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PROJECT COMPLETION REPORT

YUGOSLAVIA

MORAVA REGIONAL DEVELOPMENT II PROJECT
(LOAN 1951-YU)

DECEMBER 30, 1988

Agriculture Operations Division
Country Department IV
Europe, Middle East and North Africa Regional Office

ABBREVIATIONS

AIK	-	Agroindustrial Kombinat
BOAL	-	Basic Organization of Associated Labor
BCO	-	Basic Cooperative Organization
BPCR	-	Borrower Project Completion Report
COAL	-	Composite Organization of Associated Labor
ERR	-	Economic Rate of Return
FRR	-	Financial Rate of Return
IB	-	Investbanka - Osnova Banka
ICB	-	International Competitive Bidding
PO	-	Participating Organization
SDK	-	Social Accounting Service
SERBIA	-	Serbia Proper in SR Serbia (excluding Autonomous Provinces of Kosovo and Vojvodina)
SFUR	-	Serbian Fund for Underdeveloped Regions of Serbia Proper
SMA	-	Self-Management Agreement Among Participants in the Project
WO	-	Working Organization
YIB	-	Yugoslav Investment Bank

WEIGHTS AND MEASURES

1 kilogram (kg)	=	2.20 pounds
1 metric ton (m ton)	=	1,000 kilograms
1 centimeter (cm)	=	0.39 inch
1 meter (m)	=	1.09 yards
1 kilometer (km)	=	0.62 mile
1 hectare (ha)	=	2.47 acres

THE WORLD BANK
Washington, D.C. 20433
U.S.A.

Office of Director-General
Operations Evaluation

December 30, 1988

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

SUBJECT: Project Completion Report on Yugoslavia MORAVA Regional Development II Project (Loan 1951-YU)

Attached, for information, is a copy of the report entitled "Project Completion Report: Yugoslavia MORAVA Regional Development II Project (Loan 1951-YU)" prepared by the Institute for Agricultural Economics with a Performance Overview Memorandum prepared by the Europe, Middle East and North Africa Regional Office. No further evaluation of this project by the Operations Evaluation Department has been made.

Attachment

PROJECT COMPLETION REPORT

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(LOAN 1951-YU)

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PROJECT COMPLETION REPORT

YUGOSLAVIA - MORAVA REGIONAL DEVELOPMENT II PROJECT
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PREFACE

This is the Project Completion Report (PCR) of the Morava Regional Development II Project in Yugoslavia, for which Loan 1951-YU in the amount of US$87.0 million was approved on March 3, 1981. A total of US$34.6 million of the loan amount was cancelled, and the loan was closed as scheduled on December 31, 1986. The date of final disbursement was July 15, 1987.

The PCR was prepared by the Institute for Industrial Economics, in collaboration with the Institute for Agricultural Economics, under contract with the Borrower, Investbanka. Because it is voluminous, the Borrower PCR is not included in this report but is available in OED files. A Project Performance Overview Memorandum, included in this report, was prepared by the Europe, Middle East and North Africa Regional Office to summarize the Borrower PCR and to discuss various matters not fully covered there. The Overview Memorandum also compares actual developments with appraisal estimates and highlights the principal achievements, shortcomings, and lessons learned. The PCR and Overview Memorandum are based in part on a review of the Staff Appraisal Report (No. 3163a-YU) dated January 30, 1981, the President's Report (No. P-2907a-YU) dated February 11, 1981, the Loan Agreement of April 13, 1981, correspondence with the Borrower, internal Bank memoranda on project issues as contained in relevant Bank files, as well as interviews with officials in the Bank.

In accordance with the revised procedures for project performance reporting, this PCR was read by the Operations Evaluation Department (OED) but the project was not audited by OED staff. A copy of the draft report was sent to the Borrower on Sept. 22, 1988 for comments. Comments received have been reproduced as Attachments I and II.

PROJECT COMPLETION REPORT

YUGOSLAVIA - MORAVA REGIONAL DEVELOPMENT II PROJECT
(LOAN 1951-YU)

BASIC DATA SHEET

KEY PROJECT DATA	Appraisal Estimate	Actual or Estimated Actual	Actual as % of Appraisal Estimate
Total Project Cost (US$Million)	239.4	288.4	120
Loan Amount (US$Million)	87.0	87.0	100
Disbursed (US$Million)	87.0	52.4	60
Cancelled (US$Million)		34.6	
Date Board Approval		03/03/81	
Loan Agreement Date		04/13/81	
Date Effectiveness	07/13/81	08/28/81	130 /a
Date Physical Components Completed	12/85	12/87	140 /a
Proportion Then Completed (%)	100	100	
Closing Date	12/31/86	12/31/86	100 /a
Economic Rate of Return (%)	25	12	48
Institutional Performance		Satisfactory	
Technical Performance		Satisfactory	
Number of Direct Beneficiaries (families)	11,000	10,000	91

STAFF INPUT /b	FY76	FY78	FY79	FY80	FY81	FY82	FY83	FY84	FY85	FY86	FY87	TOTAL
Preappraisal	.6	1.9	.7	72.7	13.9	.0						89.8
Appraisal				20.0	44.1							64.1
Negotiations					10.2							10.2
Supervision					7.3	19.0	23.4	23.4	24.3	14.1	4.5	116.0
Other			.2	.0	1.2			.0				1.5
TOTAL	.6	1.9	.9	92.8	76.9	19.1	23.4	23.4	24.3	14.1	4.5	281.8

CUMULATIVE DISBURSEMENTS	FY82	FY83	FY84	FY85	FY86	FY87
Appraisal Estimate (US$Million)	11.0	38.0	65.0	81.0	87.0	87.0
Actual (US$Million)	2.2	12.7	20.6	35.8	48.8	52.4
Actual as % of Estimate	2	33	32	44	56	60

Date of Final Disbursement July 15, 1987

MISSION DATA	Date Mo/Yr	No. of Persons	Man days in Field	Specialization Representation /c	Performance Rating/d	Trend/e	Types of Problems/f
Preparation	2/80	6	108	A,B,C,H,I			
Pre-appraisal	4/80	4	72	A,F,G,H			
Appraisal	6/80	8	144	A,B,D,E,F,H,I			
Supervision I	4/81	2	6	H,I	1	2	
" II	10/81	2	7	E,I	1	1	
" III	3/82	2	8	E,I	1	1	
" IV	10/82	2	9	B,I	1	2	
" V	/83	3	14	E,G,H	2	2	FP
" VI	3/84	1	10	E	2	1	F
" VII	12/84	2	12	E,F	2	2	TF
" VIII	5/85	2	10	E,F	2	2	TF
" IX	11/85	4	12	C,E	3	2	TF
" X	10/86	1	8	E	2	-	-

OTHER PROJECT DATA

Borrower:	Investbanka Belgrade
Guarantor:	Socialist Federal Republic of Yugoslavia
Executing Agency:	Serbian Fund for Underdeveloped Regions
Fiscal Year of Borrower:	January 1 to December 31
Name of Currency (Abbreviation)	Dinar (Din)
Currency Exchange Rate	
Appraisal Year Average	US$1.00 = Din 24.6
Intervening Years Average (1981-86)	US$1.00 = Din 163.4
Completion Year Average (1987)	US$1.00 = Din 737.0
Follow-on Project:	None

/a Calculated in terms of months from date of Board approval.
/b Input as staff weeks. Source: World Bank Planning and Budget Department.
/c A = Agriculturalist; B = Livestock Specialist; C = Irrigation Specialist; D = Marketing Specialist; E = Economist; F = Financial Analyst; G = Horticulturist; H = Ag. Ind. Specialist; I = Ag. Cr. Specialist.
/d 1 = Problem-free or minor problems; 2 = Moderate problems; and 3 = Major problems.
/e 1 = Improving; 2 = Stationary; and 3 = Deteriorating.
/f F = Financial; M = Managerial; T = Technical; P = Political; and O = Other.

PROJECT COMPLETION REPORT

YUGOSLAVIA - MORAVA REGIONAL DEVELOPMENT II PROJECT (LOAN 1951-YU)

EVALUATION SUMMARY

Introduction

1. The Morava Regional Development II Project was the eighth loan to Yugoslavia for agriculture and agroindustries and was the first direct loan to Serbia in the agricultural sector. Serbia benefitted previously under two agricultural credit projects.

2. The project was implemented in a difficult environment. World economic growth was low during the implementation period of 1981-1987, and in Yugoslavia, GDP grew only marginally in constant prices and consumption actually declined. In agriculture, the average annual growth rate of gross social product fell from about 4% during 1972-1979 to 2% during 1980-1984. For agroindustry, a decline in real wages led to a dampening of domestic demand, and the country faced increasing constraints on exports, particularly to the EEC.

