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Report No. P-1923a-YU

REPORT AND RECOMMENDATION

OF THE

PRESIDENT OF THE

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

TO THE

EXECUTIVE DIRECTORS

ON A

PROPOSED LOAN

TO

VODOPRIVREDNA ORGANIZACIJA METOHIJA

(WATER MANAGEMENT ORGANIZATION, METOHIJA)

WITH THE GUARANTEE OF

THE SOCIALIST FEDERAL REPUBLIC OF YUGOSLAVIA

FOR THE

METOHIJA I MULTIPURPOSE WATER PROJECT

December 17, 1976



Public Disclosure Authorized

## CURRENCY EQUIVALENTS*

| | | |
|---|---|---|
| Currency Unit | = | Yugoslav Dinar (Din.) |
| US$1 | = | Din. 18.00 |
| Din. 1 | = | US$0.0555 |
| Din. 1,000 | = | US$55.55 |
| Din. 1,000,000 | = | US$55,555.55 |

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* The Yugoslav Dinar has been floating since July 13, 1973. The currency equivalents given above are as of July 31, 1976.

## FISCAL YEAR

January 1 - December 31

## GLOSSARY OF ABBREVIATIONS

| | | |
|---|---|---|
| BOAL | - | Basic Organization of Associated Labor |
| GMP | - | Gross Material Product |
| Kosovo | - | Socialist Autonomous Province of Kosovo |
| LDR | - | Less Developed Regions (of Yugoslavia) |
| VOM | - | Water Management Organization Metohija |

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

# REPORT AND RECOMMENDATION OF THE PRESIDENT TO THE EXECUTIVE DIRECTORS ON A PROPOSED LOAN TO VODOPRIVREDNA ORGANIZACIJA "METOHIJA" WITH THE GUARANTEE OF THE SOCIALIST FEDERAL REPUBLIC OF YUGOSLAVIA

1. I submit the following report and recommendation on a proposed loan equivalent to US$54.0 million to Vodoprivredna Organizacija "Metohija" (VOM) with the guarantee of the Socialist Federal Republic of Yugoslavia, to finance the foreign exchange cost of the Metohija I Multipurpose Project. The loan would bear interest at 8.7 percent per annum and would have a term of 15 years including a grace period of 3 years.

## PART I - THE ECONOMY

2. A basic economic mission visited Yugoslavia in November 1972; its report entitled "The Economic Development of Yugoslavia" (194a-YU) was distributed to the Executive Directors on January 2, 1974. An economic mission visited Yugoslavia in October 1975; its report entitled "Economic Memorandum--Yugoslavia" (1086b-YU) was distributed to the Executive Directors on September 3, 1976. A special Economic Mission to review the new development plan and the new planning system visited Yugoslavia in October and November 1976, and its report is under preparation. Some of the material gathered by the Mission has been utilized for updating the information contained in the subsequent paragraphs of this report. Basic data on the economy are given in Annex I.

### Economic Trends and Development Issues

3. The Yugoslav economy has experienced rapid growth during the last two decades, with total GDP at constant prices having increased by an average rate of 6.3 percent, and per capita GDP at 5.2 percent annually. In 1975, per capita GNP was about US$1,480 (World Bank Atlas methodology). This impressive record of growth was accompanied by some fundamental structural changes in the economy which has moved towards a modern industry/service oriented urban society.

4. The population growth rate averaged 1 percent per year during the last two decades, but with considerable regional variations ranging from an average rate of 1.6 percent for the less developed Republics and Provinces to 0.7 percent for the developed ones. The structural changes in the economy permitted a sizeable transfer of the labor force from agriculture to industry and services. Despite this, however, by 1975, 37 percent of the employed resident labor force was still engaged in agriculture and forestry, mostly on small private farms; industry (including mining) accounted for 23 percent, and other sectors for 40 percent.

5. The socio-political framework evolved through several constitutional amendments which were consolidated in the new Constitution of 1974. It strengthens three important features of the socio-political system of Yugoslavia. First, self-management, whereby the use and control of the socially owned means of production are entrusted to the workers' collectives, is the fundamental right and obligation of every Basic Organization of Associated Labor (BOAL--the smallest technologically identifiable unit of operation) in every sector and activity. Second, the responsibility for most important social and policy decisions has been shifted from the Federation down to the Republics and Provinces, and on to the communes. And third, the management and financial responsibility for social activities (health, education, welfare, etc.) is transferred from the realm of the state to Communities of Interest (decision-making bodies which comprise delegates of both suppliers and users of the specific services). Responsibility for certain economic activities affecting large segments of the society (like communal services, power production, highways and water management) can be--and progressively is--similarly organized through Communities of Interest.

6. The social sector, which includes government, most enterprises and public institutions such as libraries, hospitals, theatres and schools, has the leading role in economic and social development; it accounts for 85 percent of GDP and employs over half of the total labor force. The private sector is comprised predominantly of peasant farms (with a 10 hectare limit to land holdings) and small enterprises (with a 5 person limit on the number of nonfamily workers), mainly in handicrafts, construction, trade, transport and tourism. In the past, the private sector had been relatively neglected by government policy. However, lately increased attention is being devoted to private farmers with a view to accelerating the growth of agricultural production and reducing the rural/urban income disparity.

7. Regional income disparity--with a gradient of per capita income falling generally from North to South--has emerged as one of the most important development issues of the country. Four regions can be distinguished by stage of development. The Republic of Slovenia is the high income region with almost double the national average. The Republics of Serbia, Croatia and the Autonomous Province of Vojvodina make up the middle income regions, ranging from 100 to 125 percent of the national average; however, even within these regions pockets of underdevelopment persist. The Republics of Bosnia-Herzegovina, Montenegro and Macedonia, with per capita income between 67 to 75 percent of the national average, constitute the upper group among the officially designated Less Developed Regions (LDRs). The Socialist Autonomous Province of Kosovo (Kosovo), with an average income of only 33 percent of the national average (about US$490.0 equivalent), is at the bottom of the spread. These inter-regional disparities can be traced back further to intra-regional disparities. Within Republics and Provinces the spread between communes can extend over the range of 10 to 1, and it is the prevalence of stagnating poor rural communes within the LDRs which largely determines the disparity between the regions. The rate of economic growth of the LDRs as a whole was only slightly below the average for Yugoslavia, but due to the faster population growth (1.6 percent per year versus 0.7 percent in the more developed regions) the income disparity has tended to widen significantly during the last two

decades. In order to reverse this trend and to accelerate economic growth and social development in the LDRs, mechanisms have been instituted for sizeable transfers of financial resources. In 1975, net credits on highly favorable terms (containing a grant element of around 50 percent) were made available through the Federal Fund for the Accelerated Development of Less Developed Regions to the LDRs in the amount of US$370 million, equivalent to about 20 percent of their total investment in the social sector. An additional US$197 million were transferred as budgetary grants for social services. The mechanism for both categories assures a growth of transfers in line with the growth in total GDP.

8. Open unemployment has not been a serious problem and is estimated to be only around 4 percent of the resident labor force in 1975. However, this low rate conceals three important aspects of the employment problem. First, an estimated 800,000 out of a total labor force of around 9 million (in 1974) has assumed temporary employment abroad. Second, there is some evidence of growing regional and occupational imbalances, due to low interregional mobility of labor and to unmatched skill requirements in a fast changing economy. Third, severe underemployment persists in the private agricultural sector.

Recent Developments

9. In 1974, Yugoslavia recorded a rapid increase of GDP of 9 percent in real terms as compared to 5 percent and 4 percent in 1973 and 1972, respectively. Industry was the leading sector with an estimated growth rate of 11 percent in 1974; however, the growth of agricultural production, enhanced by favorable weather conditions, and of services (with the exception of tourism) also accelerated during the year. This rapid expansion of economic activity permeated the whole economy. Investment outlays grew in nominal terms by almost 40 percent (9 percent in real terms) and total consumption expenditures by about 41 percent (13 percent in real terms). The resulting rapid increase in total demand for goods and services was reflected both in the rise of employment and of imports--both in nominal and real terms--and domestic prices. The gain in total employment amounted to about 5 percent in 1974 and exceeded for the first time the natural increase of the labor force. Industrial producer prices rose by almost 30 percent while the cost of living rose less rapidly by some 21 percent. Since fiscal policy leaves, for institutional reasons, little room for demand management, the major response to the inflationary pressures was in terms of monetary policy and direct controls through prices and income policy, including recent legislation placing greater control on investment expenditures. After an expansionary phase during 1972 and 1973, the money supply increased by only 24 percent as compared to a nominal increase of social product of about 36 percent. The shift to a large deficit in the balance of payments in 1974 also contributed to the increased effectiveness of the monetary policy.

10. The balance of trade deficit increased from US$1.7 billion in 1973 to almost US$3.7 billion in 1974 both on account of an increase in the volume and the rapid rise in the price of imports and the stagnation of real exports (the terms of trade for the country are estimated to have deteriorated by

about 11 percent). The recession in Western Europe led to a sharp decline in exports to that area. The traditionally large surplus for invisibles (mostly from workers' remittances and tourism receipts) failed to compensate for the large trade deficit, and the country recorded a current account deficit in excess of US$1 billion in 1974 as compared to a surplus of US$464 million in 1973. In response to the circumstances, the import regime has been gradually tightened since August 1974, affecting a large variety of consumer goods and some capital and intermediate goods. In addition, the National Bank raised the intervention point in the foreign exchange market, in effect devaluing the dinar by about 7 percent against the currencies of Yugoslavia's major trading partners. The large current account deficit led to some loss of foreign exchange reserves; the official reserves fell by US$438 million in 1974 (compared to a gain of US$632 million in 1973). In addition, net foreign borrowing, which averaged US$390 million during 1971-73, increased to around US$650 million in 1974. Commercial import credits from suppliers and credits from financial institutions continued to be the major sources of foreign capital. Long-term funds related to financing of development are being made available mainly by the IBRD and some bilateral sources (particularly the US Export-Import Bank and Federal Republic of Germany). Yugoslavia has also been one of the beneficiaries of the IMF's Special Oil Facility. Yugoslavia's medium- and long-term external debt outstanding as of December 31, 1975 is estimated at US$6,050 million (disbursed only). Debt service payments amounted to about 16.5 percent of foreign exchange earnings (including workers' remittances) in 1974 and 16.9 in 1975.

11. In 1975, the growth rate of the economy receded to 4.5 percent, due mainly to the combined effects of a restrictive monetary policy, stagnating exports and a reduced growth of personal incomes and stagnating consumption; economic investment and housing construction provided the major growth stimulus during 1975. The inflationary pressure, which built up during 1974 and extended into 1975, receded drastically in the second half of the year; the rate of increase of industrial producer prices decreased from 30 percent for 1974 to 11 percent during 1975, and the index of real personal receipts slightly declined for the whole of the year. The good harvest in 1974 had a favorable impact on the balance of payments, although meat exports were severely affected by the European Community ban on meat imports. Exports to oil producing countries and to the non-convertible currency area continued to expand rapidly in 1975, but were insufficient to compensate for the sharp decline in exports to the convertible currency area. Workers' remittances and receipts from tourism have increased marginally. As a result, commodity exports declined by 2 percent in real terms. However, a larger contraction of imports and an improvement in the terms of trade led to a decline in the current account deficit to $1,032 million.

Estimates for 1976 and Prospects for 1977

12. Further reduction of the balance of payments deficit and of the inflationary pressures in the economy were the major objectives of economic policy during 1976. On both counts, these objectives are successfully being

met. Due to the reduction of imports--with sizeable stocks of imported intermediate goods being gradually depleted--and to a lesser extent the increase of exports, a small current account surplus is expected for the year as a whole. The rate of inflation declined further, with the cumulative index of industrial producer prices dropping to 6 percent for the first nine months of 1976 compared with 26 percent for the same period of the preceding year. However, the measures and policies leading to this improvement simultaneously halted economic growth during the first half of 1976. By the middle of the year, industrial production started to expand again, mainly as a result of an expansion of investment and exports, and an increase of money supply during the first part of the year. This upsurge, in conjunction with the favorable crop of 1976, is expected to lead to a real increase of GDP by about 4 percent for the year as a whole. For 1977, Yugoslav authorities expect the growth rate to rise to 5.5 percent, accompanied, however, by a reappearance of a moderate current account deficit and a moderate resurgence of the rate of inflation. Employment growth, estimated at 3 to 3.5 percent for 1976 is expected to continue at about the same rate through 1977.

Medium- and Long-Term Objectives and Prospects

13. The surfacing of major economic problems during 1974, such as rapid inflation and balance of payments pressures, has led to a reappraisal of development objectives. In the light of the recent shift of relative prices in favor of raw materials, more emphasis will be given to the development of Yugoslavia's own natural resources. In this connection, the development of the energy sector is given the highest priority. It focuses on electric power, where the generating capacity is likely to fall critically short of the rapidly rising power requirements of the expanding economy. The development of the power sector will be based primarily on the largely unutilized hydropower potential and soft-coal reserves of the country. Other priority activities are ferrous metallurgy, some segments of non-ferrous metallurgy (notably lead, zinc, copper, nickel and bauxite/aluminum), technologically advanced production equipment, basic chemicals including petroleum refining, agriculture and food processing, interrepublic transportation, multipurpose works, and housing and basic construction material.

14. This emphasis on accelerated development of the raw material basis and of the economic infrastructure requires a more capital-intensive investment pattern, associated with longer time lags between investment and output. To sustain this development path, both continued high borrowing abroad and an increased savings rate will be essential. Since, with the possible exception of private savings, interest rates have not been given a significant role to play in the determination of the level of aggregate savings, the income policy--i.e. the guidelines governing the distribution of enterprise income between workers' income and accumulation--will have a crucial role.

