abandonment of the its former centralised organisation and administrative system of management. Every imitation of the Soviet economic system and institutions was wholly abandoned, and the country directed in the further development of socialism mainly towards its own experience acquired in this respect.

In the newly created situation the influence of the State on the producer relations in agriculture inevitably sought new forms which would correspond better to the new line of farm policy in general.

The provisions of the Fundamental Law on the Management of State Owned Economic Enterprises and Higher Economic Associations by the Workers and Employees of July 2, 1950, placed the problem of further changes in the producer relations in the field of agriculture on the agenda.

Similarly to the measures implemented in industry with the factories the state farms were handed over to the management of the work-in# collectives according to this Law, thus radically changing the position of the agricultural workers on the farms as they henceforth became decisive factors on such holdings.

The Decree providing for the creation of a fund for mechanisation and investment construction in agriculture and the Decree on the Management of the Mechanisation Fund and Investment Construction of Cooperative Agriculture by the Cooperative Councils are indissolubly linked with the system of workers self-management. These two Decrees brought In 1950, introduced certain significant innovations in the field of cooperativism which further enhanced the role of cooperative members as direct producers in the cooperative.

This decree abolished agricultural machine stations, since their further operation as independent state enterprises would not be in accordance with the socialist principle that the means of production belong to the producers themselves. Therefore the tractors and other agricultural machinery of these stations were handed over to cooperatives for permanent use and exploitation provided that the cooperatives pay certain fixed depreciation quotas for the machinery allotted them until the total payment of their estimated value was completed.

Along with this, funds for mechanisation and investment construction were organised in the individual districts through which the state sponsored the investment construction and mechanisation of cooperative agriculture. The members of these funds are Peasant Work Cooperatives the former managed by the representative organs of producers: the Cooperative Council and Managing Board are in accordance with the provisions of the above mentioned Decree on the Management of the Mechanisation Fund. Apart from these representative organs there is also a director of the Fund appointed by the District People's Committee who represents the fund and manages its affairs directly.

Such an organisation of the fund represents a special form of association between the peasant work cooperatives of a particular district the government organs, the latter losing their character of administrative and executive organs in this relationship with the

cooperatives. This corresponded to the newly formulated idea on the withering away of the state functions in economy.

The tasks of the Fund were not limited only to the promotion of mechanisation and fostering of investment construction in cooperatives, but also comprised other forms of cooperative activity. Thus their scope of competence comprised over-all cooperative production, crediting, the training of skilled cadres, the revision of the bookkeeping system, the establishment of various workshops and enterprises etc.

However, the activities of the Fund for Mechanisation were of short duration.

It soon became obvious that concurrently with the creation of direct cooperative associations their existence would seriously impair the achieved unity in the cooperative movement. Their liquidation was therefore initiated in the first half of 1952, while their functions were transferred to the district associations of peasant cooperatives.

With the aim of insuring the organisational unity of rural economy through the cooperatives, peasant associations were encouraged as well as the socialist development of agriculture not in the peasant work cooperatives but in those of general type. The neglect of the regular development of the latter until then was assessed as a negative factor and had to be eliminated from economic practice in the interest of agricultural advancement. The general type peasant cooperatives developed as complex economic organisations, which, apart from commodity traffic, devote particular attention to producer activities in the field of crop cultivation, livestock farming, the crafts etc., which depends on the concrete economic conditions of the area in which they are located.

The reorganisation of the unprofitable peasant work cooperatives was initiated in 1952 when 1625 or almost 24% of the total number of peasant work cooperatives were reorganised.

In the particularly non-self-sufficient areas reorganisation was confined to the simple liquidation of the respective cooperatives. In other parts of the country one part of the cooperative property (land, livestock etc.) was transferred to general type peasant cooperatives with the purpose of organising collective production where the necessary conditions existed, while the other part was returned to the cooperative members for individual cultivation. Finally, some cooperatives abandoned unprofitable cereal production and switched to some other agricultural activity which corresponded better to the local conditions.

The number of peasant work cooperatives declined from 6804, as registered in on December 31, 1951 to 4524 by the end of 1952. This reduction did not vitally affect the over-all economic cooperative potential as the liquidation mainly covered the small and economically weakest cooperatives in the mountainous and agriculturally deficient areas, while larger cooperatives particularly in the wheat bearing areas, remained more or less intact.

The reorganisation received further incentive by the Decree of Property Relations and the Reorganisation of Peasant Work Cooperatives of March 28, 1953.

This Decree enabled the further radical and multifold reorganisation of these cooperatives, while conditioning their creation in the future by strict adherence to the principle of that both the entry into the cooperative and withdrawal from it should be on

an entirely voluntary basis.

