

# **ASIAN DEVELOPMENT BANK**

**REPORT AND RECOMMENDATION  
OF THE  
PRESIDENT  
TO THE  
BOARD OF DIRECTORS  
ON A  
PROPOSED LOAN  
AND  
TECHNICAL ASSISTANCE GRANT  
TO THE  
REPUBLIC OF UZBEKISTAN  
FOR THE  
RURAL ENTERPRISE DEVELOPMENT PROJECT**

November 1996

## CURRENCY EQUIVALENTS

(as of 30 September 1996)

Currency Unit	-	Sum
Sum1.00	=	\$0.025
\$1.00	=	Sum40

The exchange rate of the sum is determined by the Central Bank of Uzbekistan under a managed float system.

## ABBREVIATIONS

BIS	-	Bank for International Settlements
CAR	-	Central Asian Republic
DFI	-	Development Finance Institution
EBRD	-	European Bank for Reconstruction and Development
EIRR	-	Economic Internal Rate of Return
EU-TACIS	-	European Union Technical Assistance for Commonwealth of Independent States
FIRR	-	Financial Internal Rate of Return
FSU	-	Former Soviet Union
GDP	-	Gross Domestic Product
IDC	-	Interest During Construction
IMF	-	International Monetary Fund
NBU	-	National Bank for Foreign Economic Activity of the Republic of Uzbekistan
OCR	-	Ordinary Capital Resources
PIF	-	Privatization Investment Fund
PIU	-	Project Implementation Unit
SBA	-	Standby Arrangement
SDR	-	Special Drawing Rights
SME	-	Small and Medium Enterprise
SOE	-	State-owned Enterprise
STF	-	Systemic Transformation Facility
TA	-	Technical Assistance
UNDP	-	United Nations Development Programme
USAID	-	United States Agency for International Development

## NOTES

- (i) The fiscal year (FY) of the Government and NBU ends on 31 December.
- (ii) In this Report, "\$" refers to US dollars.
- (iii) In this Report, "ton" refers to metric ton.

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## LOAN AND PROJECT SUMMARY

<b>Borrower</b>	:	Republic of Uzbekistan
<b>Project Description</b>	:	The Project is designed to support the market-based development of non-State enterprises, predominantly small and medium enterprises (SMEs) in agro-processing in rural areas. Rehabilitation and modernization of the existing production facilities will enable SMEs to produce marketable-quality products. With the resulting expansion of markets and the containment of further deterioration of production facilities, falling employment and real wages in this sector will be mitigated. A \$50 million loan will be provided by the Bank to finance 25-50 investment projects in the sector.
<b>Classification</b>	:	Economic Growth
<b>Environmental Assessment</b>	:	Category B. An initial environmental examination was undertaken for eight selected representative subprojects. No significant adverse environmental impacts have been identified. Further environmental examination will be undertaken for all subprojects.
<b>Rationale</b>	:	Uzbekistan has the potential for developing an internationally competitive agro-processing industry that processes domestically produced raw materials, particularly horticultural products. Agro-processing is currently constrained by outmoded equipment in former State-owned enterprises (SOEs) and the lack of microprocessing facilities on collective and family farms. Accordingly, the proposed Project will focus on the rehabilitation and modernization of the agro-processing sector. The Project will arrest further deterioration of production facilities, sustain demand for agricultural outputs and labor, improve efficiency and product quality through the introduction of new technology, increase value added, and facilitate export diversification.
<b>Objectives and Scope</b>	:	The objectives of the Project are to (i) rehabilitate and modernize existing SMEs in the agro-processing sector so as to sustain primary production levels and increase exports, and (ii) provide collective and family farms with new microprocessing facilities to increase value added and rural incomes. In selecting the SMEs, priority will be given to export-oriented investment proposals that focus on upgrading processing and packaging lines to international standards. This will enable the selected SMEs to access

new export markets beyond Uzbekistan's traditional Former Soviet Union (FSU) markets. This is particularly true for those intermediate products such as tomato paste and fruit juice concentrate that require a small number of large customers rather than fragmented retail marketing. The subprojects to be financed under the proposed Bank loan will be mainly for the processing of fruits and vegetables. In addition, financing will be provided for suitable dairy subprojects in response to the high demand for packaged milk products.

**Cost Estimates :** The total cost of the Project is estimated at \$87 million equivalent, comprising a foreign exchange cost of \$57 million (65 percent), and a local currency cost of \$30 million equivalent (35 percent). The cost estimates include appropriate provision for physical contingencies and price escalation.