15. The new Five Year Plan (1976-80) focuses on the implementation of these objectives. For growth, an average rate of 7 percent per year is proposed, comparing with a target growth rate of the previous Plan of 7.5 percent and an expected realized growth rate of 6.5 percent. For employment,

the average planned growth rate would come to about 3 percent with annual increments exceeding the natural increase of the labor force by growing margins. This would permit more vigorous pursuit of two major social objectives: the reduction of the number of temporary migrants abroad, and an increased absorption of the rural underemployed into the social sector. The economy will continue to be open to the world market, although the composition of foreign trade is expected to change with a reduced share for raw material, semi-finished products and consumer goods on the import side, and an increased share for agricultural products and manufactured goods on the export side. Workers' remittances are not expected to increase in real terms, but rising tourism receipts are expected to compensate for the expected declining importance of workers' remittances.

16. The reduction of regional disparities is another priority objective of the new Five Year Plan. To that end, the transfer of financial resources to the LDRs in the forms of loans at concessionary terms for economic investment and of budgetary grants for social development will be continued and probably increased as a proportion of total GDP. Since most of the natural resources of the country, including hydropower, are to be found in the LDRs, these regions will also benefit from the increased emphasis on the development of power and basic industries which will be financed largely through direct financial contributions from the consuming regions.

17. The new Five Year Plan was prepared according to the self-management principle stipulated in the Constitution of 1974. Self-management planning is perceived as an iterative process of sequential, converging consensus-finding. In the initial stage, broad priorities (as to sectors and activities) and general quantitative targets and constraints (like growth rates of social product and the volume of savings and investment) are determined on the basis of consensus by the Assemblies (Communal, Republican and Provincial, and Federal) of the socio-political communities. Subsequently, the planning process starts at the bottom with individual enterprises and Communities of Interest setting out expectations and targets. The planning process then proceeds through successive and partially overlapping stages of horizontal adjustments within sectors and branches (aimed primarily at eliminating gross duplications), vertical adjustments between closely interdependent sectors and branches (aimed at determining realistic orders of magnitudes of production, conceptually within an input/output framework), and regional adjustments between Republics and Provinces (aimed at both horizontal and vertical consolidation). The socio-political communities participate in this process by ensuring observance of the broad priorities, targets and constraints, and by resolving conflicts which cannot be resolved by the direct participants. The evolving consolidated programs of action, which in their totality constitute the operational portion of the Plan, are codified in the form of "social contracts" or "self-management agreements" which are legally binding for the whole Plan period unless renegotiated in the case of major deviations occurring in the course of Plan implementation. The new Plan differs from the previous one in strengthening and formalizing the commitments for implementation by enterprises, banks and government institutions.

Creditworthiness

18. In spite of the recent balance of payments problems, the prospects for Yugoslavia's continued economic growth during the next decade are good. The country's endowment of natural and human resources, its relatively low dependence on imported primary energy, its pragmatic approach to economic problems and its readiness to undertake institutional changes, combine to give grounds for a favorable assessment of future prospects. Yugoslavia will need to continue to raise foreign capital on a fairly large scale, mostly from established channels such as the Euro-currency market, suppliers' credits and the World Bank. In addition, greater use may be made of credit lines from COMECON countries and the European Communities, and efforts are being intensified to open up new sources of capital in OPEC countries. The debt service ratio is likely to remain in 1976 at the same level as in 1975 (around 17 percent), and it is expected to decline slightly in the subsequent years. Taking into account Yugoslavia's debt service record and the measures taken in the past to control balance of payments problems, as well as the prospective growth of production and structural improvement of the balance of trade, Yugoslavia remains creditworthy for a substantial amount of Bank lending.

## PART II - BANK GROUP OPERATIONS IN YUGOSLAVIA

19. The Bank has made thirty-nine loans to Yugoslavia totalling about US$1,313 million. Of this amount, approximately 47 percent (US$620.4 million) has been for fourteen loans for the transportation sector--seven for highways totalling US$220.0 million, four for railways totalling US$248.0 million, US$59.4 million for natural gas, US$49.0 million for oil pipelines, and US$44.0 million for a port project. Bank lending has generally concentrated on infrastructure including, in addition to the transportation loans, power (three loans totalling US$135.0 million), telecommunications (one loan for US$40.0 million), four multipurpose projects totalling US$123.0 million and US$51.0 million for two water supply and sewerage projects. Ten loans have also been made for industry and two each for tourism and agriculture. The first Bank loan for air pollution control was approved May 25, 1976. In addition, IFC has made investments in nine Yugoslav enterprises totalling about US$130.0 million. Experience with on-going projects has been generally good. Annex II contains a summary statement of Bank loans and IFC investments as of November 30, 1976, and notes on the execution of on-going projects.

20. The basic thrust of the Bank's activities in Yugoslavia continues to be dictated by the following interrelated, yet distinct objectives:

(a) support of the Yugoslav efforts to accelerate development in the Less Developed Regions (LDRs);

(b) promotion of agricultural development in both the private and social sectors by providing basic infrastructure and credit;

(c) encouragement of structural reforms in the major sectors through improved coordination, institution-building and technical assistance;

(d) help in the identifying and financing of gaps in basic infrastructure--particularly transport and energy; and

(e) alleviation of critical shortages of convertible foreign exchange by providing part of the required long-term capital, encouraging and promoting Yugoslavia's efforts to tap other sources of medium- and long-term capital, and supporting projects which generate or conserve foreign exchange.

These objectives have guided Bank lending in previous years. It is obvious that each Bank operation cannot address all these objectives which are not always fully compatible. There has, however, been an evolving change in the relative weights of these objectives with particular emphasis being directed towards the support for the lesser developed regions and the agricultural sector.

21. Our emphasis on aiding the accelerated development of the LDRs is fully in accord with the Federal Government's wishes and avowed policy to reverse the widening gap between the richest and the poorest regions (Slovenia and Kosovo). Over the past two years, over two-thirds of our lending has been to the lesser developed regions, and we hope to maintain a comparable pattern of distribution over the medium-term, though there will undoubtedly be year to year fluctuations. Over the next two years, operations envisaged for LDRs include a second loan for agricultural credit, another loan for irrigation and loans for agricultural industries. Proposed loans for agriculture and agro-industries projects in Macedonia and Montenegro have been negotiated and are expected to be presented to the Executive Directors shortly. Highway, railway and power transmission projects during the same period will both assist the LDRs and promote structural reforms in the transport and energy sectors. IFC is currently investigating several new investment opportunities to encourage joint ventures which would provide technical, management and marketing expertise as well as long-term capital.

22. In recognition of the fact that such an expanded investment program for the LDRs would need to be preceded by a systematic survey of these regions to take stock of development potential and identify constraints, the Bank undertook and completed economic surveys of the four LDRs (Kosovo, Bosnia-Herzegovina, Macedonia and Montenegro). These regional surveys, coupled with intensified Bank assistance in project formulation, should enable the Bank to achieve a high level of participation in the development of these regions.

23. The Bank supported and assisted in the formulation of the 1973 "Green Plan" which, in addition to providing a comprehensive framework for promoting agricultural development, recognized and encouraged the role of the private sector which holds almost 85 percent of the cultivated land and employs over 90 percent of the farm population. It is now generally appreciated that

the private farm sector can--given sufficient support in terms of extension services, credit for inputs and basic infrastructural facilities--generate significant increases in production. Our loans for the Ibar Multipurpose Project (Loan No. 777-YU) in Kosovo, the Agro-Industries Project (Loan No. 894-YU) in Macedonia and the Agricultural Credit Project (Loan No. 1129-YU) have given special attention to the needs of the private farm sector. The proposed project and the forthcoming projects for agro-industries, irrigation and agricultural credit will support agriculture development in general and in particular the private sector.

24. Decentralized management, which is the cornerstone of Yugoslavia's socio-economic philosophy, compounds the inherent complexities of coherent sector planning which are evident in any economy. This is of particular relevance to the transport and energy sectors. The Bank's significant involvement in these sectors, both in terms of money and technical assistance, has helped to highlight the critical need for, and to evolve mechanisms to further country-wide coordination of, sectoral investment programs and policies. The limited, yet discernible progress made has been supported by our lending for electric power distribution, railways and highways. Our continuing involvement in the transport and power sectors, though the funds we can make available are limited, will, we hope, have further beneficial impact on fostering coordination. For instance, a proposed eighth highway project, for which we expect to negotiate a loan shortly, will provide for studies of road-user charges and railway costs which the Government and ourselves believe essential for fostering inter-modal coordination and devising a policy framework for the transport sector.

25. A persistent foreign resource gap looms as the major impediment to Yugoslavia's ability to attain its growth targets. While the Yugoslavs are making concerted efforts to open up and enlarge access to Western financial markets and institutions (including the European Investment Bank), there is presently no concrete evidence of substantial additional inflows. The Bank, therefore, remains a major source of long-term external capital for the foreseeable future. In our financing of infrastructure projects, we propose to devote particular attention to those which have clear possibilities of attracting co-financing and where our participation, albeit limited, is likely to induce the entry of financing partners.

26. The level of Bank lending has remained constant, averaging about US$200 million annually during the period FY74-76. Although this represents only a small proportion of the country's need for external finance, it is equivalent to almost one-third of the annual long-term official capital inflow in convertible currencies. Yugoslavia's debt to the Bank amounts to about one-fifth of its total public debt outstanding and disbursed. The outstanding debt to the Bank is, however, expected to decline gradually from its current level of less than 10 percent of Yugoslavia's total external debt. Service on Bank loans as a proportion of total debt service was 4 percent in 1974 and is projected to increase to about 6 percent in 1980.

## PART III - THE AGRICULTURE AND WATER SUPPLY SECTORS

### Agriculture in Yugoslavia

27. The agriculture sector, which occupies about one-third of the population and accounts for around 15 percent of the GMP 1/ in 1975 has grown at an average rate of about 3 percent during 1970-75. In view of emerging food deficits and rural poverty, increasing emphasis is being placed upon accelerating agricultural development, and the new Plan (1976-80) projects an increase in the growth rate to about 4 percent over the period.

28. The country has three distinct climatic zones and a predominantly mountainous terrain. Agricultural activities are consequently many and varied, ranging from cultivation of wheat, maize and sugar beets in the fertile plains, to livestock rearing in the upland pastures, and cultivation of sub-tropical crops and fruits along the Adriatic Coast and in the catchment basin of the Aegean Sea.

29. An important feature of Yugoslav agriculture is the co-existence of social and private sectors. The social sector, which grew out of the postwar collectivization, is made up of a number of different institutions including kombinats (integrated factory farms), cooperatives and research institutions; this sector accounts for about one-third of the total agricultural output, controls 15 percent of agricultural land, and employs about 6 percent of agricultural manpower. In contrast, the private sector, which controls 85 percent of the cultivated land and employs over 90 percent of agricultural manpower, is handicapped by fragmented and poor quality landholdings and has been neglected in terms of provision of basic infrastructure, financing and technology. The Government now recognizes that any further significant growth in production will have to emanate from the private farms, and has accordingly launched programs which embrace the private sector and give it access to infrastructural facilities, credit, improved technology through extension services and cooperation with the social sector, and also to marketing services.

30. The Bank has, to date, made two loans for agricultural projects: the first being the Agro-Industries Project in Macedonia (Loan No. 894-YU) in 1973, which primarily involves the social sector, and the Agricultural Credit Project (Loan No. 1129-YU) in 1975, 30 percent of the funds provided therein being made available directly to the private sector. In addition to the proposed project, the bulk of which will directly involve the private sector, two agricultural and agro-industries projects (referred to in paragraph 21 above) one for the Republic of Montenegro--primarily involving the social sector--and the other for the Republic of Macedonia, which has significant involvement of the private sector, have been negotiated and are expected to be submitted to the Executive Directors shortly. In addition to these

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1/ GMP (Gross Material Product) corresponds to GDP (Gross Domestic Product) less output of certain services, such as public administration, defense, education, health and social insurance.

five agricultural projects, previous Bank loans for multipurpose projects have included small agricultural components, such as irrigation works under the Ibar Multipurpose Project (Loan No. 777-YU) of 1971 and two pilot irrigation projects under the Morava Region Development Project (Loan No. 1262-YU) of 1976, both involving primarily private sector farmers. The mix between involvement in the social and private agricultural sectors in Bank projects in Yugoslavia has been determined in each particular case by the Federal and Republican Governments' own efforts for the social and private sectors, the high priority attached to the specific agricultural project and the relative absorptive capacity of the private and social sectors.

31. Agricultural Policy in Kosovo. Kosovo is the poorest member of the Yugoslav Federation with an estimated per capita income of one-third the national average. The province accounts for about 6 percent of the population in the country, or 1.6 million persons, but contributes only 2 percent of the GMP. Although the GMP growth rate in the province has about equalled the national average in recent years, the per capita income has tended to decline in relation to the national average owing to the rapid increase in the provincial population (about 2.4 percent per year). Agricultural policy for Kosovo must therefore provide a response to two dominant problems: a rapidly-growing population and increasing underemployment in rural areas.

32. Thus, the challenge for agriculture is to ease underemployment and create additional employment through the intensification and extension of agriculture. To this end, Kosovo seeks to foster the growth of smallholder productivity, primarily through irrigation development as well as credit provision and by expanding the capacity of the social sector to absorb and process the output from the smallholder sector. Two major programs have been promoted in Kosovo to attain these goals, the Ibar-Lepenac Program, under which falls the Ibar Multipurpose Project (Loan 777-YU), and which envisages the irrigation of about 73,000 ha, and the master plan for the water resources development of the Metohija region, which includes the proposed project, and which foresees irrigation of about 93,000 ha.