3. Nevertheless, the project was relatively successful and seems to have helped build a foundation for higher growth in the Morava Region. While implementation of the primary production component did not reach expectations, agroindustry investments were implemented approximately as planned and appear sound for the longer term.

Objectives

4. The general objective of the project was to promote the development of the Morava Region in the Republic of Serbia, one of the less-developed rural areas of the country, through increases in productivity, employment, and incomes. Further, it was designed to increase the supply of agricultural and agroindustrial products for the domestic market, expand exports of agroindustrial products, and strengthen participating institutions. These objectives were to be achieved through a primary production component (50% of project cost), an agricultural services component in support of primary production (2%), and an agroindustries component (48%). The primary production component comprised individual sector development (45%) and social sector development (5%). Individual sector development included livestock (21%), orchards (12%), vineyards (6%), and irrigation (5%).

Implementation Experience

5. Because of the poor economic environment, livestock and horticultural development in the individual sector did not meet expectations. Some 91% of the projected number of livestock farmers participated but with smaller investments than anticipated, and orchards/vineyards were established on only 38% of the projected area. The implementation period was about as anticipated. In contrast, the agroindustrial investments were undertaken approximately as planned, although the implementation period of 1981-1987 was considerably longer than expected.

6. The actual cost of the project was Din 25.3 billion in current terms, compared to the appraisal estimate of Din 6.5 billion (including contingencies.)[1/] The dinar cost figure was affected by delays in project implementation and much higher inflation than expected at appraisal. Individual sector primary production accounted for about 27% of project cost, compared to the appraisal estimate of 45%, and agroindustry accounted for 70%, compared to 48%, because of the reduction in the former component.

7. The Bank financed about 43% of project cost, compared to 30% estimated at appraisal, and the remainder was financed by the Serbian Fund for Underdeveloped Regions, Investbanka, local banks, and subborrowers. Only US$52.4 million of the original amount of US$87.0 million was utilized, because of reductions in the individual sector livestock and horticulture components and because the rate of depreciation of the dinar during the project period was higher than the rate of inflation.

Results

8. It is difficult to estimate meaningful financial rates of return on the basis of experience to date because of the volatile economic conditions, specific factors affecting individual activities, and the long gestation period for orchard investments. The estimates given in the borrower project completion report (BPCR) range from 3% to 137% for livestock and from -370% to 310% for orchards. The BPCR did not present any financial rates of return for agroindustry, but present estimates are likely to be lower than the 12% to 46% calculated for the 1985 annual evaluation report. Neither did the BPCR provide an estimate of the economic rate of return (ERR), but an attempt was made using customary OED assumptions, and it appears that the average ERR for the project is at least 12%.

Sustainability

9. In general, the sustainability of increases in production and incomes resulting from the project depends on the future course of the country's economy. Investments in primary production appear to be sound, although the outlook for some activities is more uncertain than for others. Investments in agroindustries also appear to be sound, and the enterprises should encounter a

1/ The borrower project completion report does not provide a phasing of costs which would allow conversion to constant terms and to US dollars.

growing demand on the domestic and export markets over the medium to long term, but further improvements in management are needed (particularly in finance and marketing).

Findings and Lessons Learned

10. The project was relatively successful, in spite of the generally adverse environment for both primary production and agroindustries. While the long-term impact of the project cannot be assessed at this early stage, the project appears to be achieving its overall objective of contributing to the development of the Morava Region.

11. There was a substantial shortfall in the primary production component, and FRRs estimated on the basis of present conditions vary widely, but agroindustrial investments were implemented approximately as planned and recent estimates of FRRs are satisfactory. The borrower, Investbanka, gradually assumed a more active role in supervising subprojects and providing advice to subborrowers during the course of project implementation. Participating agroindustrial enterprises made some improvements in financial and marketing management, and a few introduced cost accounting systems.

12. Primary lessons learned are indicated below.

- Greater attention to the managerial capability of participating agroindustrial enterprises may be required during preparation and appraisal, and strengthening of management systems may need to be incorporated into subprojects.

- The strengthening of financial intermediaries needs to be addressed in the context of future macro, sector, and project operations, particularly with respect to portfolio and foreign exchange risk management.

- The Bank will need to ensure that Yugoslavia implements a sound interest rate policy as part of the framework for future operations.

- Integrated development of primary production and agroindustries may be desirable in fragmented economies such as Yugoslavia's.

- Sound preparation and appraisal, including the preappraisal of agroindustry subprojects and the preparation of procurement documents, had a substantial impact on project implementation.

- Additional flexibility in the allocation of funds between individual and social sectors, and between primary production and agroindustry, may have been warranted.

- Land consolidation is not likely to be successful unless induced by market forces.

PROJECT COMPLETION REPORT

YUGOSLAVIA - MORAVA REGIONAL DEVELOPMENT II PROJECT (LOAN 1951-YU)

PROJECT PERFORMANCE OVERVIEW MEMORANDUM

I INTRODUCTION

Macroeconomic and Sectoral Context

1.01 The period during which the project was implemented, 1981-1987, was a difficult one for the world and Yugoslav economies. Economic growth was low throughout the world; the volume of trade was stagnant or declining, in particular, for many food items; commodity prices were generally falling in real terms; real interest rates were high; and external debt was growing. For Yugoslavia, the situation was especially difficult. GDP grew only marginally in constant prices, and consumption actually declined. Exports of merchandise were virtually stagnant while imports declined. External debt remained at about the same level in terms of US dollars during the period, but it was about triple the level of 1975. Money supply increased nearly seven times in nominal terms between 1981 and 1986 and domestic credit increased over six times; the consumer price index in 1986 was about nine times the level in 1981. The exchange rate in 1986 was Din 379 per US dollar, compared with Din 35 per US dollar in 1981. Federal budget expenditure decreased 22% in constant terms between 1980 and 1985. Furthermore, the economic setting was characterized by high volatility and uncertainty.

1.02 In agriculture, the average annual growth rate of gross social product during 1980-1984 was about 2% in real terms, in contrast with the 4% annual rate achieved during 1972-1979.[1/] The growth rate in industry also declined to 3% in the later period from 7-8% in the earlier. These growth rates were affected by the reduction in investment in 1980-1983 which resulted in part from frequent changes in investment policy, according to the borrower project completion report (BPCR). They were also affected by a protracted decline in the efficiency of investment. The agricultural trade balance was in deficit during 1975-1980 and, while the overall balance turned positive in 1981, it returned to surplus with the convertible currency areas only in 1983.

1.03 On the supply side, the rate of growth of primary agricultural production appears to be limited primarily by the growth rate of technology, as yields are low by international standards and have considerable room for improvement, and labor resources appear adequate. However, domestic and export market constraints are limiting on the demand side, and the BPCR notes that Yugoslavia faced increasing constraints on exports to the EEC during the

1/ This discussion is taken from the agricultural sector memorandum, Adjustments in the Agricultural Sector - Issues and Options, Report No. 6130-YU, August 5, 1986.

project implementation period of 1981-1987. The BPCR also indicates that the terms of trade for agriculture deteriorated during this period and nominal interest rates rose, leading to a contraction in on-farm investment, an underutilization of facilities, and a general return to traditional farming methods.

1.04 The major expansion of agroindustries in the 1970s resulted from autarkic investment programs (which produced some duplication of facilities with excess capacity in various republics), a burgeoning domestic market, and an excessive reliance on foreign borrowing. The subsequent decline in real wages led to a dampening of domestic demand, and the real depreciation of the dinar imposed a heavy financial burden on the agroindustries and related financial intermediaries which assumed the currency exchange risk on foreign loans. The growth of social product of agroindustries slowed, and fixed investment in 1983 was 33% below that of 1979 in real terms.

Project Objectives and Experience

1.05 Yet the project was relatively successful, in spite of the generally unfavorable environment for both primary production and agroindustries. The overall objective of the project was to promote the development of the Morava Region, and more specific objectives were to increase the region's livestock and horticulture production, expand exports of processed food products, and strengthen participating institutions. While it is too early to judge the extent to which these objectives will be achieved (especially because of the depressed economic conditions and the long-term nature of some of the investments), the project does seem to have helped lay the foundation for higher growth in Morava.