**Financing Plan :** (\$ million)

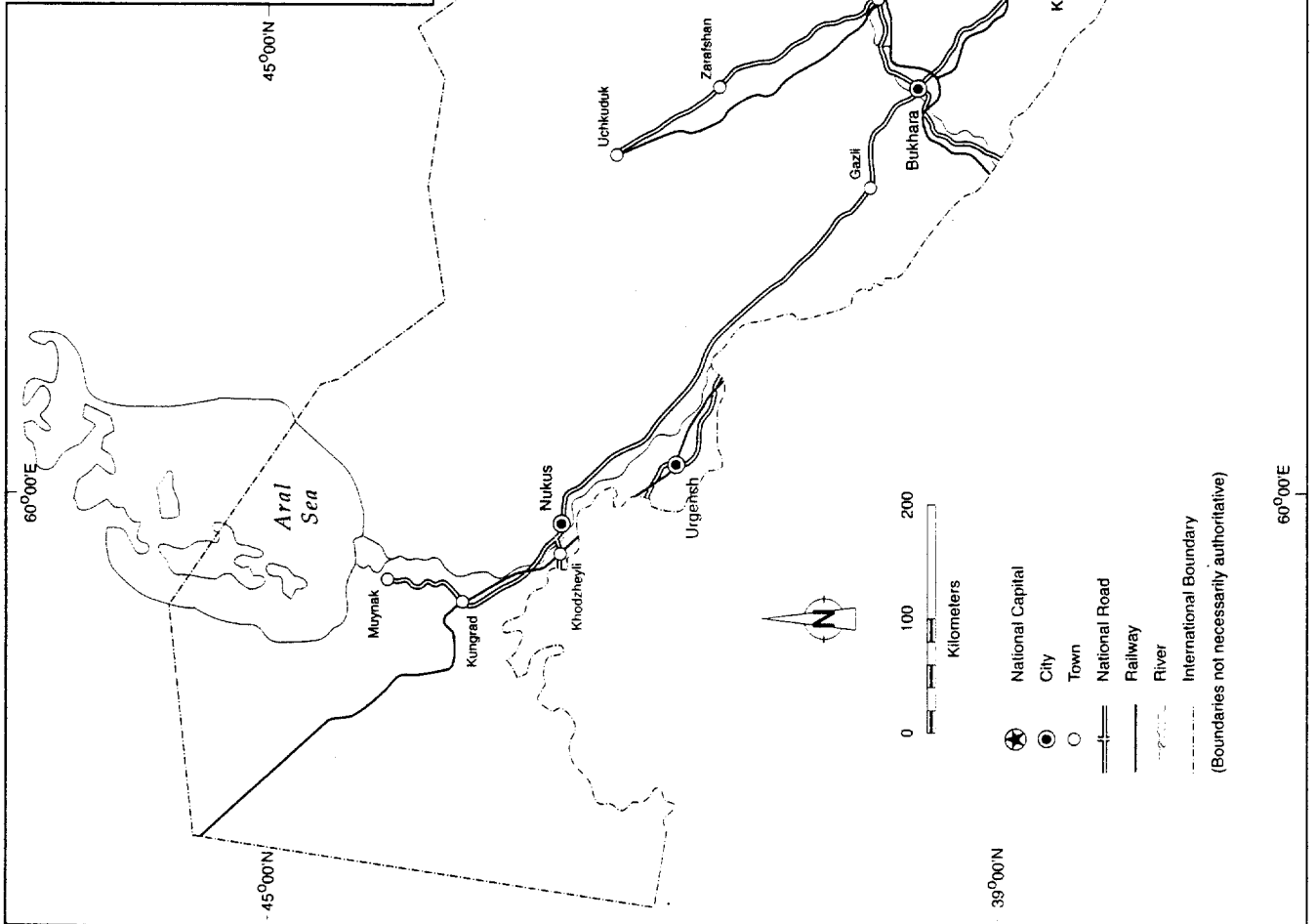
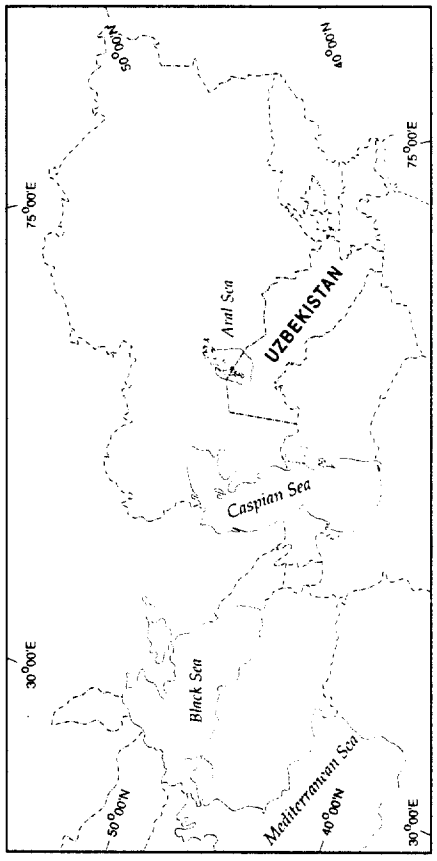
Source	Foreign Exchange	Local Currency	Total Cost
Bank	50	-	50
Other Foreign Financing	7	-	7
Subborrowers and Local Financial Institutions	-	30	30
<b>Total</b>	<b>57</b>	<b>30</b>	<b>87</b>