33. The Ibar Multipurpose Project (Loan No. 777-YU), the first of its kind undertaken by Kosovo, experienced a number of difficulties and delays which have now been largely resolved. These included significant cost overruns due to unforeseen international and domestic inflation. The additional financing requirements have been met from Provincial and Federal sources. A major impediment to the progress of the irrigation distribution system was the delay in the legislation which permits adjustment of boundaries of small parcels of land owned by private farmers. This, too, has now been overcome, and enabling legislation was enacted in July of this year, and consultants have commenced work on the laying out of the system.

Water Supply

34. As it is generally the case in Yugoslavia, public water supplies are the responsibility of the local communes which organize water departments (vodovods) for construction, operation and maintenance of water supply systems.

In addition, a number of water management organizations, autonomous enterprises, develop new water resources for other purposes, including irrigation, flood control and stream regulation. The activities of these latter organizations may also extend to domestic and industrial water supply, though, in general, the emphasis has been on providing water for agriculture.

35. Of the 1.6 million persons living in Kosovo, less than 10 percent have access to public water supply systems. Geophysical influences cause variable rainfall distribution, provoking frequent floods in spring and winter and acute water shortages in the summer and fall when industrial and agricultural demand is highest. Further, discharges of untreated wastewater into local water sources often contaminate the supply of drinking water.

## PART IV - THE PROJECT

36. Owing to the chronic problem of inadequate water supply for agricultural, domestic and industrial requirements, a master plan for water resource development in Metohija was prepared in 1973 by the Yugoslav consultants, Energoprojekt. The plan determined that it would be possible to irrigate as much as 93,000 ha by providing for water storage facilities at different sites; from this plan was derived a water resources development program for the Metohija region (see attached maps IBRD 12061R and 12062R) conceived in two phases which, when completed, would irrigate about 21,000 of the aforementioned 93,000 ha and provide industrial and domestic water supply for three towns and forty-seven villages.

37. A feasibility study for the proposed project (the first phase of the development of the Hydro-System Radenic) was prepared by Water Management Organization "Metohija" (VOM) and its consultants (Kosovoprojekt) with the assistance of the IBRD/FAO Cooperative Program, and subsequently submitted to the Bank in 1975. This project would provide for (a) intensive irrigation of 10,250 ha, of which 6,950 ha are owned by 2,200 smallholder private sector families and the remainder by the social sector, and (b) domestic and industrial water supply in an area affected by water-borne diseases and whose industrial development is hampered because of inadequate water supply. The project was appraised by two Bank missions, in November 1975 and in January 1976. Negotiations were held November 8-19, 1976. The Yugoslav delegation was led by Mr. Djemsit Durici, Secretary for Finance and Member of the Executive Council of Kosovo.

### Project Objectives and Description

38. The proposed loan and project are summarized in Annex III and described in detail in the report "Appraisal of Metohija I Multipurpose Project, Report No. 1218-YU". This report, dated December 17, 1976, is being distributed separately to the Executive Directors.

39. As originally determined in the master plan for water resource development in Metohija, an optimal long-term solution for water supply needs would include a reliable water source enabling gravity distribution to a maximum number of consumers. Such a source is foreseen under the proposed project in the provision of Radenic Dam, fed principally by diversions from the Decanska Bistrica River, which would supply water for joint use on the basis of 20 percent for domestic and industrial purposes and 80 percent for irrigation. This would meet major objectives to benefit a portion of Yugoslavia's poverty target population (those with a per capita income of US$160.0 equivalent or less) by increasing crop production, raising labor productivity and improving water supply.

40. The project would include:

(a) construction of the Radenic Dam;

(b) a diversion weir with intake works and a feeder canal;

(c) water supply works for three towns (Djakovica, Orahovac and Zrze) and twelve villages, including a water treatment plant with pumping equipment and new water storage facilities;

(d) an irrigation distribution system; and

(e) miscellaneous works comprising drainage, erosion control, soil improvement, power supply lines, equipment, farm roads, buildings, demonstration farms and consultant services.

Project Cost Estimates and Financing Plan

41. Total project costs are estimated at US$88.3 million equivalent excluding taxes and duties but including physical and price contingencies. The foreign exchange component would amount to US$43.0 million equivalent or 49 percent of total costs. Taxes and duties are estimated at about US$22.0 million equivalent. Interest and other charges during construction on the proposed Bank loan are estimated at about US$11.0 million equivalent. Overall contingencies amount to about 49 percent of base cost. Details of the cost estimates are shown in Annex III.

42. The proposed Bank loan to VOM of US$54.0 million would finance in full (a) the estimated foreign exchange component of the project cost, and (b) the estimated interest and other charges during construction on the Bank loan. This would represent about 55 percent of project costs (including interest during the five-year construction period on the Bank loan). Local costs of US$45.3 million equivalent, or about 45 percent of total costs, would be met by loans from Kosovo to VOM channelled through the Bank of Kosovo (Kosovska Banka Pristina). Kosovo would obtain these resources from the Federal Fund referred to in para 7 of this report.

Project Implementation

43. The Water Management Organization, "Metohija" (VOM), the borrower of the Bank loan and the entity responsible for project implementation, is a socially-owned autonomous enterprise which constructs, operates and maintains irrigation and water supply systems in the Metohija region and, as an Organization of Associated Labor, is comprised of three Units of Associated Labor: Irrigation, Construction and Engine Repair and Maintenance. A Joint Service is attached to the directorate of VOM to handle administrative matters.

44. Under the proposed project, VOM plans to transform its three units into Basic Organizations of Associated Labor (BOALs--see para 5 of this report) and would, itself, be expanded to include a new organism, BOAL Hydro-System Radenic, created to bear responsibility for operation and maintenance of the proposed project. The irrigation works would be operated and maintained by four Sector Offices of the Operations Division of the BOAL Hydro-System Radenic. Each sector would service about 2,500 ha. Field operation staff would cooperate with extension units to promote proper use of irrigation water. The water supply facilities, except for distribution systems for the towns of Djakovica and Orahovac and the water treatment plant, would be operated and maintained by the four sectors mentioned above. The towns of Djakovica and Orahovac would operate and maintain their distribution systems through the existing water departments (vodovods), as at present. The water treatment plant would be operated by BOAL Hydro-System Radenic, but under the control of a separate Chemist-Manager, who would be assisted by technicians. The BOAL Hydro-System Radenic would supply potable water for consumers in rural areas and directly to industry in the towns of Djakovica, Orahovac and Zrze on the basis of metered bulk supply. Agreement was reached during negotiations that (a) VOM would create Hydro-System Radenic under arrangements satisfactory to Kosovo, VOM and the Bank, prior to December 31, 1978 (Loan Agreement Section 1.02 (d)), and (b) Hydro-System Radenic would employ at all times a qualified and experienced engineer to act as its Director and a qualified financial expert to act as his Deputy (Loan Agreement Section 3.01 (c)). In addition, and in view of the very substantial increase expected in its operational and financial activities, VOM's General Director would be assisted by a qualified person appointed as Financial Director. The appointment of the latter is a condition of effectiveness of the Loan Agreement (Section 8.01 (b)).

45. Extension Services. Joint Services would be enlarged by the establishment of an Agricultural and a Technical Division. The Agricultural Division, in cooperation with various national agricultural institutes, would provide extension services and help in the adoption of new irrigation technology by farmers, and would provide training for new agricultural staff. The Technical Division would provide engineering design support to field units. It would be assisted by consultants, who would be responsible to the General Director.

Marketing

46. Project output would be marketed through established networks. Kombinats in the project area would purchase industrial crops, fruits and

most vegetables from all producers through annual contracts for processing. Sales of these commodities and/or their products outside of Kosovo would be coordinated by Agro-Kosovo Kombinat, which has future delivery contracts with major buying and selling organizations throughout Yugoslavia and with importers in West Germany and other European countries. Cereals would be distributed through existing wholesale grain enterprises which are equipped to handle incremental output of grains from the project area. A portion of project output of vegetables would be marketed by farmers through peasant free markets in Prizren and the surrounding area.

Procurement and Disbursement

47. Contracts for civil works and equipment financed under the proposed Bank loan would be grouped, to the extent practicable, into 10 contracts totalling about US$61.0 million which would be tendered on the basis of international competitive bidding. A preference margin of 15 percent, or prevailing custom duty if lower, would be extended to local manufacturers in the evaluation of bids for equipment under international competitive bidding.

48. Procurement in accordance with local competitive bidding, following Government procedures which are acceptable to the Bank, would be appropriate for the remaining contracts totalling about US$15.3 million. These contracts would cover such items as the first section of the main canal, the access road to the Radenic Dam, the diversion tunnel, grouting, erosion control works and buildings. Most of the works are scattered over the project area, are of minor nature and would be built at different times. Construction of the tertiary network and farm roads, and soil improvement measures (cost: US$11.0 million) would be carried out by VOM under force account. Individual purchases of equipment not exceeding US$40,000 in value would be allowed to be procured in accordance with applicable local procedures, which are acceptable, up to an aggregate value of US$300,000.

49. To avoid unnecessary delay of further project design, VOM has, in accordance with normal Bank procedure, contacted a foreign consultant firm acceptable to the Bank for assistance in final design of the irrigation component and has requested retroactive financing for these services. The Bank will review the terms of reference and draft contract documents prior to its formal approval. With this understanding, it is recommended that the Bank finance retroactively expenditures up to a total amount of US$100,000 for this purpose.

50. Disbursement of the Bank loan would begin in the third quarter of 1977 and be completed by June 30, 1982. It would be made on the basis of: 40 percent of total expenditure for civil works; 100 percent of foreign expenditure, or 100 percent of ex-factory cost of equipment manufactured locally; 20 percent of total expenditure for headquarters and field office buildings and demonstration farms; 100 percent of foreign expenditure for consultants; and amounts due on interest and other charges during construction on the Bank loan.

Cost Recovery

51. The cost of investment in, and operation and maintenance of project facilities which are common to the irrigation and water supply components would be allocated to each component in proportion to the volume of water used. Costs relating to the water supply component would be totally recovered from beneficiaries through water charges. Costs relating to the irrigation component would be only partially recovered since, despite the substantial increase in incomes of irrigation beneficiaries expected under the project, these incomes will still fall within Yugoslavia's poverty target range, and irrigation beneficiaries' average per capita consumption level would remain considerably below the country's projected average. With a view to VOM's needs, as well as to financing continuing development while avoiding excessive tariff rates that would undermine the incentive of poor farmers to participate, proposed charges for the irrigation component would therefore be designed to recover 100 percent of the operation and maintenance and only about 10 percent of investment costs over a project life of 40 years. The actual water charges to be levied on the farmers as well as the kombinats would be agreed with the Bank and, for the first three years of irrigation, these charges would be increased gradually, attaining the full rate in the fourth year following commencement of irrigation. During negotiations it was agreed that VOM would collect, from the start of irrigation, water charges annually at rates that would be agreed with the Bank, and would review these rates periodically in consultation with the Bank (Loan Agreemen Section 5.07).

52. As noted in the preceding paragraph, investment in and operation and maintenance cost of water supply facilities would be recovered through a water tariff. During negotiations, assurances were obtained that VOM would impose charges for potable water sufficient to provide in any given year, commencing in 1981, revenues to cover all administrative and operating expenses (including depreciation) incurred in providing the supply, as well as capital costs of the project (Loan Agreement, Section 5.07). In addition, it was agreed that such revenues would be sufficient to provide a rate of return on the fixed assets employed of not less than 7 percent by the year 1982 and thereafter. Although this would entail a fourfold increase over the present charges for domestic supplies in the project area, its price is broadly consistent with charges for water supplies for other Bank-assisted projects in rural and small urban areas of Yugoslavia.

Financial Performance

53. Although VOM earned a small net income in the past three years, these financial results are not useful as a guide to future performance since the proposed project would substantially expand the scale of VOM's operations. Under the proposed project, the sale of potable water will produce a positive rate of return on the attributable assets from the outset, rising to 20 percent by 1987. However, the constraints on pricing the irrigation service (para 51) mean that this activity will incur operating losses,

reducing the financial rate of return to the project to 3 percent in that year. The other activities of VOM will by then be so small in comparison to the operation of the project as to have no significant effect on VOM's overall rate of return.

54. All the funds for project construction will be provided in the form of loans from IBRD and the Bank of Kosovo. The loans have repayment terms of 12 and 20 years respectively, compared with a project life of approximately 40 years. Taken in conjunction with the low rate of return, this situation imposes on VOM a debt service burden which is beyond its capability to support from operational cash flow; for practical purposes this condition may be expected to persist, though to a diminishing extent, until retirement of the proposed Bank loan in 1992. Therefore, a financing plan has been developed to provide VOM with the funds it requires during this period. The plan comprises grants by Kosovo to cover (i) the amount of all maturities of the Bank loan due for repayment before December 31, 1981 and (ii) a certain portion of the interest and other charges payable by VOM on the Bank loan and the first Bank of Kosovo loan (for capital financing) in the years 1982 to 1989 inclusive. In addition, a second loan from the Bank of Kosovo to be repaid over 25 years beginning in 1993, would provide roll-over financing, between 1982 and 1991, of part of the original project loans. The assurances necessary to implement this financing plan were received at negotiations from Kosovo and the Bank of Kosovo (Section 6.02, Recital (D) (i) and (iii) of the Preamble and Schedule 5 to the Loan Agreement).