1.06 To be sure, implementation of the individual sector component of primary production fell considerably short of expectations, since 91% of the projected number of livestock farmers participated but with smaller investments than planned, and orchards/vineyards were established on only 38% of the projected area. The participation of individual farmers was adversely affected by the deteriorating economic conditions, particularly the declining terms of trade for agriculture and the rising nominal interest rates. Furthermore, horticulture farmers were affected by the harsh weather conditions of 1984/1985. Nevertheless, interest in dairying, sour cherry orchards, and vineyards remained high.

1.07 Agroindustries were affected by the adverse environment in terms of the investment implementation process and initial operations, particularly by the high inflation, shortages of imports, and climbing nominal interest rates, contraction of the domestic market, and growing difficulties in exporting to the ECC. Yet project investments in agroindustry were undertaken approximately as planned, perhaps because the enterprises were shielded from the environment through their traditional access to direct and indirect subsidies. While the viability of the project investments remains to be demonstrated, they appear sound for the longer term.

II. IMPLEMENTATION

Physical Implementation

2.01 As appraised, the project consisted of a primary production component (50% of project cost), an agricultural services component in support of primary production (2%), and an agroindustries component (48%). The primary production component comprised individual sector development (45%) and social sector development (5%). Individual sector development included livestock (21%), orchards (13%), vineyards (6%), and irrigation (5%).

2.02 Primary Production - Individual Sector. The livestock component was designed to increase productivity, income, and employment of about 2,550 individual farmers. It was implemented essentially over a five-year period (1982-1986), as anticipated, although the composition of activities changed, the component fell somewhat short of appraisal estimates in terms of the number of participating farmers, and investment levels were lower. At appraisal it was expected that about 33% of the 2,550 farmers would be engaged in sheep fattening, 30% in dairying, and smaller proportions in cattle fattening, pig fattening, mixed livestock, broilers, and bee keeping. When it became apparent that the demand for dairying was greater than anticipated, the demand for most other activities lower, and the average investment lower, the project estimates were revised and the number of farmers was increased to 2,875, of whom about 43% would be in dairying, 27% in sheep fattening, and lower proportions in the other activities. In fact, because of the reduction in investment demand, 2,322 farmers participated (91% of the appraisal estimate and 81% of the revised estimate), of whom 55% were in dairying and 25% were in sheep fattening. The numbers of farmers in cattle and pig fattening were particularly low in relation to the appraisal and revised estimates. (Annex 1 shows the structure of subborrowers.)

2.03 Whil the BPCR does not provide data on livestock investment by activity, a comparison can be made of the structure of investments expected at appraisal and that of actual subloan disbursements (Annex 3). The largest proportions of investment were expected to be for sheep fattening at 36% and dairying at 23%, with smaller proportions for the other activities. However, the largest proportion of subloan disbursements was for dairying, at 37%, with broilers next at 33% and sheep fattening much lower at 17%. A measure of the extent of implementation is given by the proportions of approved subloans actually disbursed. For the component as a whole, this proportion was only 82%, which was the same figure as for dairying. The proportions for goat raising (a new activity introduced during project implementation) at 53% and mixed livestock at 56% were particularly low, although these activities absorbed relatively small amounts of disbursements. The proportion for sheep fattening also was quite low at 70%.

2.04 The BPCR indicates that often there was excess investment in buildings and other facilities relative to stock and forage production, and that farmers sometimes sold dairy cows purchased under the project. Thus facilities were sometimes underutilized, and low financial returns resulted.

2.05 Implementation of the individual sector orchard component was affected by the various factors explained above relating to the economic environment. In addition, the component was affected adversely by the harsh winter of 1984/85 and the drought of the summer of 1985 which killed or damaged many of the new plantings. According to the BPCR, implementation was also affected by the selection of varieties unable to withstand the rigors of the climate, although it is not clear whether there are varieties available which would produce high yields of high quality crops and also be able to withstand the unusually harsh conditions of 1984/85 as seedlings. A novel feature of this component was the land consolidation program, which was aimed at establishing block orchards of 10 to 50 ha involving 20 to 100 farmers, in order to increase the efficiency of production. In practice, this effort was not very successful, as the large number of small holdings demonstrates, and the retarded implementation in those areas where it was attempted because of the adverse reactions of farmers. Finally, the BPCR notes that the inadequate support services (para 2.12) and problems in marketing of output contributed to the reduced achievement of this component.

2.06 Sour cherries, plums, and, to a lesser extent, walnuts, were the major crops established under this component (Annex 2). Implementation occurred over a period of six years, including the partial first year of the project (1981). Major investments occurred in years two and three (1982-83) and in year five (1985). A total of 2,936 farmers participated, or 63% of the appraisal estimate of about 4,640. Some 1,375 ha of orchards were established, only 38% of the appraisal estimate of 3,650 ha. The average area per farmer of 0.5 ha was only 60% of the appraisal estimate of 0.8 ha. Actual investment in orchards was about Din 360 million, in comparison to the appraisal estimate of Din 760 million (including contingencies), but the relationship is distorted by the higher inflation rate than anticipated. Of interest is the fact that only 70% of approved subloan amounts were disbursed,[1/] since many farmers decided not to establish orchards under the project, or reduced the area, as a result of the factors mentioned above.

2.07 Some 1,814 farmers established sour cherry orchards (compared to the appraisal estimate of about 1,740) on 802 ha (1,300 ha), resulting in an average orchard size of about 0.44 ha, substantially below the appraisal estimate of 0.75 ha. There was much less interest in plums than expected, with 437 farmers (975) planting 274 ha (775 ha), giving an average orchard size of 0.63 ha (0.79 ha). Walnuts accounted for the next largest area planted, with 123 farmers (195) establishing 92 ha of orchards (170 ha), for an average size of 0.75 ha (0.87 ha). Interest in the other crops was far below expectations and was particularly low in the case of blackberries (28 farmers on 12 ha compared to about 620 farmers on about 505 ha) and black currants (no farmers compared to 280 farmers on 245 ha).

1/ As of March 31, 1987.

2.08 Interest in vineyards was high, as the wineries in the region are well-established and successful, although the average area planted was only about 30% of the expected average. Some 2,468 farmers planted vineyards (compared to the appraisal estimate of 1,830) on 418 ha (1,100 ha), giving an average area of 0.17 ha (0.55 ha).

2.09 The three appraised irrigation schemes were implemented on a total of 1,040 ha, with the Masurica scheme having been reduced by 195 ha (as a result of resistance from farmers, according to the BPCR) and the Bojnik scheme having been increased by 305 ha. Implementation proceeded more slowly than anticipated, partly because of some technical changes that were introduced but mainly because of the land consolidation issue. The BPCR indicates that the construction of the schemes has been completed but that none was operating as of May 1987 because the land consolidation process was still underway.

2.10 Primary Production - Social Sector. The project provided for a piglet breeding unit with 1,650 sows to be established in the social sector to supply about 31,000 piglets per year to individual farmers for fattening. The unit was constructed as planned, but the contract operations with individual farmers were not introduced, and the unit has operated as a breeding/fattening facility.

2.11 It was envisaged that social sector organizations would establish 220 ha of orchards under the project, consisting of 150 ha of sour cherries, 50 ha of black currants, and 20 ha of blackberries (Annex 2). After some potential participating organizations dropped out and others joined the project, a total of 235 ha was planted, of which only 9 ha was in sour cherries, none in black currants, and 15 ha in blackberries. The remaining area was planted to apple (95 ha), pear (60 ha), peach (30 ha), and quince (26 ha).

2.12 Support Services. The support services component was designed to provide technical assistance to individual farmers participating in the project and to other farmers in the area, through the existing basic agricultural service, the agricultural and veterinary stations, and the three major agrokombinats of the region. The BPCR reports that implementation of this component was delayed because investors did not want to bear the foreign exchange risk on Bank loan proceeds, and was carried out primarily in 1985 and 1986. While some additional staff were recruited, buildings constructed, and vehicles and equipment purchased, this component did not seem to have a significant impact on project results.

2.13 Agroindustries. The agroindustry component was implemented approximately as expected in terms of the numbers and types of plant, although one dehydrated food plant was not built and some plants are larger than planned. However, the implementation process was much more arduous than anticipated and required considerably longer than expected. The brief operating experience has been mixed.

2.14 This component was greatly affected by the macro-economic/sectoral conditions mentioned above (paras 1.01-1.04), particularly with respect to the investment implementation process and the operation of facilities. Wages were declining in real terms, leading to a shrinkage of the domestic market for agroindustrial products. It was also a difficult period for the world

economy, and it became increasingly difficult for Yugoslavian agroindustries to export to the EEC, in particular. Furthermore, the economic climate was characterized by high volatility and uncertainty. The BPCR notes that, as a result, the number of food processing enterprises in Serbia incurring losses and the amount of such losses increased continuously from 1981 through 1986, and the food processing industry as a whole operated at a substantial net loss in 1985 and 1986.