**Loan Amount and Terms :** The loan amount will be \$50 million. The Borrower will be the Republic of Uzbekistan. The loan will be for a period of 15 years including a 3 year grace period. The interest rate on the Bank loan will be determined in accordance with the Bank's pool-based variable lending rate system for US dollar loans. The standard commitment charge of 0.75 percent per annum will be applied.

**Relending and Onlending :** The Government will relend the loan proceeds in US dollars to the Executing Agency, the National Bank for Foreign Economic Activity of the Republic of Uzbekistan (NBU). The relending terms and conditions will be identical to those of the Bank loan to the Borrower.

The onlending interest rates to be charged by NBU to the subborrowers will be based on market rates in Uzbekistan and NBU's assessment of credit risk of the borrowers. The maximum subloan size will not exceed \$5 million. The free limit will be \$2 million. Subloans greater than \$2 million, as well as subloans for all subprojects which do not generate foreign exchange earnings will be subject to the prior approval of the Bank.

<b>Cofinancing</b>	:	The Overseas Economic Cooperation Fund of Japan is considering cofinancing with the Bank. Accordingly, preliminary discussions have taken place regarding the possibility of expanding the Project scope at a later stage.
<b>Period of Utilization</b>	:	The closing date for submission of subloan applications for approval and authorization for withdrawals will be three years after the date of loan effectiveness. The closing date for disbursements will be five years from the same date.
<b>Executing Agency</b>	:	National Bank for Foreign Economic Activity of the Republic of Uzbekistan
<b>Procurement</b>	:	The Bank's <i>Guidelines for Procurement</i> will be followed.
<b>Estimated Project Completion Date</b>	:	15 June 2002
<b>Benefits</b>	:	The main benefits of the Project will be (i) containment of further deterioration of the agro-processing industry; (ii) improved efficiency through adoption of processing and packaging technology that meets the requirement of international markets, which is essential for the industry to recoup its traditional FSU export markets as well as to gain access to non-traditional export markets beyond the FSU countries for processed horticultural products; (iii) higher value added products; (iv) mitigation of the rural unemployment problem; (v) support of enterprises in transition towards a market-based corporate ownership structure; and (vi) promotion of balanced regional development and sustainable rural employment opportunities.
<b>Technical Assistance</b>	:	An advisory technical assistance grant of \$830,000 is proposed for the institutional strengthening of NBU. The objective of the technical assistance is to strengthen the capacity of NBU's branch offices to screen subproject proposals, and design as well as implement a subproject benefit monitoring and evaluation system in NBU's Headquarters.



## I. THE PROPOSAL

1. I submit for your approval the following Report and Recommendation on (i) a proposed loan to the Republic of Uzbekistan for the Rural Enterprise Development Project,<sup>1</sup> and (ii) proposed technical assistance (TA) for Institutional Strengthening of the National Bank for Foreign Economic Activity of the Republic of Uzbekistan (NBU).

## II. INTRODUCTION

2. Since Uzbekistan's independence in 1991, the Government has undertaken a macroeconomic stabilization program that has aimed at minimizing output contraction, reducing inflation, and averting a balance of payments crisis. After five years of this program, inflation has sharply declined, and the consolidated fiscal deficit has been significantly reduced. In addition, net foreign exchange reserves have been built up, and the current account deficit has been contained. Gross domestic product (GDP) is expected to resume its growth, albeit modestly at a rate of 1.1 percent, in 1996.<sup>2</sup>

3. The Government's macroeconomic stabilization program has been supported by the International Monetary Fund (IMF), initially under a Systemic Transformation Facility (STF) extended in 1995 with two purchases equivalent to Special Drawing Rights (SDR) 49.9 million each. Aside from macroeconomic stabilization, the STF program included a number of structural and institutional reforms to speed up the market orientation of the economy.