55. The effect of these arrangements is to secure a small positive cash flow for VOM in each of the years following project completion. Although the enterprise will be entirely debt-financed for a number of years, it can reasonably be expected to be capable of servicing this debt without aid by 1992, and to develop an increasing degree of self-financing thereafter.

56. Boundary Adjustment and Irrigation Systems. Of the 10,250 ha included under the project, 6,950 ha are private freehold and 80 percent of the smallholders falling within this category own less than 5 ha. These small private holdings are of irregular shape and often consist of scattered parcels. It would, therefore, have been desirable to carry out land consolidation and to design on-farm irrigation systems accordingly. But land consolidation, because it is opposed by the conservative local farm population, is not feasible. For this reason, a law allowing minor boundary adjustment to regularize the haphazard shape of small parcels has been passed by the Kosovo Assembly. Farmers in the project area have been consulted on this matter, and have agreed in principle to it, and on-farm irrigation systems for private holders, including portable sprinkler equipment, have been designed. It was agreed during negotiations that VOM will carry out a program of adjustment of farm boundaries to permit regular irrigation layout (Loan Agreement Section 4.05).

57. Accounts and Audit. The greatly increased scale of operations envisaged by the project would place significantly greater demands on the accounting systems and staff. Therefore, assurances have been given that

VOM would recruit suitably qualified personnel and, if necessary, modify its accounting, budgeting and financial procedures to ensure accurate information on current financial performance and future projections. VOM's accounts are audited by the Social Accounting Service of Yugoslavia (SAS) and would be reviewed in the future by a special group of SAS inspectors trained in carrying out audits to international standards acceptable to the Bank (Loan Agreement, Sections 3.01(b)(iv), 5.02 and 5.03).

Benefits and Justification

58. The principal beneficiaries of the irrigation component would be about 2,200 smallholder and poor private farmers and their families whose average current per capita income is estimated at about US$150 equivalent. At full project development by 1985, however, the proposed project would increase this per capita income by about 170 percent to US$412 equivalent in 1975 prices. The project would also increase profits to the social sector and incomes to its workers, it would reduce instability in crop production and help a sugar factory in the area by providing a cheaper source of sugar beet. Ultimately, indirect beneficiaries would include other residents of Kosovo through greater availability of domestically produced goods. Underemployment, particularly of smallholder private farmers, would diminish as a result of a doubling of labor productivity.

59. The irrigation development costs, which roughly amount to US$4,700 per hectare or US$15,000 per family, can be regarded as high, though not unusually so when compared with other irrigation projects elsewhere. Furthermore, these costs must be assessed in the context of the limited development alternatives that exist within this particularly poor region of Yugoslavia as well as the country's ability to afford such costs.

60. The water supply component, by providing new sources of hygienic water, would benefit the entire population of the project area (presently 64,700). It would, as well, benefit social sector industrial enterprises and persons within the project area and an increasing livestock population owned by private farmers.

61. The economic rate of return on all project components is estimated at about 11 percent. The rates of return on the irrigation component and on the water supply component are computed at approximately 11 percent each. Relatively high investment costs result partly from the inclusion in Phase I (the proposed Metohija I project) of costs of those common facilities which would serve both Phases I and II of Hydro-system Radenic. If the investment costs were prorated between Phases I and II, the economic rate of return on Phase I would be about 13 percent. The social rate of return of the project, which measures the effects of the project on both economic growth and on income distribution, is computed at about 16.6 percent.

62. Though the proposed project will attempt to address the problems of a significant number of private farmers, the risks of the project not being implemented in accordance with its agreed design and schedule and not achieving its benefits are regarded as minimal. This is owing to a number of circumstances, including the fact that crops to be grown are not new to the

participating farmers who traditionally have also had experience with some form of irrigation. This, along with provision of complementary inputs and supporting agricultural services to be established by the project entity, is expected to expedite the achievement of project goals. Furthermore, officials of the Government of the Province of Kosovo as well as other local authorities have learned valuable lessons from past experience with such undertakings as the Ibar Multipurpose Project (Loan No. 777-YU--para 33), and the proposed project stands to benefit from the now mandated boundary adjustment program for small parcels of land owned by private farmers (para 56). Thus, the risks for the project are low.

## PART V - LEGAL INSTRUMENTS AND AUTHORITY

63. The draft Loan Agreement between the Bank, Kosovo and Vodoprivredna Organizacija "Metohija"; the draft Guarantee Agreement between the Socialist Federal Republic of Yugoslavia and the Bank; the report of the Committee provided for in Article III, Section 4 (iii) of the Articles of Agreement; and, the text of a draft resolution approving the above loan, are being distributed to the Executive Directors separately.

64. Provisions of the agreements of special interest are noted in paragraphs 44, 51, 52, 54, 56 and 57 of this report. Special conditions of loan effectiveness (Loan Agreement Section 8.01) are:

(a) Execution and authorization or ratification of the Kosovska Banka Loan Agreement (para 42 of this report); and

(b) Appointment of VOM's Financial Director (para 44 of this report).

65. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Bank.

## PART IV - RECOMMENDATIONS

66. I recommend that the Executive Directors approve the proposed loan.

Robert S. McNamara
President

by J. Burke Knapp

Attachments

TABLE 3A
YUGOSLAVIA • SOCIAL INDICATORS DATA SHEET

LAND AREA (THOU KM2)
TOTAL 255.8
AGRIC. 144.7

| | YUGOSLAVIA 1960 | YUGOSLAVIA 1970 | YUGOSLAVIA MOST RECENT ESTIMATE | REFERENCE COUNTRIES (1970) RUMANIA, REP | SPAIN | GERMANY FED. REP. ** |
|---|---|---|---|---|---|---|
| GNP PER CAPITA (US$) | 390.0 | 820.0 | 1480.0 | .. /a | 1560.0 | 4420.0 |
| **POPULATION AND VITAL STATISTICS** | | | | | | |
| POPULATION (MID-YR, MILLION) | 18.4 | 20.4 | 21.0 | 20.3 | 33.6 | 61.6 |
| POPULATION DENSITY | | | | | | |
| PER SQUARE KM. | 72.0 | 80.0 | 83.0 | 85.0 | 67.0 | 240.0 |
| PER SQ. KM. AGRICULTURAL LAND | 124.0 | 138.0 | 147.0 | 134.0 | 97.0 | 439.0 |
| VITAL STATISTICS | | | | | | |
| AVERAGE BIRTH RATE (/THOU) | 26.8 | 21.0 | 18.2 | 19.0 | 21.0 | 17.3 |
| AVERAGE DEATH RATE (/THOU) | 11.5 | 9.1 | 9.2 | 8.9 | 8.8 | 11.6 |
| INFANT MORTALITY RATE (/THOU) | 88.0 | 55.5 | 40.4 | 49.4 | 27.9 | 23.6 |
| LIFE EXPECTANCY AT BIRTH (YRS) | 63.7 | 67.7 | 68.0 /a | 68.4 | 70.8 | 70.3 |
| GROSS REPRODUCTION RATE | 1.4 | 1.3 | 1.3 | 0.9 | 1.4 | 1.2 |
| POPULATION GROWTH RATE (%) | | | | | | |
| TOTAL | 1.2 | 1.0 | 1.0 | 1.0 | 1.1 | 1.0 |
| URBAN | 6.0 | 4.6 | .. | 3.4 | 2.0 | 4.1 |
| URBAN POPULATION (% OF TOTAL) | 27.2 | 38.7 | 39.0/b | 40.8 | 59.1 | 82.4 |
| AGE STRUCTURE (PERCENT) | | | | | | |
| 0 TO 14 YEARS | 30.7 | 28.3 | 26.6 /a | 25.9 | 27.8 | 23.2 |
| 15 TO 64 YEARS | 63.2 | 64.3 | 65.2 /a | 65.5 | 62.5 | 63.6 |
| 65 YEARS AND OVER | 6.1 | 7.4 | 8.2 /a | 8.6 | 9.7 | 13.2 |
| AGE DEPENDENCY RATIO | 0.6 | 0.6 | 0.5 /a | 0.5 | 0.6 | 0.6 |
| ECONOMIC DEPENDENCY RATIO | 1.0 | .. | 0.8 /f | 0.7 /b | 1.1 | 0.9 |
| FAMILY PLANNING | | | | | | |
| ACCEPTORS (CUMULATIVE, THOU) | .. | .. | .. | .. | .. | .. |
| USERS (% OF MARRIED WOMEN) | .. | .. | .. | .. | .. | .. |
| **EMPLOYMENT** | | | | | | |
| TOTAL LABOR FORCE (THOUSAND) | 8300.0 | .. | 9100.0 /c | 9900.0 | 11900.0 | 26500.0 |
| LABOR FORCE IN AGRICULTURE (%) | 57.0 | .. | 36.1 /d | 49.0 | 25.0 | 8.9 |
| UNEMPLOYED (% OF LABOR FORCE) | 7.0 | .. | 3.9 /d | .. | 1.0 /a | 0.7 |
| **INCOME DISTRIBUTION** | | | | | | |
| % OF PRIVATE INCOME RECD BY- | | | | | | |
| HIGHEST 5% OF HOUSEHOLDS | 16.4 /a | 15.1 | .. | .. | .. | .. |
| HIGHEST 20% OF HOUSEHOLDS | 41.5 /a | 41.4 | .. | .. | .. | .. |
| LOWEST 20% OF HOUSEHOLDS | 6.9 /a | 6.6 | .. | .. | .. | .. |
| LOWEST 40% OF HOUSEHOLDS | 19.0 /a | 18.4 | .. | .. | .. | .. |
| **DISTRIBUTION OF LAND OWNERSHIP** | | | | | | |
| % OWNED BY TOP 10% OF OWNERS (I) | 15.1 * | 15.1* | 15.1 * | .. | .. | .. |
| % OWNED BY SMALLEST 10% OWNERS (II) | 84.9 * | 84.9* | 84.9 * | .. | .. | .. |
| **HEALTH AND NUTRITION** | | | | | | |
| POPULATION PER PHYSICIAN | 1420.0 | 1000.0 | 900.0 /a | 680.0 | 740.0/b | 580.0 |
| POPULATION PER NURSING PERSON | 500.0 /b | 350.1 /a | 350.0 /a,e | 200.0 | .. | 350.0 |
| POPULATION PER HOSPITAL BED | 190.0 | 190.0 | 170.0 /a,f | 120.0 | 220.0 | 90.0 |
| PER CAPITA SUPPLY OF - | | | | | | |
| CALORIES (% OF REQUIREMENTS) | 115.0 | 124.0 | 125.0 /g | 118.0 | 107.0 | 121.0 |
| PROTEIN (GRAMS PER DAY) | 91.0 | 92.0 | 94.0 /g | 92.0 | 81.0 | 88.0 |
| -OF WHICH ANIMAL AND PULSE | 27.0 | 29.0 | .. | 28.0 | 40.0 | 56.0 |
| DEATH RATE (/THOU) AGES 1-4 | 4.5 | 2.6 | 2.5 /b | 3.0 | 0.9 | 0.9 |
| **EDUCATION** | | | | | | |
| ADJUSTED ENROLLMENT RATIO | | | | | | |
| PRIMARY SCHOOL | 96.0 | 94.0 | 96.0 | 112.0 | 131.0 /c | 129.0 |
| SECONDARY SCHOOL | 34.0 | 45.0 | 48.0 | 46.0 | 57.0 /c | 66.0 |
| YEARS OF SCHOOLING PROVIDED (FIRST AND SECOND LEVEL) | 12.0 | 12.0 | 12.0 | 12-13 | 15.0 | 15.0 |
| VOCATIONAL ENROLLMENT (% OF SECONDARY) | 72.0 | 72.0 | 74.0 | 58.0 /c | 20.0 | 48.0 |
| ADULT LITERACY RATE (%) | 77.0 | 85.0 | .. | 99.0 | 94.0 | 99.0 |
| **HOUSING** | | | | | | |
| PERSONS PER ROOM (AVERAGE) | 1.7 | .. | 1.3 /b | 1.3 /d | .. | 0.7 /a |
| OCCUPIED DWELLINGS WITHOUT PIPED WATER (%) | .. | .. | 66.0 /b,h | 88.0 /d,e | .. | 0.3 /b |
| ACCESS TO ELECTRICITY (% OF ALL DWELLINGS) | 54.5 | .. | 87.9 /b | 49.0 /d | .. | 100.0 |
| RURAL DWELLINGS CONNECTED TO ELECTRICITY (%) | 36.1 | .. | 80.1 /b | 27.0 /d | .. | .. |
| **CONSUMPTION** | | | | | | |
| RADIO RECEIVERS (PER THOU POP) | 84.0 | 163.0 | 176.0 | 152.0 | 214.0 | 318.0 |
| PASSENGER CARS (PER THOU POP) | 3.0 | 35.0 | 63.0 | .. | 71.0 | 220.0 |
| ELECTRICITY (KWH/YR PER CAP) | 490.0 | 1288.0 | 1865.0 | 1613.0 | 1627.0 | 4128.0 |
| NEWSPRINT (KG/YR PER CAP) | 2.3 | 4.5 | 3.9 | 2.6 | 5.7 | 17.7 |

SEE NOTES AND DEFINITIONS ON REVERSE

## NOTES

Unless otherwise noted, data for 1960 refer to any year between 1959 and 1961, for 1970 between 1968 and 1970 and for Most Recent Estimate between 1973 and 1975.

I Agriculture land held by social sector "Kombinace". II Agriculture land held by private small-holders "10 hectors maximum".

** Selection of Federal Republic of Germany as an objective country is based on the close economic ties maintained by the two countries as well as on the fact that the greater part of Yugoslavia's around one million workers temporarily abroad have found employment in the Federal Republic of Germany.