2.15 The policy framework also was in a state of flux. Frequent changes occurred in development and investment priorities, and in monetary policy (in terms of credit allocation, interest rates, and the exchange risk on foreign borrowings). Furthermore, the legislative and regulatory environment kept changing, which had an impact on licensing, documentation, etc.

2.16 The high rate of inflation during the project period caused particular difficulties for investors. Investment costs soared far beyond original estimates, and investors did not have the additional equity resources needed for sound financing plans. Nor were they prepared to cope with large amounts of debt financing at high and varying nominal rates of interest. Operations were also made considerably more difficult by the large amounts of debt at high nominal interest used to finance working capital, especially when combined with the lack of experience with pricing of output under extremely inflationary conditions and the constraints on pricing under which the agroindustries operated.

2.17 As noted in the BPCR, the project enterprises also suffered from a lack of sufficient guidance from the kombinats to which they belonged, which were expected to provide technical assistance in areas such as investment planning and implementation, financing, and marketing. This inadequacy placed even greater pressure on enterprise management, which in some cases was not up to the task, as indicated in the BPCR and in Bank reports. Management sometimes was not prepared for undertakings of the size and complexity involved in the project, in terms of both the implementation of investments and the operation of resulting facilities. For some enterprises, insufficient attention and expertise was devoted to the adequacy and quality of raw material supply and to the marketing of output. Financial management was frequently deficient, not only in terms of the financing of investment and in operations, as mentioned above, but also with respect to financial planning in general and cost accounting. Furthermore, enterprises were not completely familiar with Bank requirements, such as for procurement, which led to delays in implementation.

2.18 Another factor which caused some problems during implementation was the inadequacy of technical personnel in some enterprises. The training provided as part of the investment programs was not always sufficient, and the kombinats did not provide enough support to overcome the deficiency.

2.19 Individual project enterprises were affected by the above factors in varying degrees. Most investments were to have been implemented in 1982 and 1983, whereas four of the fourteen were not completed until 1987, and one plant (Medvedja dehydrated food) still had not been commissioned as of September 1987. About half of total investment expenditure was incurred in 1986 and 1987. The structure of investment was approximately as expected, as the Delises fruit juice and dairy plants accounted for 38% of total investment

(compared to the 30% estimated at appraisal), the Leskovac slaughterhouse, 16% (13%), and the Prokupac fruit salad plant, 10% (8%). At the time of evaluation in mid-1987, seven of the fourteen plants were operating near projected rates of capacity utilization, two plants had just been commissioned, and Medvedja was inoperative because of technical difficulties. The other five plants were operating significantly below projected levels because of various difficulties with raw material supply, market demand, and financing, according to the BPCR.

Project Cost and Financing

2.20 The actual cost of the project was Din 25,275 million in current terms, compared to the appraisal estimate of Din 6,465 million (including contingencies). The dinar cost figure was affected by delays in project implementation and much higher inflation than expected at appraisal. (Inflation averaged 51% per year 1981-1986). The BPCR does not provide a phasing of costs which would allow conversion to constant terms and to US dollars. Individual sector primary production accounted for about 27% of project cost, compared to the appraisal estimate of 45%, and agroindustry accounted for 70%, compared to 48%. This change in composition resulted from a substantial reduction in the former component. Estimated and actual costs are shown in the table below.

	Appraisal /a		Actual /b
	Din M	US$ M	Din M
Primary Production - Individual Sector			
Livestock	1,358	50.3	2,855
Orchards	760	28.1	)
Vineyards	416	15.4	) 1,108
Irrigation	349	12.9	2,879
Total	2,883	106.7	6,842
Primary Production - Social Sector			
Livestock	203	7.5	344
Orchards	44	1.6	)
Vineyards	66	2.4	) 205
Total	313	11.5	549
Support Services	143	5.3	303
Agroindustry	3,127	115.8	17,581
Total	6,465	239.4	25,275

/a Including contingencies.
/b In current terms, based on subloan disbursements as of May 31, 1987 and relationship between estimated cost and approved subloan amounts. Insufficient data in BPCR to convert to constant terms or to US$.

2.21 The Bank financed about 43% of project cost, compared to 30% estimated at appraisal, and the remainder was financed by SFUR, Investbanka, local banks, and subborrowers. Only US$52.4 million of the original loan amount of US$87.0 million was utilized, because of reductions in the individual sector livestock and horticulture components and because the rate of depreciation of the dinar during the project period (66% per year 1981-1987) was higher than the rate of inflation. (Annex 4 gives a comparison of the appraised and actual allocation of loan proceeds.) The BPCR provides only sketchy information on financing, as reflected in the table below. The amount of Bank financing in dinar terms is based on the amount for agroindustry, which is given in the BPCR, plus amounts for the other components derived from the actual cost estimates and the appraisal estimates of financing proportions.

	Appraisal		Actual	
	Amount (Din M)	%	Amount (Din M)	%
Subborrowers	2,198	34	14,369	57
Local Banks				
Investbanka	582	9		
SFUR	1,745	27		
IBRD	1,940	30	10,906	43
Total	6,465	100	25,275	100

Procurement and Disbursement

2.22 In general, procurement proceeded relatively smoothly because of the advanced stage of the procurement process by Board presentation (bids had been invited for construction of 5 plants on a turn-key basis and for purchase of equipment for another 7 plants, out of a total of 14 proposed for the project), although some delays did occur because of the resistance of some investors to Bank procedures.

2.23 Disbursements lagged behind appraisal estimates because of delays in project implementation, as shown in the table below.

	FY82	FY83	FY84	FY85	FY86	FY87	Total
	US$ million						
Appraisal estimate	11.0	27.0	27.0	16.0	6.0	-	87.0
Actual	2.2	10.5	7.9	15.2	13.0	3.6	52.4

The process was reasonably smooth, particularly after the establishment of the special account in 1984. The original closing date of December 31, 1986 was not extended, although the books were left open to accommodate subsequent disbursements, and the final disbursement was made on July 15, 1987.

Accounts and Audits

2.24 Investbanka maintained its project accounts in a reasonable manner and had them audited by the Social Accounting Service (SDK), although the audit reports were sometimes submitted late because of SDK's inadequate capacity. The audit reports were also reasonably satisfactory, but the Bank has continued its dialogue with SDK in the context of this and other projects and urged greater attention to lending policies and procedures, portfolio quality, and foreign exchange risk management.

2.25 Investbanka was less successful in securing compliance of social sector subborrowers with the requirement to have their accounts audited and submit audit reports. About half the agroindustry subborrowers submitted audit reports for the mid-term review in 1985, but subsequent compliance was fragmentary.

III. INSTITUTIONAL PERFORMANCE

Borrower and Implementing Agency

3.01 Investbanka (IB) was the borrower and was to carry out the appraisal, supervision, and collection of subloans; handle funds; and maintain records under an agreement with the Serbian Fund for Underdeveloped Regions (SFUR), the implementing agency.

3.02 In practice, IB carried out a brief review of feasibility studies prepared for POs by various institutes and initially undertook little supervision of subprojects, leaving supervision largely to SFUR as implementing agency. During the course of the project, however, IB began to take a more active role in supervising subprojects and providing guidance to subborrowers, particularly on financial matters.

Serbian Fund for Underdeveloped Regions (SFUR)

3.03 As implementing agency, SFUR was to promote the project, implement the support services component and the cost accounting study, provide part of project financing, coordinate project implementation through regional coordination units, and provide general assistance to the participating organizations. It performed its promotional and coordinating functions reasonably well, but it had limited staff to assign to the project and had less success with those aspects for which it had direct responsibility. The support services component was only partially implemented and appears to have had little impact. The cost accounting study was undertaken by consultants retained by SFUR, but most POs did not introduce cost accounting systems.

Participating Organizations (POs)

3.04 Implementation of subprojects was undertaken by three agrokombinats (Agro-Industrial Kombinat (AIK) Leskovac, Work Organization (WO) Delises, and WO Prokupac) and about 20 basic organizations not associated with these agrokombinats. Experience varied, depending essentially on the managerial competence of the POs. The BPCR suggests that the project did not have any significant impact on the management of social sector organizations, but some of the agroindustrial enterprises did improve their financial and marketing capabilities. Furthermore, a few enterprises did introduce cost accounting systems and may have a demonstration effect on other enterprises in the region.