The relations between the Peasant Work Cooperatives and its members are determined by rules independently enacted by the cooperative and a freely concluded contract with its members. All the previous restrictions, relating to the cooperative forms of management, rights and duties of members, labour organisation etc. expired and the regulation of these matters was left to the discretion of the cooperative members.

The enforcement of the new Decree enabled reorganisation i. e. liquidation to be carried out on a far broader scale so that only 1258 peasant work cooperatives remained by the end of 1953.

Due to the abolishment of a large number of Peasant Work Cooperatives, many of their former members which belonged to the ranks of landless and poor peasants would have been forced, if no other assistance were extended them, to seek employment as hired labourers on the properties of those peasants who, owing to the size of their holding were unable to cultivate it without the help of hired labour. After the enforcement of the Law on the Land Reform and Colonisation of August 23, 1945 there remained about 90,000 holdings on which hired labour relations still survived to a certain extent as an inheritance of the capitalist social system in pre-war Yugoslavia.

In order to prevent the landless peasants who were formerly members of the Peasant Work Cooperatives from reverting to their former status of hired labourers of the wealthier peasants, and in order to limit the possibilities of exploitation in agriculture still further, the law on the Agricultural Public Fund and the Distribution of Land to Agricultural Organisations was enacted on May 27, 1953.

This Law fixed the maximum size of holdings in private ownership to 10 hectares of arable land (fields, vegetable gardens orchards, vineyards, meadows and pastures raised on arable land), or 15 hectares for communal families and households in the less fertile areas. According to this law which provided for compensation to the former owners, land in excess of the maximum stipulated above was incorporated into the public agricultural land pool and subsequently allotted for permanent use to peasant cooperatives, collective farms and other economic organisations and institutions engaged in agricultural activity.

In order to be eligible for the allocation of land from the Public Land Pool, these organisations must fulfil the following conditions:

that only the immediate producers take part in the management of their agricultural output

that the share of income yielded by this output be divided, in accordance with the tariff regulations, only among persons engaged in this production

that in their activities and labour organisation they adhere to the regulations valid for agricultural holdings.

Apart from the already existing economic organisations, groups of agricultural workers and peasants who intend to create an agricultural organisation may also apply for land from the Public Land Pool. Thus an invaluable pointer was given for the solution of the problem of employing the landless peasants, as many of them were given the opportunity to create better living and working conditions by their concrete action and with the assistance of the community.

The promotion of the principles laid down by the Law on the Agricultural Public Land Pool and the Decree on Property Relations and Reorganisation of Peasant Work

Cooperatives of January 26, 1954.

Taking the principle of free association free determination of mutual relations between the cooperative and its members, and the free choice of cooperative forms, as its starting point, the decree devoted particular attention to the coordination of the cooperative activities in Yugoslavia with the already well established principle that cooperative property represents social property which is managed by the cooperative.

In order to insure the inviolacy of this management right it was foreseen that the cooperatives could under any conditions be deprived of their property. The restitution of the value of the means of production brought into the cooperative by its members on the basis of lease or sales-purchase agreements was likewise guaranteed.

The cooperative can discharge its economic activities either directly or through enterprises, shops or independent units created in that purpose, and can also be organised as an economic enterprise. It is managed exclusively by its members while operating more or less along the same lines as enterprises in other branches of industry.

The enterprises, shops and independent sales-purchase units created by the peasant cooperative for the advancement of agricultural activity of its members, are managed by their working personnel much in the same way and according to the same principles as in other economic organisations. In relation to all these economic units, the cooperative acts in the capacity of the principal exponent of common activity whose advancement should be fostered by their collective efforts. The close ties of all these units and the cooperative is reflected in the contributions given for the maintenance of the cooperative, the entry of profits earned by these units into the cooperative, the determination of the activities to be followed by means of a contract with the cooperative etc.

All the existing peasant cooperatives: Peasant Work Cooperatives, and the General Type Peasant Cooperative are due to regulate their work and rules within a one year period from the establishment of the new organisational basis described above.

The changes called forth by the implementation of the Law on the Agricultural Public Land Pool and the Decree on Peasant Cooperatives exerted a strong influence in the field of producer relations in agriculture.

By setting the maximum private holding at 10 i.e. 15 hectares of cultivable land, the possibility of exploiting hired labour in agricultural production was reduced to the lowest possible extent.

Furthermore the allocation of land from the Public Land Pool to Peasant Cooperatives and other economic organisations based on the principle of workers self-management opens prospects for a far more rapid rate of development of socialist relations in agriculture than was the case so far. Apart from this, such a distribution of land from this Pool prevented the further partitioning of holdings which would result from their distribution to individual landless and poor peasants and thus exerted a positive influence on the development of producer forces in agriculture.