YUGOSLAVIA 1960 /a 1963; /b Including midwives, assistant midwives, assistant nurses and nursing auxiliaries.

1970 /a Including midwives, assistant midwives, assistant nurses and nursing auxiliaries.

MOST RECENT ESTIMATE: /a 1972; /b 1971; /c Including about 800 thousand migrant workers working outside; /d Residents only; /e Including midwives, assistant midwives, assistant nurses and nursing auxiliaries; /f Government hospital establishments; /g 1969-71 average; /h Inside; /i Ratio of population under 15 and 65 and over to total labor force.

ROMANIA: 1970 /a The calculation of these figures is under discussion; the estimate for 1975 is $1300; /b Ratio of population under 15 and 65 and over to total labor force, /c Full-time education only; /d 1966; /e Inside.

SPAIN 1970 /a Registered unemployed; /b Registered, not all practicing in the country; /c 6-10 and 11-16 years of age respectively.

GERMANY FED. REP. 1970 /a Total, urban and rural; /b Inside only.

R13, December 6, 1976

## DEFINITIONS OF SOCIAL INDICATORS

Land Area (thou km²)
Total - Total surface comprising land area and inland waters.
Agric. - Most recent estimate of agricultural area used temporarily or permanently for crops, pastures, market & kitchen gardens or to lie fallow.

GNP per capita (US$) - GNP per capita estimates at current market prices, calculated by same conversion method as World Bank Atlas (1973-75 basis); 1960, 1970 and 1975 data.

Population and vital statistics
Population (mid-yr. million) - As of July first: if not available, average of two end-year estimates; 1960, 1970 and 1975 data.

Population density - per square km - Mid-year population per square kilometer (100 hectares) of total area.
Population density - per square km of agric. land - Computed as above for agricultural land only.

Vital statistics
Crude birth rate per thousand - Annual live births per thousand of mid-year population, ten-year arithmetic averages ending in 1960 and 1970, and five-year average ending in 1975 for most recent estimate.
Crude death rate per thousand - Annual deaths per thousand of mid-year population, ten-year arithmetic averages ending in 1960 and 1970, and five-year average ending in 1975 for most recent estimate.
Infant mortality rate (/thou) - Annual deaths of infants under one year of age per thousand live births.
Life expectancy at birth (yrs) - Average number of years of life remaining at birth; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.
Gross reproduction rate - Average number of live daughters a woman will bear in her normal reproductive period if she experiences present age-specific fertility rates, usually five-year averages ending in 1960, 1970 and 1975 for developing countries.
Population growth rate (%) - total - Compound annual growth rates of mid-year population for 1950-60, 1960-70 and 1970-75.
Population growth rate (%) - urban - Computed like growth rate of total population, different definitions of urban areas may affect comparability of data among countries.
Urban population (% of total) - Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries.
Age structure (percent) - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population.
Age dependency ratio - Ratio of population under 15 and 65 and over to those of ages 15 through 64.
Economic dependency ratio - Ratio of population under 15 and 65 and over to the labor force in age group 15-64 years.
Family planning - acceptors (cumulative,thou) - Cumulative number of acceptors of birth-control devices under auspices of national family planning program since inception.
Family planning - users (% of married women) - Percentages of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.

Employment
Total labor force (thousand) - Economically active persons, including armed forces and unemployed but excluding housewives, students, etc., definitions in various countries are not comparable.
Labor force in agriculture (%) - Agricultural labor force (in farming, forestry, hunting and fishing) as percentage of total labor force.
Unemployed (% of labor force) - Unemployed are usually defined as persons who are able and willing to take a job, out of a job on a given day, remained out of a job, and seeking work for a specified minimum period not exceeding one week; may not be comparable between countries due to different definitions of unemployed and source of data, e.g., employment office statistics, sample surveys, compulsory unemployment insurance.

Income distribution - Percentage of private income (both in cash and kind) received by richest 5%, richest 20%, poorest 20%, and poorest 40% of households.

Distribution of land ownership - Percentages of land owned by wealthiest 10% and poorest 10% of land owners.

Health and nutrition
Population per physician - Population divided by number of practicing physicians qualified from a medical school at university level.
Population per nursing person - Population divided by number of practicing male and female graduate nurses, "trained" or "certified" nurses, and auxiliary personnel with training or experience.
Population per hospital bed - Population divided by number of hospital beds available in public and private general and specialized hospital and rehabilitation centers; excludes nursing homes and establishments for custodial and preventive care.
Per capita supply of calories (% of requirements) - Computed from energy equivalent of net food supplies available in country per capita per day; available supplies comprise domestic production, imports less exports, and changes in stock; net supplies exclude animal feed, seeds, quantities used in food processing and losses in distribution; requirements were estimated by FAO based on physiological needs for normal activity and health considering environmental temperature, body weights, age and sex distributions of population, and allowing 10% for waste at household level.
Per capita supply of protein (grams per day) - Protein content of per capita net supply of food per day; net supply of food is defined as above. requirements for all countries established by USDA Economic Research Services provide for a minimum allowance of 60 grams of total protein per day, and 20 grams of animal and pulse protein, of which 10 grams should be animal protein, these standards are lower than those of 75 grams of total protein and 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Survey.
Per capita protein supply from animal and pulse - Protein supply of food derived from animals and pulses in grams per day.
Death rate (/thou) ages 1-4 - Annual deaths per thousand in age group 1-4 years, to children in this age group; suggested as an indicator of malnutrition.

Education
Adjusted enrollment ratio - primary school - Enrollment of all ages as percentage of primary school-age population; includes children aged 6-11 years but adjusted for different lengths of primary education, for countries with universal education, enrollment may exceed 100% since some pupils are below or above the official school age.
Adjusted enrollment ratio - secondary school - Computed as above, secondary education requires at least four years of approved primary instruction, provides general, vocational or teacher training instructions for pupils of 12 to 17 years of age; correspondence courses are generally excluded.
Years of schooling provided (first and second levels) - Total years of schooling; at secondary level, vocational instruction may be partially or completely excluded.
Vocational enrollment (% of secondary) - Vocational institutions include technical, industrial or other programs which operate independently or as departments of secondary institutions.
Adult literacy rate (%) - Literate adults (able to read and write) as percentage of total adult population aged 15 years and over.

Housing
Persons per room (average) - Average number of persons per room in occupied conventional dwellings in urban areas; dwellings exclude non-permanent structures and unoccupied parts.
Occupied dwellings without piped water (%) - Occupied conventional dwellings in urban and rural areas without inside or outside piped water facilities as percentage of all occupied dwellings.
Access to electricity (% of all dwellings) - Conventional dwellings with electricity in living quarters as percent of total dwellings in urban and rural areas.
Rural dwellings connected to electricity (%) - Computed as above for rural dwellings only.

Consumption
Radio receivers (per thou pop) - All types of receivers for radio broadcasts to general public per thousand of population; excludes unlicensed receivers in countries and in years when registration of radio sets was in effect, data for recent years may not be comparable since most countries abolished licensing.
Passenger cars (per thou pop) - Passenger cars comprise motor cars seating less than eight persons; excludes ambulances, hearses and military vehicles.
Electricity (kwh/yr per cap) - Annual consumption of industrial, commercial, public and private electricity in kilowatt hours per capita, generally based on production data, without allowance for losses in grids but allowing for imports and exports of electricity.
Newsprint (kg/yr per cap) - Per capita annual consumption in kilograms estimated from domestic production plus net imports of newsprint.

## ECONOMIC DEVELOPMENT DATA
(Amounts in Million US Dollars)

| NATIONAL ACCOUNTS | Actual 1972 | Actual 1973 | Actual 1974 | Preliminary 1975 | Projected 1976 | 1965-72 | 1972-75 | 1973-76 | 1972 | 1974 | 1976 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Constant 1974 Prices and Exchange Rate of $1 = 17.0 Din. | | | | | Average Annual Growth Rates | | | As Percent of GDY | | |
| Gross Domestic Product | 21,638 | 22,720 | 24,765 | 25,887 | 26,922 | 5.6 | 6.2 | 5.8 | 97.8 | 100 | 99.3 |
| Gains from Terms of Trade | 468 | 681 | - | +142 | +197 | | | | 2.2 | - | 0.7 |
| Gross Domestic Income | 22,106 | 23,401 | 24,765 | 26,029 | 27,119 | 5.5 | 5.6 | 5.0 | 100.0 | 100 | 100.0 |
| Imports (incl. NFS) | 6,588 | 7,600 | 8,312 | 8,350 | 8,082 | 12.6 | 8.2 | 2.1 | 29.7 | 33.6 | 29.8 |
| Exports (incl. NFS) | 5,437 | 5,788 | 5,694 | 5,872 | 6,506 | 8.3 | 2.6 | 4.0 | 24.5 | 23.0 | 24.0 |
| Resource Gap | 1,151 | 1,812 | 2,618 | 2,478 | 1,576 | | | | | | |
| Consumption Expenditure | 16,139 | 17,716 | 19,953 | 19,795 | 19,670 | 6.7 | 7.0 | 3.5 | 73.0 | 80.6 | 72.5 |
| Investment Expenditure | 6,650 | 6,816 | 7,429 | 8,570 | 8,827 | 6.0 | 8.8 | 9.0 | 30.1 | 30.0 | 32.5 |
| National Savings | 6,904 | 6,806 | 6,241 | 7,330 | 8,717 | 6.6 | 2.0 | 8.6 | 31.2 | 25.2 | 32.1 |
| Domestic Savings | 5,499 | 5,006 | 4,812 | 6,092 | 7,252 | 3.1 | 3.5 | 13.2 | 24.9 | 19.4 | 26.7 |
| MERCHANDISE TRADE | Annual Data at Current Prices | | | | | | | | As a Percentage of Total | | |
| Imports | | | | | | | | | | | |
| Capital Goods | 689 | 1,004 | 1,305 | 1,887 | 1,877 | | | | 21.4 | 17.4 | 25.0 |
| Petroleum | 126 | 296 | 843 | 756 | 1,015 | | | | 3.9 | 11.2 | 13.5 |
| Intermediate Goods | 1,910 | 2,513 | 4,398 | 4,296 | 3,826 | | | | 59.2 | 58.5 | 51.0 |
| Consumption Goods | 502 | 698 | 972 | 758 | 784 | | | | 15.6 | 12.9 | 10.5 |
| Total Merch. Imports (c.i.f.) | 3,227 | 4,511 | 7,518 | 7,697 | 7,502 | | | | 100.0 | 100.0 | 100.0 |
| Exports | | | | | | | | | | | |
| Capital Goods | 316 | 389 | 514 | 695 | 920 | | | | 14.1 | 13.5 | 18.8 |
| Textile and Leather Goods | 362 | 409 | 477 | 600 | 761 | | | | 16.2 | 12.5 | 15.6 |
| Non-ferrous Metallurgy | 272 | 325 | 556 | 458 | 472 | | | | 12.2 | 14.6 | 9.7 |
| Agricultural Products (incl. food) | 400 | 475 | 439 | 488 | 640 | | | | 17.9 | 11.5 | 13.1 |
| Other | 887 | 1,255 | 1,819 | 1,831 | 2,093 | | | | 39.7 | 47.8 | 42.8 |
| Total Merch. Exports (f.o.b.) | 2,237 | 2,853 | 3,805 | 4,072 | 4,886 | | | | 100.0 | 100.0 | 100.0 |
| MERCHANDISE TRADE INDICES | | | 1974 = 100 | | | | | | | | |
| Export Price Index | 63 | 76 | 100 | 109 | 114 | | | | | | |
| Import Price Index | 58 | 68 | 100 | 105 | 109 | | | | | | |
| Terms of Trade Index | 109 | 112 | 100 | 104 | 105 | | | | | | |
| Export Volume Index | 93 | 99 | 100 | 98 | 112 | | | | | | |
| VALUE ADDED BY SECTOR | Annual Data in Constant 1974 Prices and Exchange Rate of $1 = 17.0 Din. | | | | | | | | As a Percentage of Total | | |
| Agriculture | 3,213 | 3,496 | 3,763 | 3,663 | 3,846 | 2.7 | 4.5 | 3.2 | 15.6 | 16.0 | 15.0 |
| Manufacturing and Mining | 6,374 | 6,712 | 7,471 | 7,888 | 8,125 | 6.6 | 7.4 | 6.6 | 31.0 | 31.8 | 31.8 |
| Other | 10,956 | 11,362 | 12,276 | 13,026 | 13,589 | 5.4 | 5.9 | 6.2 | 53.3 | 52.2 | 53.2 |
| Total | 20,543 | 21,370 | 23,512 | 24,577 | 25,560 | 5.3 | 6.2 | 6.2 | 100.0 | 100.0 | 100.0 |
| PUBLIC FINANCE /1 | | | Current Prices | | | | | | As Percent of GDP/Market Prices | | |
| Current Receipts | 2,772 | 3,489 | 4,841 | .. | .. | .. | .. | .. | 17.5 | 19.5 | .. |
| Current Expenditures | 2,520 | 3,154 | 4,794 | .. | .. | .. | .. | .. | 16.0 | 19.4 | .. |
| Budgetary Savings | 251 | 334 | -47 | .. | .. | .. | .. | .. | 1.6 | 0.2 | .. |
| Public Sector Investment | 224 | 281 | 328 | .. | .. | .. | .. | .. | 1.4 | 1.3 | .. |

| LABOR FORCE AND OUTPUT PER WORKER /2 | TOTAL LABOR FORCE: Million 1972 | Million 1975 | % of Total 1972 | % of Total 1975 | 1972-75 Av. Ann. Growth Rate | VALUE ADDED PER WORKER (1974 PRICES AND EXCHANGE RATE $1 = 17 Din.): US Dollars 1972 | US Dollars 1975 | Percent of Average 1972 | Percent of Average 1975 | 1972-75 Av. Ann. Growth Rate |
|---|---|---|---|---|---|---|---|---|---|---|
| Agriculture /3 | 3.6 | 3.0 | 45.0 | 37.4 | -5.9 | 893 | 1,211 | 35 | 40 | 10.7 |
| Manufacturing and Mining | 1.65 | 1.87 | 20.6 | 23.3 | 4.3 | 3,863 | 4,218 | 150 | 138 | 3.0 |
| Other 3/ | 2.75 | 3.15 | 34.4 | 39.3 | 4.6 | 3,984 | 4,135 | 155 | 135 | 1.2 |
| Total | 8.00 | 8.02 | 100.0 | 100.0 | 0.1 | 2,568 | 3,064 | 100 | 100 | 6.1 |

/1 Budgets of Federation, Republics and Autonomous Provinces, and Communes.
/2 Total resident active labor force, i.e. excluding workers abroad and unemployed.
/3 Active labor force in the private sector (agriculture and other) and, accordingly, total are estimates.