Bank's Role

3.05 The BPCR asserts that the appraisal of the project was overly optimistic, particularly with regard to market prospects and expected benefits, but it also notes that the drastic changes in the economic and policy environment could not have been foreseen. The latter judgement appears more relevant. The basic concept of the project appears sound, even though the eventual results are still unclear.

3.06 The Bank devoted increasing attention to the management of agroindustrial enterprises over the course of project implementation, particularly the financial and marketing aspects. A question might be raised as to whether greater emphasis might have been given to this matter during preparation and appraisal, and whether improvements in the management information systems and especially the introduction of cost accounting systems might have been required as part of each subproject. With hindsight, one might suggest that such an approach might have been desirable, although it is not clear that the enterprises would have agreed. Furthermore, the stresses which appeared during project implementation as a result of the changed environment and which highlighted the need for improved management systems did not exist previously. Still, the need for cost accounting was recognized at appraisal, and provision was made for preparation of a manual.

3.07 The BPCR indicates that this project and others financed by the Bank contributed to the acceptance of a project approach to the implementation of investment policy, including the use of objective criteria in appraising investment proposals and assessing the results. The Bank also encouraged IB to become more involved in supervising the investments which it finances, and the BPCR further acknowledges the Bank's work in promoting the establishment of monitoring and evaluation systems.

3.08 While not a major part of the project, technical assistance provided by the Bank during missions and in reviewing documents probably had an impact, particularly on the technical aspects of the irrigation schemes, the technical aspects of agroindustry investments, and the financial management of agroindustrial enterprises.

3.09 The BPCR suggests that the project contributed to a better understanding of the weaknesses of social sector organizations with respect to aspects such as underutilization of capacity, financial management, raw material supply, and marketing, and the Bank probably helped increase the awareness.

3.10 Finally, the BPCR expresses disappointment that the Bank did not agree to a reallocation of loan funds from individual sector primary production to agroindustry and to social sector primary production. It contends that the new agroindustry investments would have increased the efficiency of existing plants, that the proposed social sector primary production investments were viable, and that the appraisal of the new investments could have been carried out through procedures already established for the project. It should be noted that the Bank was concerned about the general development of agroindustry in Yugoslavia (e.g. overcapacity in some industries, poor financial management) and wished to review the results of a proposed agroindustry study before agreeing to major changes in ongoing projects. Nevertheless, it may have been desirable to reassess the project when the divergence from expectations became apparent, and modify it as appropriate.

IV. FINANCIAL AND ECONOMIC PERFORMANCE

4.01 The BPCR presents financial rates of return (FRRs) for selected livestock and horticulture operations in the individual sector, but the highly volatile economic conditions and specific factors such as the harsh weather of 1984/1985 and the general overproduction of sour cherries in Europe in 1985 caused farm income to gyrate wildly during the project period, and orchards were just coming into production at the end of the period. (Annex 5 presents a comparison of FRRs given in the SAR, the last annual evaluation report (for 1985), and the BPCR.) In the case of livestock, the estimated FRRs range from 3% for bee keeping to 137% for mixed cattle and sheep. Estimated FRRs for orchards vary even more widely, from about -370% for sour cherries to 310% for pears. The experience of project cherry farmers gives an indication of the situation for orchards, as average net income in 1986 dinars fell from 1.7 million in 1982 to 1.1 million in 1983, rose again to 1.7 million in 1984, then fell once more to 0.9 million in 1985. The BPCR did not reestimate FRRs for agroindustry but reports that the financial performance of most enterprises is marginal to date. Thus FRRs estimated at present would likely be lower than the 12% to 46% estimated for the 1985 annual evaluation report.

4.02 The situation for economic rates of return (ERRs) is similar. The BPCR did not attempt to calculate ERRs, but the nontraded components of farm revenue, production cost, and investment cost streams given in the BPCR for selected investments were adjusted with the conversion factors listed in Annex 6 to generate the ERRs given in Annex 5. It has not been possible to re-calculate an aggregate ERR for the project on the basis of the information provided by the borrower. Nevertheless, in an attempt to approximate an estimate at project completion, the rates in Annex 5 have been aggregated using customary OED assumptions (i.e. a ceiling of 100% for positive ERRs and -5% for negative ERRs). With these assumptions, the derived average ERR for 11 primary production activities is 24%. Concerning agroindustries, the borrower's annual evaluation report for 1985 showed an average reestimated ERR for 12 industries (24%) slightly higher than the appraisal average (23%). At appraisal, the ERRs tended to be higher than the corresponding FRRs. It can thus be reasonably assumed that the average ERR for agroindustries estimated under 1985 conditions exceeded 24%. If a margin of error of 100% were assumed, because of the incomplete data and the deterioration in the economic environment since 1985, the present estimate of the ERR for the project as a whole would still be at least 12%.

V. ACCOMPLISHMENTS AND SHORTCOMINGS

5.01 In general, the implementation of the project was relatively successful, if somewhat delayed, in spite of the unexpected adverse economic conditions prevailing during the implementation period. Whether this implementation in the face of adversity will be justified in terms of the results remains unclear, but the investments appear to be the types which should be successful in the long run. The products should find a growing demand on the domestic market over the medium to long term, and those intended for export appear to meet Yugoslavia's comparative advantages in foreign markets.

5.02 Shortfalls in implementation were greatest in primary production, which was affected by the reactions of individual farmers to adverse economic conditions, land consolidation, and rising variable nominal interest rates. Livestock was more successful than horticulture, particularly dairying, which enjoyed more favorable circumstances than most other types of operation. Because of the long-term nature of investments in orchards, this component was especially affected by the uncertain environment and by specific circumstances such as the general overproduction of sour cherries in Europe in 1985. Irrigation was affected by the land consolidation process, some technical considerations, and bureaucratic delays, although the schemes were finally implemented and seem to have reasonable prospects. Almost all agroindustry investments were implemented, after delays caused by factors such as changing investment policies, cost overruns and consequent financing problems, difficulties in ensuring adequate raw material supplies, and technical problems in the case of the dehydrated food plant. Since the agroindustry component represents about 70% of project cost, the general success or failure of the project depends on the eventual results of these investments. The support services component was not very successful. Some facilities were constructed, but there seemed to be little incremental impact on project farmers.

5.03 The integrated nature of the project was both a strength and a weakness. Great care was taken during preparation and appraisal to ensure that the primary production component would provide adequate supplies for the agroindustries and that the latter would provide assured markets for project farmers. In practice, the differential reactions of the individual and social sectors to the environment resulted in a less integrated project than planned. Greater flexibility during project implementation might have allowed further achievement, particularly in the individual sector (perhaps through the incorporation of non-associated farmers). However, allowing production for non-project outlets would have introduced additional uncertainties. Thus it may be that integrated development of the type planned for this project is the most appropriate for a fragmented economy such as Yugoslavia's.

5.04 As noted above, land consolidation delayed implementation of horticultural development and the irrigation schemes. While it was probably essential for the irrigation schemes and may have introduced some efficiencies into the production of horticultural crops, the advisability of requiring it for the latter might be questioned. Since farmers oppose the consolidation of lands, it may be that any lasting movement in this direction will occur only if market forces so dictate.

5.05 Institutional development was recognized at appraisal as an important aspect of the project, but there was even greater emphasis placed on this aspect during implementation. Although the BPCR suggests that the project had little impact on the management of social sector organizations, there do seem to have been significant changes in agroindustry enterprises which were at least partly attributable to the project. Enterprises appear to have developed a greater awareness that they will need to become increasingly self-reliant and that they need to improve their management information systems (especially for cost accounting). Some managers were replaced, particularly in the fields of finance and marketing. Enterprises also gained experience in investment planning and implementation. Of course they still have a difficult task ahead in learning to survive in a more market-oriented environment and will need substantial further improvements in financial, marketing, and raw materials management.

5.06 The participating banks also seem to have gained a greater awareness of the need for improved financial management, particularly with respect to high variable interest rates, foreign exchange risk issues, and deteriorating loan portfolios. Furthermore, they gained experience in the appraisal and supervision of subprojects. Nevertheless, the project did not focus on the general strengthening of banks, and therefore its impact was limited to specific aspects of their operations.

5.07 More generally, the BPCR suggests that the project contributed to the acceptance of the project approach to investment analysis and implementation in Yugoslavia, and it mentioned more specifically the use of objective criteria for appraisal and supervision and the establishment of monitoring and evaluation systems to assess the results. It also suggests that the project contributed to a better understanding of the comparative advantage of the individual sector in activities such as livestock production and of the weaknesses of social sector agroindustrial enterprises.