Effect on Producer Forces in Agriculture

The State influence on the producer forces of agriculture developed parallel with its influence on the producer relations in this economic branch.

Mechanisation and Technical Equipment

The level of technical equipment and mechanisation constitutes an important factor for the increase of labour productivity and overall output in agriculture.

Therefore intensive efforts were devoted to the restoration of the damaged agricultural implements and machinery already in the initial period of rehabilitation and reconstruction of the country in 1945/46 which were reflected in the obvious results achieved: 328,000 plows, 800 tractors, 8,500 other motors, 8,300 threshers etc. were repaired and handed over to agriculture.

While about 15 types of draft implements and agricultural machinery were produced in the country before the war, now the necessary conditions have been created for the manufacture of a broad variety of such machinery and implements.

Output of agricultural implements and machinery in 1950, not including tractors, rose by 330% as compared to the 1939 production level.

In 1949 there were 7230 tractors or 214%, 1,078,000 or 10,9% plows more than in 1939, while the number of other machines (threshers, harvesters, grain cutters etc;) almost reached the pre-war level.

. The available mechanisation was mainly used on state farms and peasant work cooperatives, while used only to a very small extent on the individual holdings which covered the major part of agricultural land.

Where available, mechanisation was mainly used for plowing while many other agricultural operations in various seasons were still carried out mainly by manual labour. Consequently such a situation in agriculture prevented the extensive liberation of rural labour and its reorientation towards employment in industry.

It proved necessary to hand over the means of production at the disposal of the machine and tractor stations to the immediate producers united in the Peasant Work Cooperatives. Therefore these stations were abolished and mechanisations funds created in their stead through which the following machinery was handed over to the peasant work cooperatives in 1950 and 1951:

Tractors	2,448
Tractor plows	2,669
Harrows	2,525
Harvesters (self-binders)	1,173
Threshers	1,714
Locomobiles	293
Other machinery and implements	2,600

In this way the same as the industrial workers the Immediate products in these cooperatives were allotted the means of production.

In spite of the progress made by agricultural mechanisation in the post-war period, its over-all effect on agricultural production was still not entirely satisfactory.

Substantial financial resources have been expended for the supply of agricultural implements. Thus for instance 622 tractors were imported in 1951, and 2,657 tractors and 1,790 tractor plows in the following year. Apart from this, home industry delivered over

1200 new tractors to agriculture until the end of 1952 and succeeded in producing about 80 different types of agricultural machines and implements.

The technical equipment and mechanisation of agriculture at present consists of the following types of machinery:

Tractors	8,500
tractor plows	9,500
plows	1,170,000
motor threshers	10,600
Harvesters	11,400
grain cutters	13,500
sowing machines	53,527

These achievements however are not quite satisfactory when compared to those achieved in the developed countries. There is still only one plow per every two holdings in Yugoslavia, one tractor per 1645 hectares of land, i.e. 840 hectares of arable land etc. Developed agriculture however stipulates one tractor per every 100 hectares of arable surface, while in many countries with a highly mechanised agriculture this ratio is even lower. Of the total arable surfaces in this country only 4,500,000 are suitable for cultivation by tractors. Only 18% of all holdings are equipped with tractors so far. Immense tasks still confront our agriculture in this field which will be resolved within the framework of the ten year long-range programme of agricultural development which has already been drafted in outline. According to this programme agriculture should be equipped with the following machinery by the end of this period:

Tractors	50,000
Sowing machines	81,000
Grain cutters	46,000
Combine harvesters	8,000
Corn pickers	8,000
Trailers and flatcars	120,000

Reclamation

Reclamation in the broader sense of the word connotes all those technical operations intended to protect the soil from floods, to drain marshlands and irrigate arid areas with the purpose of increasing the cultivable surface and achieving higher yields of agricultural products. In the narrow sense of the word, reclamation implies the improvement of the quality of the soil i.e. the improvement of its production capacity.

Reclamation projects are carried out in various ways: by regulating the flow of river and flood waters, the building of embankments and dykes for *flood* prevention, the dredging of river beds, afforestation of barren areas, the drainage of marshlands, the construction of irrigation systems etc.

The Five Year Plan, although primarily aiming at industrialisation and electrification, also foresaw extensive reclamation projects: drainage, irrigation, flood prevention, afforestation etc. According to data available, 3,200,000 dinars, calculated at reduced

prices, were invested in these projects until the end of 1951, while 72,000 hectares of land were drained or otherwise reclaimed and 4,400 ensured against floods in the same period.

The ten year long-range programme of agricultural development foresees about 500,000 hectares for irrigation projects while about 1,000,000 hectares should be drained. One of the largest projects of this kind is the Danube—Tisa—Danube Canal whose construction was initiated in 1954 and for which the amount of 850,000,000 dinars was earmarked out of the Federal Budget.