Europe, Middle East and North Africa Region
December 6, 1976

## BALANCE OF PAYMENTS AND EXTERNAL ASSISTANCE AND DEBT

| | 1972 | Actual 1973 | 1974 | 1975 | Projected 1976 | Annual Growth Rates 1972-75 |
|---|---|---|---|---|---|---|
| **SUMMARY OF BALANCE OF PAYMENTS** | | | | | | |
| Exports (incl. NFS) | 3425 | 4407 | 5694 | 6315 | 7306 | 16.5 |
| Imports (incl. NFS) | 3821 | 5168 | 8312 | 8767 | 8809 | 23.1 |
| Resource Balance (X-M) | -395 | -761 | -2618 | -2452 | -1503 | |
| Interest | -165 | -222 | -285 | -337 | -355 | 19.6 |
| Workers Remittances | 889 | 1310 | 1511 | 1575 | 1747 | 15.4 |
| Other factor services net | 17 | 50 | 93 | 62 | 70 | 38.2 |
| Current Transfers (net) | 74 | 87 | 110 | 120 | 135 | 12.8 |
| Balance on Current Account | 419 | 454 | -1189 | -1032 | 94 | |
| M&LT Loans /1 | | | | | | |
| Disbursements | 943 | 1170 | 1426 | 1850 | 2031 | 20.1 |
| Repayments | -570 | -686 | -814 | -930 | -1025 | 13.6 |
| Net Disbursements | 373 | 454 | 612 | 920 | 1006 | 28.3 |
| Capital Transactions n.e.i. /2 | -117 | -285 | 139 | -68 | - | |
| Use of Reserves | -675 | -663 | 438 | 180 | -1100 | |

| GRANT AND LOAN COMMITMENTS | | | | |
|---|---|---|---|---|
| Official Grants & Grant-like | - | - | - | - |
| Public M&LT Loans | | | | |
| IBRD | 75.0 | 104.9 | 256.5 | 209.0 |
| IDA | - | - | - | - |
| Other Multilateral | - | - | - | - |
| Governments | 183.9 | 179.7 | 615.4 | 274.7 |
| Suppliers | 82.3 | 3.0 | .6 | - |
| Financial Institutions | 121.4 | - | 73.1 | 86.2 |
| Bonds | - | - | 51.5 | - |
| Public Loans n.e.i. | 4.2 | - | - | - |
| Total Public M&LT Loans | 466.8 | 287.6 | 997.2 | 569.9 |

| DEBT AND DEBT SERVICE /4 | Actual 1972 | 1973 | 1974 | Estimated 1975 |
|---|---|---|---|---|
| Public Debt Out. & Disbursed | | | | |
| Interest on Public Debt | 63.2 | 97.1 | 101.2 | 120.8 |
| Repayments on Public Debt | 154.3 | 205.0 | 282.3 | 309.0 |
| Total Public Debt Service | 217.5 | 302.1 | 383.5 | 429.8 |
| Other Debt Service | 634.5 | 726.9 | 826.6 | 937.0 |
| Total Debt Service | 852.0 | 1029.0 | 1210.1 | 1366.8 |
| Burden on Export Earnings (%) /5 | | | | |
| Public Debt Services Ratio | 5.0 | 5.2 | 5.2 | 5.3 |
| Total Debt Service Ratio | 19.4 | 17.7 | 16.5 | 16.9 |
| IDS - Direct Investment Inc. | - | - | - | - |

| EXTERNAL DEBT | Actual Debt Outstanding on Dec. 31, 1975 Disbursements only | Percent |
|---|---|---|
| World Bank | 559.1 | 24.6 |
| IDA | - | - |
| Other Multilateral | 5.3 | .2 |
| Governments | 1304.3 | 57.4 |
| Suppliers | 115.6 | 5.1 |
| Financial Institutions | 269.9 | 11.9 |
| Bonds | 18.1 | .8 |
| Public Debt n.e.i. | .1 | - |
| | 2272.5 | 100.0 |
| Other M&LT Debts /3 | 3780.0 | |
| Short-term Debt (disb. only) | - | |

| Average Terms of Public Debt | 1972 | 1973 | 1974 | 1975 |
|---|---|---|---|---|
| Int. as % Prior Year DO&D | 5.3 | 7.3 | 6.3 | 6.5 |
| Amort. as % Prior Year DO&D | 12.9 | 15.3 | 17.4 | 16.5 |
| IBRD Debt Outs. & Disbursed | | | | |
| " as % Public Debt O&D | 20.7 | 19.6 | 18.8 | 20.6 |
| " as % Public Debt Services | 14.7 | 12.7 | 11.9 | 13.4 |

1/ Includes direct foreign investment.

2/ Includes errors and ommissions, short term loans, net export credits, IMF account, National Bank and Commercial Bank Credits.

3/ Estimate.

4/ Figures on debt service do not correspond with balance of payments figures due to differences in coverage.

5/ Includes workers remittances.

Europe, Middle East & North Africa Region
December 2, 1976

# THE STATUS OF BANK GROUP OPERATIONS IN YUGOSLAVIA

## A. STATEMENT OF BANK LOANS (as at November 30, 1976)

| Number | Year | Borrower(s) | Purpose | US$ million Amount (less cancellations) Bank | Undisbursed |
|---|---|---|---|---|---|
| Sixteen Loans fully disbursed | | | | 474.7 | |
| 751 | 1971 | SFRY | Roads | 35.0 | 0.3 |
| 752 | 1971 | Hotel "Bernardin", Piran | Tourism | 10.0 | 1.6 |
| 777 | 1971 | SFRY | Multipurpose Water | 45.0 | 29.5 |
| 782 | 1971 | "Babin Kuk" Hotelsko Turisticki Centar, Dubrovnik | Tourism | 20.0 | 2.3 |
| 836 | 1972 | Twelve Electric Power Enterprises in Yugoslavia | Power | 75.0 | 15.1 |
| 894 | 1973 | Stopanska Banka, Skopje | Agricultural Industries | 31.0 | 8.5 |
| 916 | 1973 | Naftagas | Gas Pipeline | 59.4 | 24.4 |
| 947 | 1973 | Kikinda | Iron Foundry | 14.5 | 2.3 |
| 965 | 1974 | IMT | Tractor Factory | 18.5 | 0.7 |
| 966 | 1974 | FOB | Iron Foundry | 15.0 | 1.9 |
| 990 | 1974 | Bosnia-Herzegovina Road Funds | Roads | 30.0 | 2.0 |
| 1012 | 1974 | Stopanska Banka, Skopje | Industrial Credit | 28.0 | 13.4 |
| 1013 | 1974 | Privredna Banka Sarajevo | Industrial Credit | 22.0 | 14.0 |
| 1026 | 1974 | Community of Yugoslav Railways | Railways | 93.0 | 63.8 |
| 1060 | 1974 | Port of Bar | Harbor Expansion | 44.0 | 40.3 |
| 1066 | 1974 | Vodovod Dubrovnik | Water Supply and Wastewater | 6.0 | 5.9 |
| 1129 | 1975 | Vojvodjanska Banka | Agricultural Credit | 50.0 | 49.3 |
| 1143 | 1975 | Republic Road Organization in Slovenia, Montenegro and Serbia | Roads | 40.0 | 38.0 |
| 1173 | 1975 | Jugoslavenski Naftovod | Pipeline | 49.0 | 49.0 |
| 1262 | 1976 | Republicki Fond Voda | Water Supply, Sewerage & Water Resources | 20.0 | 20.0 |
| 1263 | 1976 | Sarajevo Water Supply & Sewerage Enterprise | Water Supply & Sewerage | 45.0 | 45.0 |
| 1264/a | 1976 | Sarajevo Gas Enterprise & Naftagas Gas Unit | Air Pollution Control | 38.0 | 38.0 |
| 1277 | 1976 | Privredna Banka, Sarajevo, Stopanska Banka, Skopje, Investiciona Banka, Titograd, Kosovska Banka, Pristina | Second Industrial Credit | 50.0 | 50.0 |

/a Not yet effective.

| Number | Year | Borrower(s) | Purpose | US$ million Amount (less cancellations) Bank | Undisbursed |
|---|---|---|---|---|---|
| | | Total (less cancellation) | | 1,313.1 | 515.3 |
| | | of which has been repaid | | 152.0 | |
| | | Total now outstanding | | 1,161.1 | |
| | | Amount sold | 7.8 | | |
| | | of which: Amount repaid | 6.3 | 1.5 | |
| | | Total now held by Bank | | 1,159.6 | |
| | | Total undisbursed | | | 515.3 |

B. STATEMENT OF IFC INVESTMENTS (as at November 30, 1976)

| Year | Obligor | Type of Business | Amount in US$ million Loan | Equity | Total |
|---|---|---|---|---|---|
| 1970 | International Investment Corporation for Yugoslavia | Investment Corporation | - | 2.0 | 2.0 |
| 1970 | Zavodi Crvena Zastava Fiat S.P.A. | Automotive Industry | 5.0 | 8.0 | 13.0 |
| 1971 | Tovarna Automobilov in Mororjev Maribor (TAM)/Klockner-Humboldt Deutz A.G. (KHD) | Automotive Industry | 7.5 | 2.2 | 9.7 |
| 1972 | FAP-FAMOS Belgrade/Daimler Benz A.G. | Automotive Industry | 12.8 | 2.9 | 15.7 |
| 1972 | Sava/Semperit | Tires | 4.0 | 1.5 | 5.5 |
| 1973 | Belisce/Bell | Pulp and Paper | 13.3 | - | 13.3 |
| 1974 | Zelezarna Jesenice/ARMCO | Special Steel | 10.0 | - | 10.0 |
| 1974 | Salonit Anhovo | Cement Plant | 10.0 | - | 10.0 |
| 1975 | Rudarsko Melaturski | Steel | 50.0 | - | 50.0 |
| | Total Gross Commitments | | 112.6 | 16.6 | 129.2 |
| | less cancellations, terminations, repayment and sales | | 60.1 | 2.3 | 62.4 |
| | Total commitments held by IFC | | 52.5 | 14.3 | 66.8 |
| | Total Undisbursed | | 8.7 | 6.1 | 14.8 |

## C. PROJECTS IN EXECUTION 1/

Loan 657 Telecommunications: US$40.0 million Loan of February 20, 1970; Effective Date: August 30, 1970; Closing Date: March 31, 1976.

After initial delays the Bank-financed part of the project is proceeding satisfactorily and is now nearing completion. The installation of trunk exchanges which are not financed by the Bank, has been delayed but will be fully completed in the near future. The loan has been largely disbursed and the balance of US$146,000 is expected to be disbursed shortly.

Loan 751 Fifth Highway: US$35.0 million Loan of June 18, 1971; Effective Date: June 12, 1972; Closing Date: June 30, 1977.

After an initial delay of about eight months in fulfilling the conditions for effectiveness of the loan, construction work on all sections has progressed well. All road sections but one are open for traffic. Completion of the remaining section in Slovenia is about 92 percent complete. Because of shortage of funds the Republican Road Authority has reprogrammed its completion. The first 44 km was opened at the end of June 1976 and the last 6.5 km will be finished by September 1977.

Loan 752 Bernardin Tourism: US$10.0 million Loan of June 18, 1971; Effective Date: May 31, 1972; Closing Date: June 20, 1977.

Following initial delays in project implementation due to appointing consultants, providing the necessary infrastructure and obtaining approvals by local authorities, bids received in July 1974 indicated that the project, as originally envisaged (2,500 beds), would cost approximately 100 percent above the originally estimated cost of US$25.6 million. This increase was mainly due to rapid inflation in construction costs. The Bank and the project sponsors have agreed to finance a reduced complex containing some 1,616 beds (Amendment to Loan 752-YU, December 16, 1974, R74-258) at an estimated cost of US$39.9 million, requiring additional financing by the sponsors of about US$14.0 million. Following the resolution of the financial problems excellent progress was made and the Port and Village hotels were opened for occupancy on June 4, 1976. Structural problems were encountered with the foundations for the Cliff Hotel, but the main structure has now been completed and is expected to be opened by the end of October.

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1/ These notes are designed to inform the Executive Directors regarding the progress of projects in execution, and in particular to report any problems which are being encountered, and the action being taken to remedy them. They should be read in this sense, and with the understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project execution.

Loan 777 Ibar Multipurpose Water: US$45.0 million Loan of June 20, 1971; Effective Date: May 31, 1972; Closing Date: December 31, 1978.