5.08 The BPCR asserts that the project appraisal was overly optimistic but then recognizes that the drastic deterioration in the economic and policy environment could not have been anticipated. Finally, it states that neither agroindustrial enterprises nor farmers should be burdened with high variable (nominal) interest rates. However, for enterprises it is more a question of improved financial management, although the indexing of subloans to produce more appropriate debt service profiles under inflationary conditions would help. For individual farmers, it is partly a question of their becoming accustomed to more market-oriented interest rates, partly a matter of inappropriate debt service profiles produced by unindexed subloans, and partly an appropriate reaction to an unfavorable, uncertain environment.

VI. LESSONS LEARNED

Enterprise Management

6.01 The stresses produced by the adverse economic conditions revealed substantial weaknesses in the management of agroindustrial enterprises, particularly in finance, marketing, and raw material supply. While considerable attention was given to this matter during preparation and appraisal, it may warrant even greater attention in future operations. If deficiencies in proposed participating agencies are found, it may be necessary to build into the subprojects improvements in areas such as financial structure and performance, financial planning, pricing policy, and management information systems (especially cost accounting).

Financial Intermediaries

6.02 Weaknesses in the management of financial intermediaries also became more apparent during the course of project implementation, particularly in financial management. The strengthening of financial institutions in Yugoslavia needs to be addressed on a broad front, and future macro, sector, and project operations need to contribute to the improvement of aspects such as portfolio and foreign exchange risk management.

Interest Rates

6.03 The role, level, and structure of interst rates have featured prominently in the dialogue between the Bank and Yugoslav authorities, and limited progress has been made in improving the system. Changes in interest rates have had an important impact on the implementation of all projects involving credit, including the present one. The BPCR states that subborrowers should not be subject to high variable interest rates, and this view may be correct in the sense that indexing would produce a more appropriate debt-service profile. In any case, the Bank will need to ensure that the environment for future operations includes the implementation of a sound interest rate policy.

Integrated Development

6.04 The project attempted to integrate primary production and processing in order to ensure markets for farmers and raw material supplies for agroindustrial enterprises, and was partly successful, although this approach also introduced rigidities which made the adjustment to changing conditions difficult. On balance, it may be that integrated development is desirable, where feasible, in fragmented economies such as Yugoslavia's.

Preparation

6.05 Considerable attention was given to the preparation and appraisal of this project, and its relative success seems to have resulted in part from this effort. The agroindustry subprojects were preappraised, and this practice appears advisable, if feasible. Furthermore, the procurement process was well advanced by the time of Board approval, which kept related delays to

a minimum. The BPCR suggests that training in investment implementation and operation might have been provided to selected staff prior to the project, and provisions for such training might be considered for future operations. However, the general lesson is that the allocation of sufficient resources to ensure sound preparation of a project pays substantial dividends during project implementation.

Flexibility

6.06 Even though the integrated nature of the project introduced unavoidable rigidities, modifications must be introduced in response to changing conditions. Thus it may have been appropriate to finance additional primary production investments in the social sector and additional efficiency-oriented investments in agroindustry, which would have permitted a further transfer of resources for productive purposes to Yugoslavia.

Land Consolidation

6.07 Land consolidation causes problems almost every time it is attempted. In some cases it is unavoidable if an adequate return on investment is to be achieved, such as for the irrigation schemes of this project. However, if it is not required for the viability of investments and is being introduced to achieve additional efficiency of production, such as for orchard development under this project, it may be advisable not to impose it by administrative fiat. Consolidation for such types of investment is likely to be successful when induced by market forces but not when imposed by administrative fiat in the absence of conducive market conditions.

PROJECT COMPLETION REPORT

YUGOSLAVIA - MORAVA REGIONAL DEVELOPMENT II PROJECT
(LOAN 1951-YU)

STRUCTURE OF SUBBORROWERS

	Appraised		Revised		Actual		Comparisons	
	No.	%	No.	%	No.	%	Actual/ Appraisal %	Actual/ Revised %
1. Primary Production								
Individual Sector								
Livestock								
Dairy	753	30	1,241	43	1,270	55	169	102
Mixed	247	10	217	8	145	6	59	67
Pig fattening	209	8	263	9	51	2	24	19
Broiler	120	5	60	2	60	3	50	100
Sheep	864	33	771	27	589	25	68	76
Cattle fattening	203	8	173	6	61	3	30	35
Goats	-	-	-	-	10	-	-	-
Bee keeping	150	6	150	5	144	6	94	94
Sub-total	2,546	100	2,875	100	2,322	100	91	81
Orchards								
Sour cherry	1,742	38			1,814	62	104	
Plum	974	21			437	15	45	
Peach	266	6			-	-	0	
Apple	272	6			45	2	17	
Quince	97	2			289	10	298	
Pear	200	4			169	6	85	
Walnut	195	4			123	4	63	
Blackberry	618	13			28	1	5	
Black currant	278	6			-	-	0	
Raspberry	-	-			15	1	-	
Apricot	-	-			9	-	-	
Hazelnut	-	-			7	-	-	
Sub-total	4,642	100			2,936	100	63	
Vineyards	1,830				2,468		135	
Irrigation	3				3		100	
Sub-total	9,021				7,527			
2. Social Sector								
Livestock	1				1		100	
Orchards	4				4		100	
Vineyards	1				1		100	
Sub-total	6				6		100	
Total	9,027				7,533			
3. Agroindustry	14				14		100	

PROJECT COMPLETION REPORT

YUGOSLAVIA - MORAVA REGIONAL DEVELOPMENT II PROJECT
(LOAN 1951-YU)

PHYSICAL IMPLEMENTATION INDICATORS

	Unit	Appraised Quantity	Appraised %	Revised Quantity	Revised %	Actual Quantity	Actual %	Comparisons Actual/ Appraisal %	Comparisons Actual/ Revised %
Primary Production									
Individual Sector									
Livestock									
Dairy	head	na		na		na			
Mixed	head	na		na		na			
Pig fattening	head	na		na		na			
Broiler	head	na		na		na			
Sheep	head	na		na		na			
Cattle fattening	head	na		na		na			
Goats	head	-		-		na			
Bee keeping	hive	na		na		na			
Total		na		na		na			
Orchards									
Sour cherry	ha	1,300	36	-		802	58	62	
Plum	ha	777	21	-		274	20	35	
Peach	ha	233	6	-		-	-	0	
Apple	ha	238	7	-		30	2	13	
Quince	ha	85	2	-		75	5	88	
Pear	ha	100	3	-		77	6	77	
Walnut	ha	171	5	-		92	7	54	
Blackberry	ha	503	14	-		12	1	2	
Black currant	ha	243	7	-		-	-	0	
Raspberry	ha	-	-	-		2	-	-	
Apricot	ha	-	-	-		6	-	-	
Hazelnut	ha	-	-	-		5	-	-	
Total		3,650	100	-		1,375	100	38	
Vineyards	ha	1,100		950		418		38	44
Irrigation									
Bojnik	ha	195				500			
Masurica	ha	530				335			
Oraovica	ha	205				205			
Total		930				1,040			
Social Sector /a									
Livestock /b	Breeding sows	1,650				1,650		100	
Orchards									
Black currant	ha	50	23			-	-	0	
Blackberry	ha	20	9			10	4	50	
Sour cherry	ha	150	68			14	6	9	
Apple	ha	-				95	40	-	
Pear	ha	-				60	26	-	
Peach	ha	-				30	13	-	
Quince	ha	-				26	11	-	
Total		220	100			235	100	107	63
Vineyards	ha	200				32		16	

/a Borrower report indicates that some data on results were overstated.
/b Piglet breeding center was constructed but does not operate with contract farmers as intended. Both breeding and fattening undertaken at center.