Chemisation

The increase of soil fertility and hence also labour productivity is greatly enhanced by the use of artificial fertilizer and chemicals for plant protection in agricultural production.

As the above mentioned products are manufactured by the chemical industry the development plan for this industrial branch foresees increased production of artificial fertilizer and chemicals for plant protection.

In this purpose, the necessary measures have been taken for the modernisation of the respective factories inherited from pre-war Yugoslavia and the erection of new producer plants. Parallel with these endeavours, efforts were made to eliminate the distrust which prevailed in rural areas as regards the use of these chemicals and enable their purchase at accessible prices by entitling the domestic producers of artificial fertilizer to a compensation.

Output of artificial fertilizer reached about 90,000 tons in 1953, this quantity having been further increased by substantial imports which amounted to 37,369 tons in the first half of the year.

Consequently considerably larger quantities of artificial fertilizer were set at disposal of agriculture than before the war (1939) when agriculture absorbed only a small share (29,84 tons) of domestic output which totalled 72,770 tons while the remainder was exported.

An obvious production increase of fertilizer is expected in the near future when several new plants in this chemical factories begin operation. It is anticipated that it will be possible to satisfy almost 2/3 of home requirements in the most widely used artificial fertilizer, superphosphate, and one half of the requirements for nitrate fertilizers exclusively from raw materials which will be yielded as by-products in industrial enterprises which do not form part of the chemical industry. It is foreseen that the output of artificial fertilizer will rise to about 1,200,000 tons so that their consumption including the quantities import (particularly potassium fertilizers) would rise from the present level of approximately 6.7, to 127.7 kilos per one hectare of farm surface.

Specialisation

In the purpose of intensifying agricultural production, particular efforts were made to achieve the maximum specialisation of farm production. Thus the possibility was extended to cultivate larger surfaces with the employment of less manpower, and hence increase labour productivity.

This tendency was further enhanced by the existence of the socialist sector in

agriculture, but it was likewise noticeable in the private sector to a certain extent. In this way the cropping pattern in 1949 was already changed in comparison with the previous years, as indicated by the following survey:

	<i>Sown surface</i>	
	<i>1949</i>	<i>1939</i>
Cereals	75.7%	87.0
Industrial crops	9.1%'	3.5%'
Vegetables	6.2%	4.1
Fodder crops	9.0%	5.4%

Besides inevitably requiring a more intensive forms of soil cultivation with a parallel reduction of production expenses, specialisation also invariably leads to market production as it directs agricultural output towards the market, and not only the mere satisfaction of local requirements.

Apart from this, crop rotation (also contributed to the intensification of agricultural production), i.e. the annual rotation of crops on the same land plot thus preventing the decrease of fertility. The initiation of regional specialisation of agriculture i.e. the coordination of agricultural production to the natural conditions of an individual area (the selection of crop and sorts of plants and livestock, methods of soil cultivation, crop raising, and soil exploitation etc.) is another advanced form of agricultural specialisation.

The development of cotton cultivation in areas with the most favourable natural conditions is a good example of regional specialisation in agriculture. While only 5,641 hectares of land were sown with cotton in 1939, this surface was increased to 53,131 hectares in 1949. Pre-war domestic cotton production satisfied 2.5% of the requirements of the textile industry. In 1949 this ratio rose to 14%

In the ten year long-range programme of agricultural development the entire surface area of the country is divided into producer regions with uniform conditions for agricultural production. The cultivation of those crops is foreseen in those areas in which the best conditions for it exist.

Apart from vast material assistance extended in the period of reconstruction, agricultural credits in the value of over 2,000,000,000 million dinars, not including the subsidies from the reconstruction fund, were allotted to agriculture.

During the next few years 18,095,679.000 dinars were directly invested through the cooperative sector alone into this economic branch (until the end of 1952) for the purchase of machines and implements, the erection of farm buildings etc. Short-term credits used in this sector at the same time amounted to several tens of billions of dinars.

Investments in the socialist sector of agriculture are estimated at 10,000,000,000 dinars (computed at reduced prices).

Investment crediting of agriculture as a whole, increased notably, particularly during the past few years. The investment banking credits and budget resources for investments in agriculture amounted to 11,280,000,000 dinars in 1952, 13,500,000,000 in 1953, while the amount of 15,300,000,000 dinars has been foreseen for 1954 in addition to the 6,600,000,000 dinars intended for the development of the food industry.

The reason underlying such an intensive rate of agricultural investments lies in the Yugoslav intention to coordinate the development of this economic branch to the maximum extent and in the shortest possible time with the already achieved industrial progress, as its low level of production so far represented an obstacle for the further advancement of the country.