The start of project work was delayed for one year. Construction is now underway, the main dam is almost completed and the reservoir will be filled starting in February. A small part of the irrigation network has been completed with the remainder expected to be completed by 1978. Project costs have been above appraisal estimates, but the overrun financing is being provided by the Province of Kosovo and from Federal sources. Delays have been encountered in the arrangements for boundary adjustment and agricultural extension services. Consultants have been engaged to help find solutions, and the Kosovo Government has enacted appropriate legislation.

Loan 782 Babin Kuk Tourism: US$20.0 million Loan of July 21, 1971; Effective Date: June 12, 1972; Closing Date: July 31, 1977.

There were initial delays in the implementation of the project due to lateness in making the loan effective and in mobilizing consultants. Bids for civil works and estimates for other components indicated that the project would cost at least twice as much as originally estimated (US$49.9 million), largely due to rapid inflation in construction costs. The Bank and the project sponsors agreed to finance a reduced complex containing some 2,034 beds (Amendment to Loan 782-YU, December 16, 1974, R74-259) at a total cost of US$51.5 million, requiring additional financing by the sponsor of about US$1.6 million. This additional financing for the revised project has been arranged but in light of the increased financial commitments necessary from the local banks and a re-evaluation of the financial capabilities of the sponsor necessary to implement a project of this size, the local banks and the Borrower have proposed and are discussing with the Bank a change in sponsorship. This proposed change in sponsorship will be submitted to the Executive Directors for their consideration after being fully reviewed by the Bank. Meanwhile, construction proceeded well and the hotels were inaugurated and opened for occupancy on June 5, 1976.

Loan 836 Power Transmission: US$75.0 million Loan of June 23, 1972; Effective Date: December 29, 1972; Closing Date: June 30, 1977.

The Project construction is progressing slowly and is expected to be completed by December 1977, about one year late. Its cost has increased to about $415 million (up 84 percent) chiefly due to escalation in prices. The resulting cost overrun is being financed by the Government from funds received from the Federal Republic of Germany and from the Borrowers' own internal sources. Appointment of management consultants was delayed until mid-1976 and their report is now expected in June 1977, about 3 1/2 years late. The financial performance of 3 of the 12 Borrowers in 1976 was below the required level of 35 percent self-financing following a downturn in electricity sales and higher operating costs arising from inflation. The promulgation of the new Constitution in 1974 and the consequent evolution of the legal and

financial status of the Borrowers, particularly in regard to the requirement of their policy of pooling resources at the Republican levels requires changes in the legal arrangements including the application of financial covenants. These are being considered along with the proposed second power transmission project which has just seen appraisal.

Loan 894 Agricultural Industries (Macedonia): US$31.0 million Loan of May 25, 1973; Effective Date: November 28, 1973; Closing Date: December 31, 1978.

All loan funds provided under the project have been committed by subloan agreements through Stopanska Banka. There have been, however, difficulties in obtaining satisfactory procurement contracts for the big facilities mainly due to the heavy cost overruns. With considerable delay, contracts have now been signed for one of the wine by-products processing facilities, and the central wine cellar and construction has begun on both sites. Contract negotiations for the slaughterhouse are nearing completion. The second wine by-products facility will either be retendered or not constructed at all because of the high investment costs and resulting low financial viability.

Loan 916 Naftagas Pipeline: US$59.4 million Loan of June 25, 1973; Effective Date: March 22, 1974; Closing Date: June 20, 1977.

The costs of equipment and civil works increased so that project costs were about 71 percent above the appraisal estimate. As a result of this and of a reallocation of priorities in the use of natural gas, the project has been redefined (Amendments to Loan 916-YU, May 13, 1976, R76-116). Phase I is a reduced version of the original plan. Phase II provides for a pipeline extension to link up with the pipeline to be constructed under the Sarajevo Air Pollution Control Project, for which additional Bank financing was obtained. Naftagas has obtained additional local currency financing required for Phases I and II. A delay of more than two years in project implementation has occurred as a result of the increased project costs and revision of the project. Construction started in late June 1976, and the project is scheduled for completion by end 1978.

Loan 947 Kikinda Iron Foundry: US$14.5 million Loan of November 30, 1973; Effective Date: May 28, 1974; Closing Date: March 31, 1978.

Effectiveness was delayed about five months due primarily to the extra time required for the ratification of the Guarantee Agreement by the Federal Assembly. Project implementation is about four months ahead of schedule. Total project costs now are about 13 percent (about US$4.6 million equivalent) above appraisal estimates due to large increases in local costs. Financing of this cost overrun has been arranged with a local bank.

Loan 965 IMT Tractor Factory Expansion: US$18.5 million Loan of February 22, 1974; Effective Date: June 11, 1974; Closing Date: December 31, 1977.

The factory was officially inaugurated on March 7, 1976. Completion work on minor portions of the project, however, is continuing.

Loan 966 FOB Iron Foundry: US$15.0 million Loan of February 22, 1974; Effective Date: May 28, 1974; Closing Date: December 31, 1977.

Implementation is expected to be on schedule. Local costs are about 27 percent (about US$10.0 million equivalent) above appraisal estimates due to design changes and domestic inflation. Financing of this local cost overrun has been arranged with a local bank.

Loan 990 Sixth Highway: US$30.0 million Loan of May 31, 1974; Effective Date: December 10, 1974; Closing Date: December 31, 1977.

Four out of six road sections are complete. The remaining sections should be completed by March/April '77. Two requests for changes in road alignments have been agreed; both changes were requested to accommodate communities which would be better served by the realignments.

Loan 1012 Macedonia/Kosovo Industrial Credit: US$28.0 million Loan of June 21, 1974; Effective Date: December 19, 1974; Closing Date: December 31, 1978.

Progress has been satisfactory. The loan is almost fully committed, but the final date for submission of sub-projects is likely to be extended by six months to June 30, 1977 to allow adjustments in individual sub-loans, as needed, and to allow the banks time to submit additional projects for financing from resources freed as a result of such adjustments. Loan disbursements have been accelerating after a slow start and are expected to soon catch up and even surpass appraisal estimates.

Loan 1013 Bosnia-Herzegovina/Montenegro Industrial Credit: US$22.0 million Loan of June 21, 1974; Effective Date: December 19, 1974; Closing Date: December 31, 1978.

The note under Loan 1012 above applies also to this loan.

Loan 1026 Fourth Railway: US$93.0 million Loan of July 10, 1974; Effective Date: February 12, 1975; Closing Date: December 31, 1977.

The project consists of the 1974-76 slice of the Railways' 1973-77 Investment Plan. There have been substantial delays in project execution due principally to financial and administrative difficulties. Government efforts to combat inflation have caused railway tariffs to lag too far behind inflation. Substantial subsidies are now being proposed, and the Bank is currently reviewing this matter with the Government. Good progress continues on investment planning.

Loan 1060 Port of Bar: US$44.0 million Loan of December 11, 1974; Effective Date: June 13, 1975; Closing Date: June 30, 1978.

In general the Project is progressing well, but is now about 12 months behind schedule due to delays in procurement, most recently regarding the grain silos, for which final designs have not yet been completed. Completion of the project is likely to be at least 6 months after the original completion date of December 1977.

Loan 1066 Dubrovnik Water Supply and Wastewater: US$6.0 million Loan of December 24, 1974; Effective Date: June 26, 1975; Closing Date: December 31, 1978.

Delays in preparation of final designs and tender documents have put construction about a year behind schedule. Services to the Bank financed Babin Kuk Hotel Complex (Loan 782-YU) were, however, completed in time for its initial operation. Preliminary calculations indicated the need for a substantial tariff increase to meet the Loan Agreement's financial covenants, but the commune authorities approved a smaller increase. The Bank is seeking explanations from the communal and federal authorities together with their proposals for resolving the matter.

Loan 1129 Agricultural Credit: US$50.0 million Loan of June 20, 1975; Effective Date: February 12, 1976; Closing Date: December 31, 1979.

The Project Operations Unit of Vojvodjanska Banka, established in March 1976, is working in a competent manner with respect to preparation of subproject appraisal reports. Disbursements of IBRD funds under the project initially were lagging behind appraisal estimates, reflecting both learning curve problems with the methodology for subproject appraisal and the time required for the effective organization of implementation by Vojvodjanska Banka, the lead bank. Project operations now show encouraging progress with respect to appraisal methodology and related aspects of institution building. Commitments for investments in social sector enterprises are running ahead of those for private farmers, due largely to institutional arrangements in Yugoslavia, but a substantial pipeline of private sector subprojects should ensure the desired balance. A second project is at the appraisal stage and is expected to reach negotiations by May 1977.

Loan 1143 Seventh Highway: US$40.0 million Loan of July 18, 1975; Effective Date: March 30, 1976; Closing Date: June 30, 1979.

Construction has started in the Republic of Serbia. Construction contracts are in the process of being awarded in the Republics of Slovenia and Montenegro.

Loan 1173 Naftovod Oil Pipeline: US$49.0 million Loan of November 19, 1975; Effective Date: July 28, 1976; Closing Date: December 31, 1979.

Due to slower than anticipated progress of design and procurement it is estimated that a four-month slippage in the completion of Phase I will occur, though it is expected that the balance of the project will be completed on schedule.

Loan 1262 Morava Regional Development Project - Water Supply, Sewerage and Water Resources: US$20.0 million Loan of June 14, 1976; Effective Date: November 3, 1976; Closing Date: December 31, 1980.

The regional development study is under way. Terms of Reference and selection of consultants is about to be finalized for the flood control and water quality studies. Final designs and tender documents for the Vrutci Dam are being reviewed, and construction should begin in 1977. Construction is under way on some parts of the Cacak component and tenders are being invited for the principal work in Titovo Uzice. The impetus towards the creation of the Morava Region Water Community of Interest has slowed due to the longer than anticipated process of seeking agreement among all the Yugoslav parties concerned on the structure of the organizations. Staffing is being strengthened in the water authorities in Cacak and Titovo Uzice. There has been a delay in the implementation of initial tariff increases in Titovo Uzice but action is expected shortly.

Loan 1263 Sarajevo Water Supply and Sewerage: US$45.0 million Loan of June 8, 1976; Effective Date: November 9, 1976; Closing Date: June 30, 1981.

Consultants for final designs and tender documents have begun their work. Tendering is expected to begin early 1977.

Loan 1264 Sarajevo Air Pollution Control: US$38.0 million Loan of June 8, 1976; Closing Date: June 30, 1981.

Terminal date for declaring effectiveness is December 31, 1976.

Loan 1277 Second Industrial Credit: US$50.0 million Loan of June 14, 1976; Closing Date: December 31, 1980.

Declared effective on October 29, 1976, on schedule.

# YUGOSLAVIA: METOHIJA MULTIPURPOSE PROJECT

## Loan and Project Summary

| | |
|---|---|
| Borrower: | Vodoprivredna Organizacija Metohija (Water Management Organization Metohija--VOM). |
| Guarantor: | Socialist Federal Republic of Yugoslavia. |
| Amount: | US$54.0 million equivalent, in various currencies. |
| Terms: | Amortization in 15 years, including a three-year grace period, with interest at 8.7 percent. |
| Project Description: | Essential features of the project include (a) construction of the Radenic Dam; (b) a diversion weir with intake works and a feeder canal from the Decanska Bistrica River; (c) water supply works for three towns (Djkovica, Orahovac and Zrze) and twelve villages, including a water treatment plant with pumping equipment and new water storage facilities; (d) an irrigation distribution system; (e) miscellaneous works including drainage, erosion control, soil improvement, power supply lines, equipment, farm roads, buildings, demonstration farms and consultant services. |

Estimated Cost:

| | Local | Foreign | Total | Percent (of total project cost excluding taxes) |
|---|---|---|---|---|
| | (US$ million) | | | |
| Dam and Intake | 2.3 | 4.2 | 6.5 | 7 |
| Domestic Supply Civil Works | 2.2 | 1.5 | 3.7 | 4 |
| Domestic Supply Equipment | 1.9 | 2.6 | 4.5 | 5 |
| Irrigation Network Civil Works | 9.5 | 13.1 | 22.6 | 26 |
| Irrigation Equipment and Vehicles | 0.2 | 3.0 | 3.2 | 4 |
| Buildings and Demonstration Farms | 1.7 | 0.4 | 2.1 | 2 |
| Expropriation and Compensation | 6.9 | - | 6.9 | 8 |
| Land Improvement | 2.0 | 3.5 | 5.5 | 6 |
| Engineering | 4.0 | 0.2 | 4.2 | 5 |
| Subtotal | 30.7 | 28.5 | 59.2 | 67 |
| Physical Contingencies | 3.8 | 3.5 | 7.3 | 8 |
| Price Contingencies | 10.8 | 11.0 | 21.8 | 25 |
| Total Project Costs without Taxes | 45.3 | 43.0 | 88.3 | 100 |
| Interest and Other Charges during the Grace Period on the Foreign Exchange Component | - | 11.0 | 11 0 | - |
| Duties and Taxes | 22.0 | - | - | - |
| Total Financing Required | 67.3 | 54.0 | 121.3 | - |

Financing Plan: (for the investment costs--1977-1981--including interest during construction on the bank loan)

| | Million US$ | Percent of Total |
|---|---|---|
| IBRD | 54.0 | 45 |
| Socialist Autonomous Province of Kosovo (Kosovo) excluding federal and local duties and taxes | 45.3 | 37 |
| Duties and Taxes | 22.0 | 18 |
| Total | 121.3 | 100 |

**Estimated Disbursements:**

| Calendar Year | Amount (US$ Million) Annual | Cumulative |
|---|---|---|
| 1977 | 4.3 | 4.3 |
| 1978 | 13.9 | 18.2 |
| 1979 | 13.1 | 31.3 |
| 1980 | 11.5 | 42.8 |
| 1981 | 8.6 | 51.4 |
| 1982 | 2.6 | 54.0 |

**Procurement Arrangements:** Contracts for civil works and equipment financed under the proposed Bank loan would be grouped, to the extent practicable, into 18 contracts. Of these, 10 contracts totalling about US$61.0 million would be tendered on the basis of international competitive bidding. A 15 percent preference margin, or prevailing custom duty if lower, would be extended to local manufacturers in the evaluation of bids for equipment under international competitive bidding. Procurement in accordance with local competitive bidding, following Government procedures, would be appropriate for the remaining 8 contracts totalling about US$15.3 million. These contracts would cover such items as the first section of the main canal, the access road to the Radenic Dam, the diversion tunnel, grouting, erosion control works and buildings. Most of the works are scattered over the project area, are of minor nature and would be built at different times; others will be procured locally to avoid delays in project implementation. Construction of the tertiary network and farm roads, and soil improvement measures would be carried out by VOM under force account. Individual purchases of equipment not exceeding US$40,000 in value would be allowed to be procured in accordance with applicable local procedures up to an aggregate value of US$300,000.