PROJECT COMPLETION REPORT

YUGOSLAVIA - MORAVA REGIONAL DEVELOPMENT II PROJECT
(LOAN 1951-YU)

INVESTMENT AND CREDIT STRUCTURE
(amounts in dinar million)

	Investment				Financing-Actual						
					Credit					Equity /b	
	Appraised		Actual		Approved		Disbursed /a		Disbursed/		Equity/
	Amount	%	Amount	%	Amount	%	Amount	%	Approved (%)	Amount	Investment (%)
Primary Production											
Individual Sector											
Livestock											
Dairy	314	23	na		994	37	812	37	82	na	
Mixed	118	9	na		92	3	51	2	56	na	
Pig fattening	96	7	na		88	3	67	3	76	na	
Broiler	131	10	na		733	27	710	33	97	na	
Sheep	491	36	na		555	21	380	17	70	na	
Cattle fattening	178	13	na		114	4	97	4	85	na	
Goats	-	-	na		81	3	43	2	53	na	
Bee keeping	32	2	na		24	1	24	1	100	na	
Sub-total	1,358	100	2,874 /i		2,681	100	2,184	100	82	na	
Orchards											
Sour cherry	250	33	na		na		na			na	
Plum	140	18	na		na		na			na	
Peach	46	6	na		na		na			na	
Apple	50	7	na		na		na			na	
Quince	16	2	na		na		na			na	
Pear	27	4	na		na		na			na	
Walnut	30	4	na		na		na			na	
Blackberry	154	20	na		na		na			na	
Black currant	46	6	na		na		na			na	
Raspberry	-	-	na		na		na			na	
Apricot	-	-	na		na		na			na	
Hazelnut	-	-	na		na		na			na	
Sub-total	759	100	357 /i		401		282		70	na	
Vineyards	416		751		733		555		76	na	
Irrigation											
Bojnik /e	152		1,220 /f		na		549			671	55
Masurica /g	129		1,993		na		na			na	
Oraovica /h	69		466		na		na			na	
Sub-total	350		3,679		929		1,358		146	na	
Sub-total	2,883		7,661		4,744		4,380		93	na	
Social Sector											
Livestock	203		344		434		307		71	na	
Orchards /i											
Black currant)											
Blackberry)	21		5		na		4			1	20
Sour cherry	23	)									
Apple		)									
Pear		)	218		na		126			55	25
Peach		)									
Quince		)									
Sub-total	44		223		291		130		45	56	25
Vineyards	66		66		148		49 /c		33	23	35
Sub-total	313		633		873		486		56	na	
Total	3,196		8,294		5,617		4,865		87	na	

	Investment				Financing-Actual						
					Credit					Equity /b	
	Appraised		Actual		Approved		Disbursed /a		Disbursed/		Equity/
	Amount	%	Amount	%	Amount	%	Amount	%	Approved (%)	Amount	Investment (%)
Agroindustry											
Prokupac (Prokuplje)											
Candied fruit	113	4	1,158	6	na		834			324	28
Prokupac (Prokuplje											
Fruit salad	250	8	1,754	10	na		1,263			491	28
Prokupac (Prokuplje)											
Confectionery	-	-	1,052	6	na		726			326	31
Medvedja dehydrated food	55	2	119	1	na		49			70	59
Leskovac (vulcje)											
dehydrated food	159	5	-		-		-				
Leskovac cold store	219	7	508	3	na		356			152	30
Dalises (Vladicin Han)											
fruit juice and dairy											
Phase I			260	1	na		232			28	11
Phase II			6,663	38	na		5,415			1,248	19
Sub-total	929	/d 30	6,923	39	na		5,647			1,276	18
Vlasotince winery	176	6	676	4	na		440			236	35
Vranje winery	138	4	207	1	na		150			57	28
Blace dairy	291	9	643	4	na		386			257	40
Vranjska Banja poultry											
slaughterhouse	179	6	652	4	na		444			208	32
Vraniska Banja feed mill	188	6	1,010	6	na		707			303	30
Leskovac livestock											
slaughterhouse	401	13	2,823	16	na		2,061			762	27
Kursumlija carpet	29	1	57	-	na		37			20	35
Total	3,127	100	17,582	100	na		13,100			4,482	25

/a As of March 31, 1987.
/b Includes amounts provided by SFUR.
/c Discrepancy between amount disbursed of Din 49 million and amount utilized of Din 43 million.
/d Includes fruit juice plant at Din 540 million and dairy/creamy food plant at Din 389 million.
/e Expanded from 195 ha to 500 ha.
/f Compared to estimated cost of Din 968 million.
/g Reduced from 530 ha to 335 ha. Actual investment cost and financing not given.
/h Actual investment cost and financing not given.
/i Composition changed, but actual area of 235 ha approximately the same as appraisal estimate of 220 ha.
/j Based on disbursement percentages implied in cost table (VI/59) and disbursements as of March 31, 1987 (VII/AII/T14).

March 17, 1988

ANNEX 4

PROJECT COMPLETION REPORT

YUGOSLAVIA - MORAVA REGIONAL DEVELOPMENT II PROJECT
(LOAN 1951-YU)

ALLOCATION OF LOAN PROCEEDS
(amounts in US$ million)

Category		Appraisal Amount	Appraisal %	Actual Amount	Actual %	Unutilized Amount
(1)	Livestock and Horticulture - Individual Sector	34.5	40	7.1	14	27.4
(2)	Livestock and Horticulture - Social Sector	4.2	5	2.0	4	2.0
(3)	Irrigation	4.7	5	1.8	3	2.9
(4)	Agroindustry	41.8	48	41.1	78	0.7
(5)	Support Services	1.9	2	0.4	1	1.5
	Total	87.0	100	52.4	100	34.6

March 30, 1988

ANNEX 5

PROJECT COMPLETION REPORT

YUGOSLAVIA - MORAVA REGIONAL DEVELOPMENT II PROJECT
(LOAN 1951-YU)

RATES OF RETURN
(%)

	Financial			
	SAR	AER /a	BPCR /b	Economic /c
Primary Production				
Individual Sector				
Livestock				
Dairy	13	neg	7	6
Mixed	15	-	137	136
Pig fattening	28	-	-	-
Broiler	10	-	neg	neg
Sheep	18	neg	18	21
Cattle fattening	15	17	7	7
Goats	-	-	-	-
Bee keeping	18	16	3	4
Orchards				
Sour cherry	28	neg	(368)	(341)
Plum	10	-	0	0
Peach	21	-	-	-
Apple	18	-	-	-
Quince	21	-	-	-
Pear	27	-	312	389
Walnut	26	-	(188)	(188)
Blackberry	25	-	-	-
Black currant	32	-	-	-
Raspberry	-	-	-	-
Apricot	-	-	-	-
Hazelnut	-	-	-	-
Vineyards	14	neg	29	40
Irrigation				
Bojnik	21	-	24	-
Oraovica	31	-	26	-
Masurica	26	-	25	-
Social Sector				
Livestock	14	-	-	-
Orchards				
Black currant	-	-	-	-
Blackberry	23	-	-	-
Sour cherry	26	-	-	-
Apple	-	-	-	-
Pear	-	-	-	-
Peach	-	-	-	-
Quince	-	-	-	-
Vineyards	16	-	-	-
Agroindustry				
Prokpac candied fruit	20	17	-	-
Prokupac fruit salad	18	12	-	-
Prokupac confectionery	-	24	-	-
Medvedja dehydrated food	33	40	-	-
Leskovac dehydrated food	24	-	-	-
Leskovac cold store	27	16	-	-
Delises fruit juice	21	)	-	-
Delises dairy	28	) 18	-	-
Vlasotince winery	22	25	-	-
Vranje winery	19	26	-	-
Blace dairy	13	21	-	-
Vranjska Banja poultry slaughterhouse	14	32	-	-
Vranjska Banja feed mill	14	46	-	-
Leskovac slaughterhouse	18	16	-	-
Kursumlija carpet	21	15	-	-

/a Annual evaluation report for 1985, the last available.
/b FRRs based on basic sample. Projected income taken at 1986 level except in the case of cattle fattening and walnut, for which average income for 1982-1986 is used.
/c Estimates based on adjustments of nontraded components of farm revenue, production cost, and investment cost streams given in BPCR with conversion factors listed in Annex 6.

March 31, 1988

PROJECT COMPLETION REPORT

YUGOSLAVIA - MORAVA REGIONAL DEVELOPMENT II PROJECT
(LOAN 1951-YU)

CONVERSION FACTORS FOR NONTRADED COMPONENTS /a

Standard Conversion Factor : 0.75

Farm Revenue

Dairy	:	0.75
Broiler	:	1.11
Sheep	:	0.95
Cattle	:	0.80
Mixed	:	0.75
Bees	:	0.75
Horticulture	:	0.75

Farm Production Cost: 0.75

Farm Investment: : 0.67 /b

/a Conversion factors have been taken from the Project Completion Report of June 1985 for the Second Agricultural Credit Project (Ln. 1477-YU).

/b Based on conversion factors for construction of 0.65 (80%) and equipment of 0.74 (20%).