This agricultural investment policy will be still further enhanced by the implementation of the ten year long-range programme of agricultural development. This programme namely foresees the direct investment of 490,000,000,000 dinars in agriculture, and approximately 152,700,000,000 dinars of indirect investments building up of factories for the processing of agricultural products, and factories of means of farm production).

Parallel with the investment policy described above, the new crediting system (whose adoption coincided with the transition to the new economic system) also exerted a favourable influence on agricultural output.

The changes carried out in the crediting policy were primarily dictated by economic considerations. It was therefore foreseen that the Bank should no longer allocate credits to agricultural holdings Le. cooperatives according to pre-determined crediting plans as previously was the case, but that credit should be allotted according to the actual requirements and within the limits of the credit capacity of the respective holdings. The credit capacity of the debtor should offer the guarantee to the bank that the credit used will be returned in time, and in the manner agreed upon, i.e. with the payment of a specified interest rate etc.

The further changes affected *by* the end of 1953 in the over-all economic crediting system laid still greater stress on the economic features of crediting. Credits are now granted by the National Bank to all economic organisations, including agricultural, exclusively by means of competitive biddings at which those tenders which offer the most favourable terms of payment and the highest interest rate have priority. However, in this new system as well, the 1954 economic plan foresees special facilities for agriculture, by granting longer terms (5 to 50 years) for the repayment of the investment credits, thus enabling the agricultural organisation to compete for these loans independently from the economic organisations of other branches, (which would, due to the character of their work, often be in a more favourable position at the bidding), the amount of 14,450,000,000 dinars from the general investment fund having been earmarked for this purpose.

Such a system of crediting inevitably leads the agricultural organisations to use the funds allotted them in the most rational way for the improvement and increase of their obligations deriving from the loan.

Rounding off

The Decree of the rounding off of Land belonging to State Farms and *Peasant* Work Cooperatives of November 2, 1951 was brought with the purpose of strengthening and consolidating the socialist agricultural holdings.

The objective of this Decree is to reduce the present fragmentation of the land

belonging to socialist holdings, particularly the peasant work cooperatives.

The largest number of these cooperatives consisted of a series of fragmented and scattered strips separated by the holdings of peasants who are not cooperative members. Owing to such a land structure these cooperatives were devoid of the character of large estates and resembled more to a multiplied small-hold. The distance of one plot from the other, prevented the full success of modern crop rotation, the proper use of mechanisation, the fulfilment of reclamation projects etc. In the cultivation of such a dispersed cooperative holding much time was lost on the way to work and back, the transportation of the means of production etc., which all exerted an adverse influence on production costs.

This fragmentation of land in socialist holdings should have been amended by the enforcement of the above mentioned Decree which gives the possibility of rounding off, i.e. regrouping the land belonging to a socialist holding into the smallest possible number of large plots, and if possible group them into a compact entity.

Rounding off can be carried out only with the purpose of ensuring rational soil cultivation, the implementation of reclamation projects, the erection of farm vegetable gardens, or the planting of new vineyards and orchards. When all the necessary conditions exist, the rounding off of a peasant work cooperative can be carried out only in those cases when the majority of peasant households in a village belong to one or more peasant work cooperative, or if the land from the public land pool and the peasant work cooperative accounts for the greater part of farmland in the respective village i.e. if rounding off is effected within the limits of one group of plots.

The results achieved in the implementation of rounding off can best be seen from the data available of the re-grouping of land belonging to peasant work cooperatives in the most fertile province of Vojvodina.

Of 615 peasant work cooperatives which submitted requests for rounding off until October 10, 1952 re-grouping was carried out in 573 cooperatives. Before it was effected the surface area of all these cooperatives which totalled 937,764 cadastral jutros (one jutro = 6 hectares) was partitioned and scattered into 125,397 plots which averaged to about 7.4 cadastral jutros each. After rounding off was completed, this situation was radically changed as the number of land plots was reduced to about 6,700 which averaged to about 140 cadastral jutros, i.e. 19 times.

Planning System

The adoption of the new economic system marked the transition from detailed administrative planning by the government organs to al¹ most complete independence of the producers in production planning.

Thus the agricultural holdings were free to adapt their output, within the limits of the economic plans, to the existing conditions and requirements, provided they paid due attention to ensure the proper use of their capacities, the profitability of certain agricultural branches, the market possibilities for the sale of their goods and the creation of conditions for expanding production.

The state no longer interferes in principle with the internal affairs of agricultural

holdings, apart from coordinating and directing their development and the advancement of agriculture as a whole with the overall development of the social community 'by means of certain instruments and measures foreseen by the economic plan (allocation of investment resources, compensation etc.).