**Consultant Services:** Funds for local and foreign consultants would be provided under the project. Local consultants would be retained to prepare final design and tender documents. Foreign consultants would be needed to review final design and tender documents and to train local staff in advanced hydraulic computer technology. To avoid unnecessary delay of further project design, VOM has contracted a foreign consultant firm acceptable to the Bank for assistance in final design of the irrigation component. For this purpose, it is recommended that the Bank finance retroactively to June 30, 1976, expenditures up to a total amount of US$100,000.

Rate of Return: The economic rate of return on all project components is estimated at about 11 percent.

Estimated Project Completion Date: December 31, 1981

Appraisal Report: Report Number 1218-YU
Date: December 17, 1976
EMENA Projects Department

# YUGOSLAVIA: METOHIJA MULTIPURPOSE PROJECT

## SUPPLEMENTARY PROJECT DATA SHEET

### Section I: Timetable of Key Events

(a) Time taken to prepare project: One and one-half years (June 1974 to October 1975)

(b) Agency which prepared project: Water Management Organization, "Metohija" (VOM), with assistance of consultants and the FAO/IBRD Cooperative Program

(c) Project first presented to Bank: During visit in May 1974 of Supervision mission for the Ibar Multipurpose Project (Loan 777-YU)

(d) First Bank mission to review project: June 1974

(e) Departure of Appraisal Mission: November 1975

(f) Completion of Negotiations: November 19,1976

(g) Planned date of effectiveness: June 1, 1977

### Section II: Special Bank Implementation Actions

None.

### Section III: Special Conditions

(a) VOM, in agreement with the Bank, to establish BOAL Hydro-System Radenic for operation and maintenance of project facilities prior to December 31, 1978 (para 44);

(b) VOM to appoint, prior to effectiveness and in consultation with the Bank, a Financial Director (para 44);

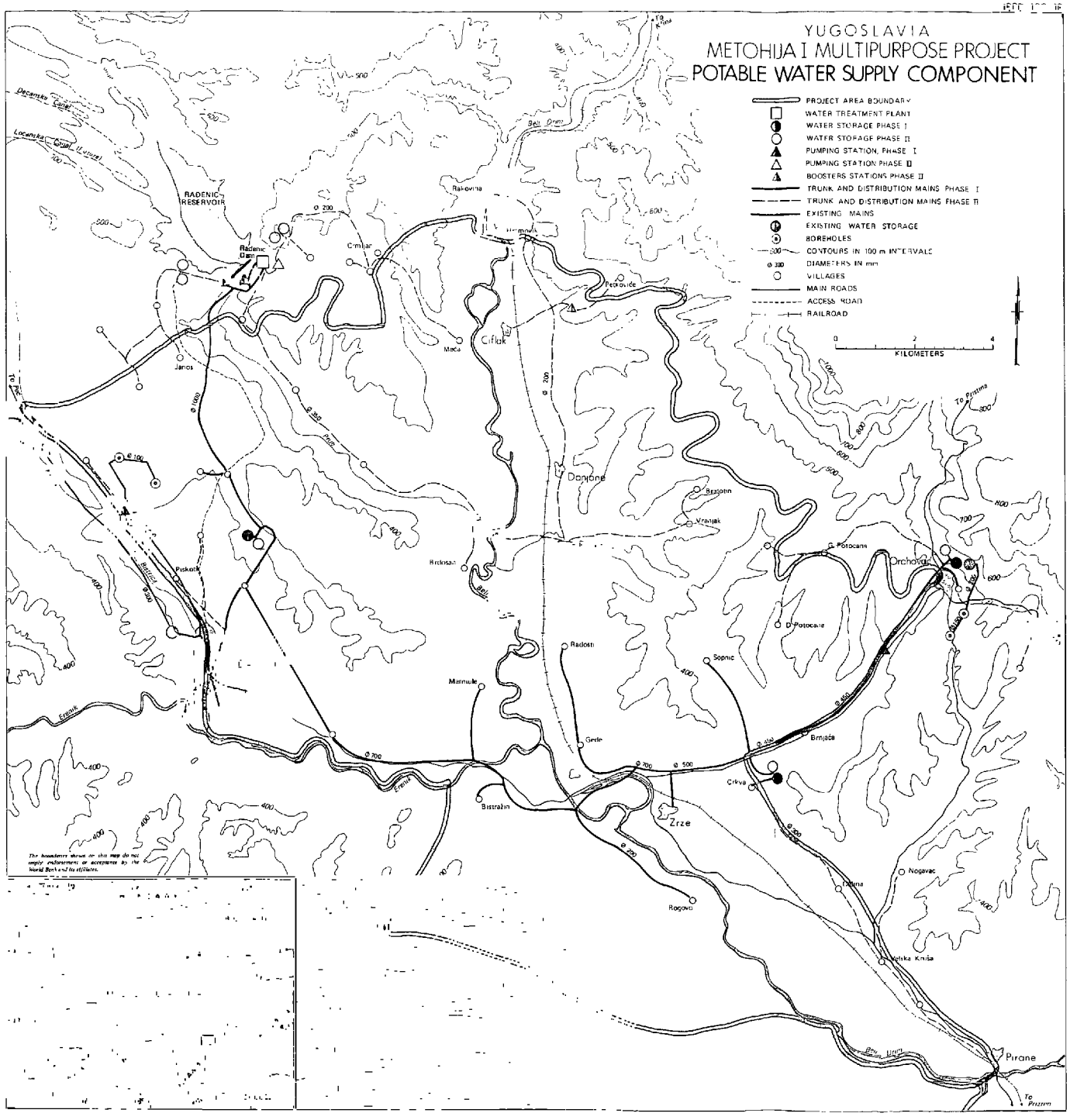
(c) VOM to review and if necessary modify its accounting procedures to ensure that they provide timely, relevant and accurate information on current financial performance and future projections (para 57);

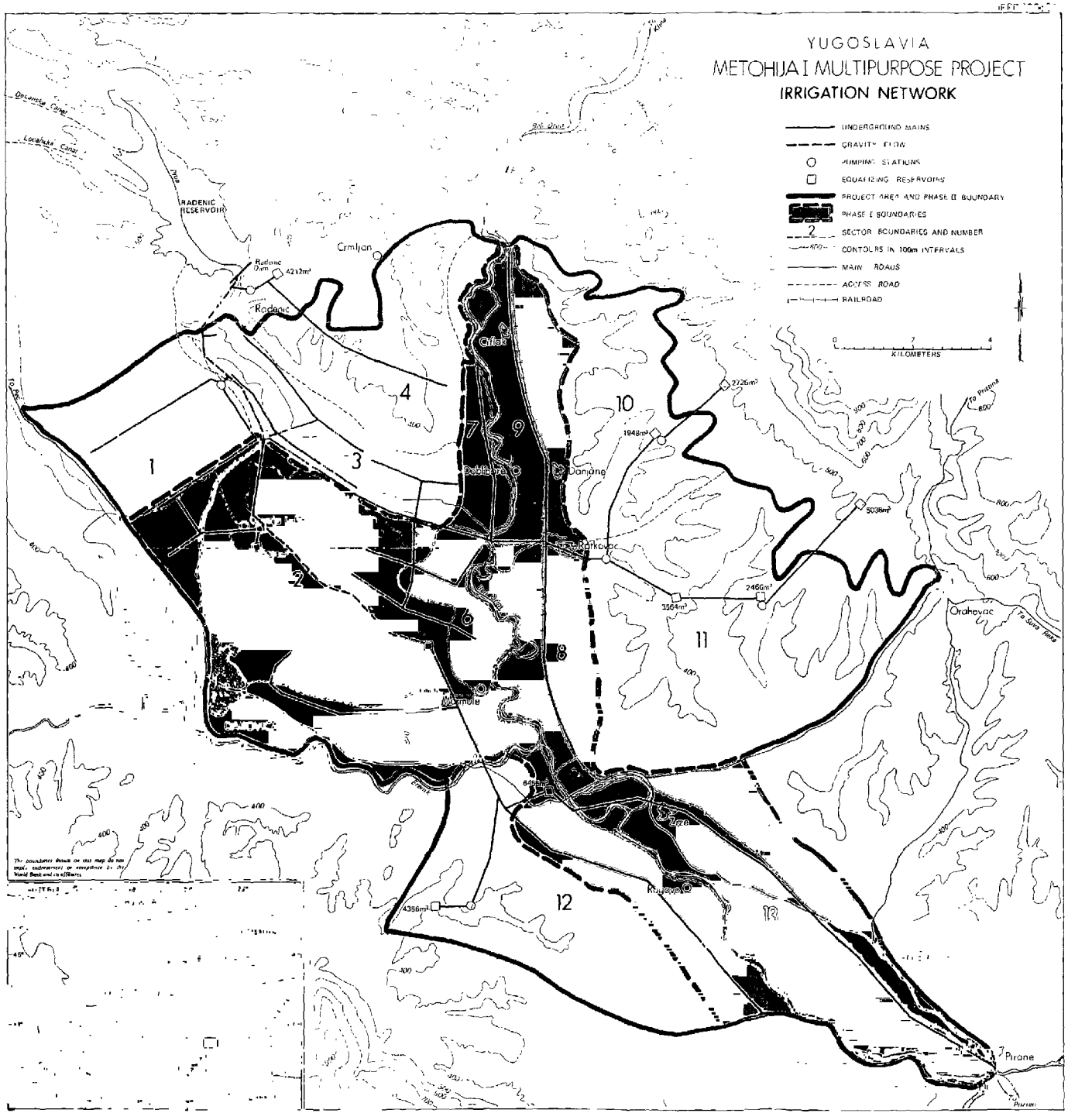
(d) VOM to submit a report on project accounts, audited by the Social Accounting Service of Yugoslavia (para 57);

(e) VOM to collect, from commencement of irrigation, water charges annually at rates which would be agreed with the Bank, and review these rates periodically in consultation with the Bank (para 51);

(f) VOM to impose charges for potable water sufficient to provide, in any given year, revenues to cover all administrative and operating expenses incurred in providing the supply and, in addition to provide a return on net fixed assets employed of not less than 7 percent by the year 1982 and thereafter (para 52); and

(g) Government of Kosovo to implement the financing plan as agreed during negotiations (para 54).


YUGOSLAVIA
METOHIJA I MULTIPURPOSE PROJECT
POTABLE WATER SUPPLY COMPONENT
PROJECT AREA BOUNDARY
WATER TREATMENT PLANT
WATER STORAGE PHASE I
WATER STORAGE PHASE II
PUMPING STATION, PHASE I
PUMPING STATION PHASE II
BOOSTERS STATIONS PHASE II
TRUNK AND DISTRIBUTION MAINS PHASE I
TRUNK AND DISTRIBUTION MAINS PHASE II
EXISTING MAINS
EXISTING WATER STORAGE
BOREHOLES
CONTOURS IN 100 m INTERVALS
DIAMETERS IN mm
VILLAGES
MAIN ROADS
ACCESS ROAD
RAILROAD
0 2 4
KILOMETERS
RADENIC RESERVOIR
Radenic Bari
Janos
Piskotit
Cimbar
Rakovina
Hermoviti
Petrovide
Ciflak
Mace
Donjone
Bratotin
Vranjak
Birdusan
Potocane
Orchovac
D. Potocane
Radosti
Sopnic
Marnule
Grede
Birnjace
Cirkva
Bistražin
Zrze
Rogovo
Nogavac
Velika Kruša
Pirane
To Prizren
To Kline
Decanska Bistrica
Locanska Bistrica
Beli Drim
Erenik
Prizren
Bistrica
The boundaries shown on this map do not imply endorsement or acceptance by the World Bank and its affiliates.


YUGOSLAVIA
METOHIJA I MULTIPURPOSE PROJECT
IRRIGATION NETWORK
UNDERGROUND MAINS
GRAVITY FLOW
PUMPING STATIONS
EQUALIZING RESERVOIRS
PROJECT AREA AND PHASE II BOUNDARY
PHASE I BOUNDARIES
SECTOR BOUNDARIES AND NUMBER
CONTOURS IN 100m INTERVALS
MAIN ROADS
ACCESS ROAD
RAILROAD
KILOMETERS
RADENIC RESERVOIR
Radenic
Crmljan
Cifak
Debelica
Danjane
Korkovac
Orahovac
Mamule
Rusevo
Pirane
1
2
3
4
7
8
9
10
11
12
13
4212m³
2726m³
1948m³
5038m³
2460m³
3564m³
4356m³