ATTACHMENT I

Comments from Borrower

TO THE WORLD BANK WASHINGTON DC
FM INVESTBANKA BEOGRAD

ATTN.: MR. GRAHAM DONALDSON CHIEF OPERATIONS EVALUATION DEPARTMENT

ATTACHED TO YOUR LETTER SEPT 22 WE RECEIVED YOUR DRAFT PROJECT COMPLETION REPORT - YUGOSLAVIA : MORAVA REGIONAL DEVELOPMENT II /LN. 1951-YU/
PCR HAVE CAREFULLY BEEN REVIEWED BY US AND WE FIND IT ACCEPTABLE SINCE ASSESSEMENTS GIVEN THEREIN SUBSTANTIALLY COMPLY WITH OUR LOAN 1951-YU COMPLETION REPORT.
WE SHARE YOUR VIEW EXPRESSED IN PCR ABOUT RELATIVELY SUSEEEEE SUCCESSFUL PROJECT COMPLETION IN SPTE OF DETERIORATED ENVIRONMENT IN YUGOSLAVIA DURING THE PROJECT IMPLEMENTATION. WE FELL THAT THE EXPERIENCE GAINED MAY BE HELPFUL IN IMPLEMENTATION OF SIMILAR PROJECTS IN YUGOSLAVIA IN FUTURE.
MORE EVIDENT IMPACT OF THE PROJECT IS EXPECTED IN THE FORTH COMING PERIOD CONSIGEEEEEE CONSIDERING THAT, AS YOU MAY KNOW, SPECIFIC MEASURES HAVE BEEN TAKEN IN YUGOSLAVIA FOR MORE STABLE ECONOMY RUNNING.
THIS OPPORTUNITY IS TAKEN TO EXPRESS OUR APPRECIATION ONE MORE TIME FOR THE WOLEEEEE WORLD BANK S COOPERATION IN IMPLEMENTATION OF THIS PROJECT
BEST REGARDS

BOSKO KOSTIC PRESIDENT

INVESTBANKA BEOGRAD

ATTACHMENT II

Comments from Borrower

WORLD BANK WASHINGTON DC

ATTN:MR GRAHAN DONALDSON,CHIEF OPERATIONS EVALUATION
RE:YUGOSLAVIA MORAVA REGIONAL DEVELOPMENT II
(LN. 1951-YU) PROJECT COMPLETION PREEE REPORT

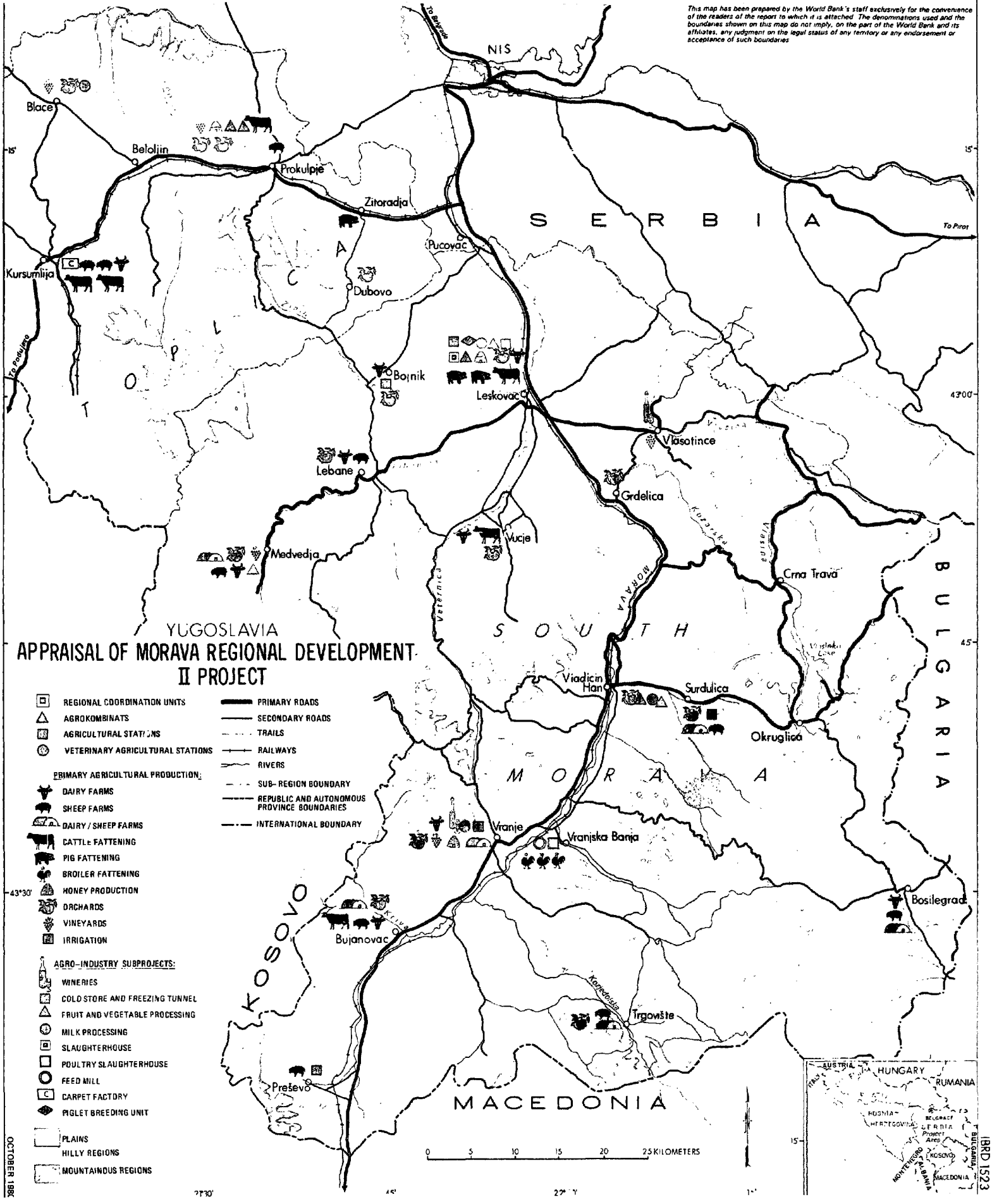
REYOUR LETTER DD SEPT.22,1988 TOGETHER WITH PCR RELATIVE
TO A/M PROJECT PLESE BE INFORMED THAT WE SHARE VIEW OF
OUR BASIC BANK INVESTBANKA,BEOGRAD WHICH WAS FORWARDED TO YOU
TZAT EEE THAT UPON CAREFUL EXAMINATON OF PCR BANK FINDS IT ACCEPTA-
BLE.ASSESSMENTS CONTAINED THEREIN SUBSTANTIALLY COMPLY WITH LOAN
1951 YU COMPELTION REPORT,OF INVESTBNAKA.
WE ALSO SHARE YOUR VIEW ABOUT RELATIVELY SUCCESFUL PROJECT
COMPLETION DESPITE THE ECONOMIC SETTING IN YUGOSLAVIA IN THE PERIOD OF
EE E OF IMPLEMENTATION.IN THE FORTHCOMING PERIOD MORE EVIDENT IMPA-
CT OF THE PROJECT IS EXPECTED CONSIDERING SPEIFIC MEASURES TAKEN IN
YUGOSLAVIA FOR MORE STABLE ECONOMY RUNNING.
THANKING YOU ON YOUR KIND COOPERATION IN IMPLEMENTAITION OF THE
PROJECT WE ASSURE YOU OF OUR COOPERATIGN AT AL TIMES.
REGARDS

DR.S.OSTOJIC,VICE PRESIEDENT

UDRUZENA BEOGRASKBANKA

11712 BGBANK YU

YUGOSLAVIA
APPRAISAL OF MORAVA REGIONAL DEVELOPMENT II PROJECT



REGIONAL COORDINATION UNITS
AGROKOMBINATS
AGRICULTURAL STATIONS
VETERINARY AGRICULTURAL STATIONS

PRIMARY AGRICULTURAL PRODUCTION:
DAIRY FARMS
SHEEP FARMS
DAIRY / SHEEP FARMS
CATTLE FATTENING
PIG FATTENING
BROILER FATTENING
HONEY PRODUCTION
ORCHARDS
VINEYARDS
IRRIGATION

AGRO-INDUSTRY SUBPROJECTS:
WINERIES
COLD STORE AND FREEZING TUNNEL
FRUIT AND VEGETABLE PROCESSING
MILK PROCESSING
SLAUGHTERHOUSE
POULTRY SLAUGHTERHOUSE
FEED MILL
CARPET FACTORY
PIGLET BREEDING UNIT

PLAINS
HILLY REGIONS
MOUNTAINOUS REGIONS

PRIMARY ROADS
SECONDARY ROADS
TRAILS
RAILWAYS
RIVERS
SUB-REGION BOUNDARY
REPUBLIC AND AUTONOMOUS PROVINCE BOUNDARIES
INTERNATIONAL BOUNDARY

OCTOBER 1980

IBRD 15233