The practice of assigning specific planned tasks to the individual peasants has been abandoned, and the latter are left to decide what crops they will sow according to their own requirements and wishes. Their obligation towards the community has been reduced to the payment of tax for general social purposes.

The changes in the system of planning reflect the idea on the withering away of the role of the state in economy, and are aimed, within the context of the new economic system, to provide greater incentive for the peasants to increase production.

Delivery System

Immediately after the liberation of the country, a system of compulsory deliveries of the basic foodstuffs (grain, fats, meat) was introduced. This measure was necessary in order to ensure adequate food supplies for the people, and prevent speculation with these goods by the individual peasants under conditions of postwar shortage and enable the people to buy them at accessible prices, thus suppressing the rural capitalist elements.

During the period of post-war reconstruction of the country, the delivery quotas of the producers were very high, particularly for cereals, whose output was almost entirely subject compulsory. The producers were only entitled to retain the quantities necessary for themselves and their families and for sowing.

In view of the fact that such a system of deliveries entirely deprived the peasants of all incentive for production, it was revised in 1947 and since then delivery quotas were fixed according to the fertility of the soil and the economic strength of the respective holding, while at the same time extending this system to a series of other products (olive oil, potatoes, pulse etc.).

A more direct stimulation of compulsory deliveries was approached the following year. Apart from the purchase price, the peasants also received special coupons in the corresponding value for which they could buy industrial goods at linked prices.

Increased demand in 1949 resulted in a raise delivery quotas. Thus for grain, delivery quotas averaged about 80% of the marketable surplus as compared to 50% in the previous year.

Twenty two staple agricultural products were subject to compulsory delivery until the end of 1950. In the same period the volume of compulsory deliveries amounted to 70-80% of the goods produced in agriculture.

The existence of compulsory deliveries necessitated the assignment of specific tasks to the producers, as regards the crops to be cultivated which greatly restricted their initiative to cultivate the most profitable crops on their holdings. Besides, the low purchase prices on the one hand, mid the high prices on the free market on the other, paralysed every wish to increase the volume of production and improve the quality of the goods produced.

Beginning with 1950, the practice of determining the delivery quotas in advance was introduced as well as the concurrent setting of obligations for all commodities subject to compulsory delivery on individual holdings, while work of the delivery apparatus gained increasing legality.

In 1951 when the transition to the new economic system was in full swing the system of compulsory deliveries, which was incompatible with the free traffic of goods and free play of economic laws characteristic of the new economic system, was suspended.

The compulsory delivery, of meat, milk and dairy products, potatoes, pulse, and hay was abolished in the beginning of 1951 while deliveries of fats were abrogated in October of the same year. After this, only grain and wool remained subject to compulsory delivery but the purchase prices were raised to such an extent that they were identical or higher than the free market prices. In June 1952, grain deliveries were likewise abolished, while deliveries of wool ceased on January 1, 1953, thus eliminating the last remaining form of the compulsory delivery system which was an indispensable instrument of economic policy in the first phase of economic development. The liquidation of the compulsory delivery system marked the removal of a major administrative obstacle which impeded the development of producer forces in agriculture,

Remuneration System

The transition to the new economic system was accompanied both in agriculture and industry by far reaching change in the system of remuneration.

The system of hired labour on the state agricultural farms was abandoned in favour of the system of earnings. Thus the level of income of the personnel employed was closely linked with the economic success of the agricultural holding, and the immediate producers became directly interested in the increase of output.

In peasant work cooperatives the system of remuneration based on the workday as the criterion of the value of labour proved inaccurate and maintained the cooperative on a level of subsistence farming.

The system of remuneration per workday did not succeed in making the producer materially interested in the economic success of the cooperative. Therefore the system of remuneration in money was introduced which was based on the principle of awarding each according to his work.

According to this system, besides taking part at the end of the year in the distribution of a part of the net income of the cooperative, — the other part being intended for cooperative investments and funds, — in proportion with their basic salary achieved in the course of the same year, the cooperative members are entitled to a basic salary in money for the work invested in the cooperative and working effect achieved.

Such a system of remuneration was far more precise than the system of workdays and therefore ensured far greater exactitude in the relations between the cooperative and its members, thus notably raising incentive for work. The cooperative members knew in advance the volume of basic income they will realize by working on a particular assignment in the cooperative their working effect could be far more accurately assessed in money than in workdays, uniformity in their remuneration system was largely

eliminated etc. Apart from this, it was foreseen that the cooperative should guarantee the basic salary of its members according to their work and working effect achieved, and regularly pay them an advance salary during the year on account of these earnings, thus enabling them to acquire the necessary monetary resources in the course of their work. Thanks to this system, the cooperative was enabled to emerge from the framework of subsistence farming and direct production to the market and operate consistently according to the principle of profitability.

The principle that each should be awarded according to his work was still further strengthened by the latest regulations, i.e. the Decree on Property Relations and the Reorganisation of Peasant Work Cooperatives, the Law on the Agricultural Public Land Pool, and the Decree on Peasant Cooperatives so that the remuneration system in cooperatives lies more or less on the same foundations as that in enterprises.

Taxation system

The fundamental Law on Social Contributions and Taxes of December 29, 1951 decrees that the income from land is assessed according to the size of the holding, its quality (fertility), and type of cultivation as entered in the cadaster. This marked the abolishment of the former system of tax assessment according to income, whose level was determined by tax commissions, and substituted by cadastral income for which a proportionate taxation rate is determined which is fixed each year by federal decree.

Cadastral income represents a comparatively stable and at any rate such a tax basis which can be assessed in advance, because it is assessed by means of objective standards as the concrete surface of the plot, its fertility, and type of cultivation. It represents the difference between the value of the average yield achieved on a particular plot of land and the average material expenses which were necessary to achieve it.

The adoption of the new system of income taxation will exert a positive influence on the increase of agricultural production, as it will be in the interest of peasants to achieve higher yields on their land than the average taken as a predetermined criterion for the assessment of their annual tax obligation, in view of the fact that the surplus yield is tax free.

The new system of taxation will serve as an instrument for the management of the volume and type of agricultural production within the context of the new economic system, this having been largely fulfilled by the system of compulsory deliveries during period of administrative management in economy. Concretely, this orientation of production can be carried out in the interest of the community by setting the tax basis at a lower level than the average cadastral income of land in those cases when it is desired to promote the cultivation of a particular crop, or conversely, at a higher level, when a reduction of output is the objective in view.

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As compared to the pre-war production level the index number of increased agricultural production in the post-war period amounts to 102.

Such a rate of growth was unable to meet the requirements of the population which

increased by 1,197,000 inhabitants or 7.6% in comparison with the pre-war period. Notable changes were likewise registered in the diet of the broad strata of the population where a strong trend towards the consumption of high calorie foods (wheat, fats etc.) prevailed. This also prevented agriculture from fulfilling its fundamental task of providing sufficient food supplies for the people, and necessitated the import of foodstuffs even during the good crop years.

While agricultural production marked such a negligible increase, the index numbers of industrial production were more than doubled at the same time in comparison with the production level on the eve of World War II.

Industry developed at an incomparably quicker rate, thus creating a serious disproportion in the development of these two economic branches.

The underdeveloped agriculture was therefore not in a position to ensure adequate supplies of raw materials for the advanced industry, so that many capacities of the latter remained partially unused, all the more as the chronic deficiency of the balance of payments resulted in the ever greater restriction of imports of these raw materials.

Under such conditions, the price increase of the basic foods on the free market was inevitable, this being aggravated by the pressure of the rising purchasing power of the non-agricultural population: the workers and employees.

However, these difficulties did not ensue exclusively as a consequence of the population increase and its purchasing fund, but were also due to the appreciable changes which took place in the structure of the sown surfaces.

While cereals accounted for 87% of the total sown surfaces in 1939, this percentage dropped to 75.5% in 1949, and on 78.9% in 1951. Apart from this, the total sown surfaces were reduced by approximately 350,000 hectares. Under such conditions, cereal production in 1949 for instance, amounted to only 96.7% of the 1930-1939 ten year average.

A similar situation also prevailed in the field of livestock cultivation which, due to the immense losses sustained during the war and the consecutive droughts, was unable to reach the average value of pre-war production.

The aforementioned changes in the structure of sown surfaces resulted in an increase of the surfaces under industrial and fodder crops, which rose from 3.5% i.e. 5.4% of the total sown surface in 1939, to 9.1% i.e. in 1939.

Such changes were called forth by the tendency to enlarge the raw materials basis of the processing and manufacturing industries whose development was fostered parallel with the other branches of industry. In practice however, this was effected by working out plans for the sowing of industrial crops in individual areas while the producers were granted various facilities within the contracting system as an incentive for the cultivation of these crops.

However, in spite of the increased cultivation of industrial crops, agriculture was incapable of satisfying industrial requirements for its raw materials.

Finally, agriculture fell short of the targets foreseen also in the field of exports.

In view of the comparatively underdeveloped state of industry, and the immense requirements for imports of technical equipment, exports of agricultural products should

have been a paramount factor for the realisation of the necessary exchange for the payment of the goods imported. However, exports failed to reach the pre-war level let alone exceed it, as they amounted to only 41% of the aggregate value of goods exported as compared to 61% in the 1935/39 period. A particular decline has been noted in the sector of livestock farming, as exports of livestock and livestock products did not exceed one fifth of pre-war exports.

Parallel with the shift to the new economic system, the problem of agricultural development particularly the increase of labour productivity gained increasing prominence.

All measures taken for this purpose, however, failed to bring about any substantial advancement in agricultural production so far.

This is due to the unfavourable weather conditions in 1950 and 1952 and the fact that agriculture constitutes an economic branch in which considerable increase of labour productivity can only be achieved after several years of persistent endeavours and notable investments of material resources.

The 1950 drought reduced the value of agricultural output by 119,000,000,000 dinars thus rendering it 26.33% lower than the average value of annual farm production.

The number of livestock declined due to the shortage of fodder, while apart from the normal quantities slaughtered, the number of cattle was reduced by 9.7%, pigs by 8.8% etc.

The consequences of the 1952 drought were still more severe. The value of agricultural output dropped by 114,000,000,000 dinars. Grain yields were 37% lower than average, while the other crops registered a similar decline. The fact that a reduction of the number of livestock was avoided this time, is primarily due to the carry-over stocks of cattle feed from the 1951 normal harvest, and second, to the new economic measures which provided a notable incentive for better and larger production in the field of agriculture, and hence, also for the preservation and advancement of livestock. Therefore, not only was there no decline in the number of livestock by the end of 1952, but also a certain increase was registered, which could already have been perceived in 1951.

The non-fulfilment of the production targets foreseen in agricultural output during the above mentioned period had an adverse effect on economy as a whole, particularly on industry and foreign trade.

Due to the low yields many industrial branches were obliged to work at reduced capacity.

The consequences of the drought years were particularly felt in foreign trade. Apart from the substantial reduction of exports of agricultural products, as exports of foodstuffs and fodder were banned, large quantities of foods, i.e. wheat, maize (corn) sugar, lard etc., were imported in order to ensure the normal food supply for the people. Thus, 1,441,000 tons of wheat, 324,000 tons of maize, 74,000 of sugar, were imported in the 1950-1953 period, at a total cost of 350,000,000 dollars or 105,000,000,000 exchange dinars! This resulted in the further deterioration of the balance of payments which was already burdened by a deficit of 170,000,000 dollars or 51,000,000,000 exchange dinars owing to the 1952 drought and reduced exports, i.e. increased imports.

The low level of agricultural development and backwardness is also reflected in the economic plans enacted so far.

Although the rural population still accounts for 61% of the total number of inhabitants, its share in the formation of national income is estimated at only slightly over 1/3. A very small part of this income is set apart for capital formation and funds, as the major part is absorbed by the agricultural population. Consequently the rate of capital formation and funds in agriculture is very low, and averaged 18% in 1952 and 1953, as compared to the corresponding ratio in industry which reached 582% and 509% in 1952 and 1953 respectively.

It was therefore foreseen that agriculture should participate in the creation of aggregate capital formation of the country by only 10% in 1952, and 10.5% in 1953.

Significant successes have been scored so far within the framework of the new economic system.

The first steps towards the fulfilment of the ten year long-range programme of agricultural development represent the initial stages of a still more intensive, systematic and consistent activity of the social community for the advancement of agriculture. The imminent completion of key projects will free substantial forces and resources for use in agriculture and will increase the possibilities for its technical equipment by the home industry.

The development of the processing and manufacturing industry will greatly contribute to the promotion of agricultural production. New slaughterhouses, refrigerators, dehydration plants, dairies, sugar refineries, oil factories, fruit and vegetable processing factories, etc.. which will be erected will enable large quantities of perishable goods to be preserved, so that their consumption will no longer be limited to short periods, while also relieving agriculture from the pressure of its surplus population. The development of transports, the expansion of the communication and transport network, the insurance of modern transport facilities and the introduction of low transport tariffs will create the necessary conditions for a more rapid and extensive transport of agricultural products from producer to consumer, which will bring about a levelling of prices of these products throughout the country.

Such a rate of development in the next ten years will raise agricultural production by 50%, thus raising the value of this output from the present 453,000,000,000 to 679,000,000,000 dinars, and augmenting the national income thus created from 236,000,000,000 to 420,000,000,000 dinars.

As for the socialist transformation of agriculture it should be achieved in the future, with strict adherence to the principle of voluntariness, by means of the working association of peasants into various forms which will be able to foster the development of the producer forces and labour productivity in agriculture. These forms, in conjunction with the steady development of the free market and commodity output will inevitably develop towards an ever greater concentration and socialisation of agricultural production, i. e. towards the creation of large collective farms. Such holdings will become an economic necessity for the peasants, with the purpose of eliminating the shortcomings and weaknesses of their individual holdings on the one hand, and on the

other, for the creation of better living conditions than those they formerly were subjected to.