4. Progress achieved under the STF program enabled Uzbekistan subsequently to gain further support through an IMF Standby Arrangement (SBA) in the amount of SDR124.7 million equivalent, which became effective at the end of 1995 to cover a period of 15 months. The main objectives of the SBA are (i) consolidating the gains in macroeconomic stabilization, (ii) laying the foundations for economic recovery, and (iii) improving living standards by reducing administrative interventions in the economy. The first and second reviews of the SBA have been completed. Although, in general, the agreed program was adhered to, the areas highlighted for further attention of the Government were enterprise arrears, the payments system, and operations of the foreign exchange market.<sup>3</sup>

5. With the progressive attainment of macroeconomic stabilization, the Government is increasingly focusing on the need to deepen structural adjustment in the economy. However, although the economic outlook has improved, there are some difficult challenges in the near future. In this context, the Government is aware of the economy's heavy dependence on cotton and gold as major export earners (accounting for more than 65 percent of total exports in recent years). This awareness is heightened by current World Bank projections of international prices for cotton which are not favorable in the medium term.<sup>4</sup> Furthermore, lower than projected

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<sup>1</sup> The proposed Project constitutes the first Bank loan to Uzbekistan.

<sup>2</sup> For additional information on the economy, see Document IN.208-96: *Economic Report on Uzbekistan* (No. ECR:UZB 96019), circulated to the Board on 14 October 1996.

<sup>3</sup> Recent developments in the foreign exchange market and the impact of Central Bank influence in exchange rate determination are discussed in Appendix 9, Financial and Economic Analysis.

<sup>4</sup> World Bank Commodity Prices and Price Projections (August, 1996) indicate cotton prices in nominal terms declining from an average \$2,130/ton in 1995 to \$1,790/ton in 1996 before recovering gradually to \$2,160/ton in 2005. In constant 1990 US dollars, the projections indicate a sharp decline from \$1,850/ton in



cotton and grain harvests in 1996, exacerbated by inclement weather conditions, will have implications for the balance of payments. The resultant current account deficit may deteriorate to about 4-5 percent of GDP. Accordingly, export diversification has emerged as one of the Government's important development priorities.

6. The Government is also concerned about the medium-term impact of relatively moderate capital inflows and a severe underemployment problem in rural areas.<sup>1</sup> It anticipates considerable potential displacement of labor in rural areas, in the light of measures being formulated with the objective of increasing efficiency in the agriculture sector, including agro-processing. Moreover, the total labor force in the country is expanding at over 200,000 a year, with 50 percent or more of this expansion originating in rural areas. At the forefront of the Government's plans to deal with this situation is the intention to develop competitive small and medium-scale agro-processing through the introduction of new technology, including under the aegis of foreign joint ventures. This approach will initially achieve the preservation of some employment but is also expected to lay the foundation for future expanded activity through a demonstration effect. Additionally, the Government aims to put in place programs to reorient the rural labor force through self employment/entrepreneurship initiatives, directed towards small scale, private activities including rural service occupations.

7. Fact-finding for the proposed Project was undertaken in June/July 1996, and appraisal in September 1996.<sup>2</sup> This Report is based on the findings of the Bank missions, a small-scale project preparatory TA,<sup>3</sup> the previous Bank economic mission, discussions with staff of various Government agencies and institutions, and consultations with the IMF, the World Bank and other aid agencies active in the sector.

### III. BACKGROUND

#### A. Sector Trends, Constraints, and Prospects

8. Agriculture plays a key role in Uzbekistan's economy accounting for about 30 percent of GDP and 45 percent of total employment. Over 60 percent of the population is dependent on agriculture for its livelihood. Most agricultural activity in Uzbekistan is concentrated in cotton and grains (90 percent of cultivated land), followed by fruits and vegetables (8 percent of cultivated land). Of about 4.4 million hectares (ha) under cultivation, 95 percent is irrigated. Of this irrigated land, 86 percent has been leased to collectives while the remaining 14 percent has been leased to individual farmers free of charge. Agricultural exports, mainly of cotton (including cotton fiber), account for about 50 percent of the country's total exports.

9. Under the Former Soviet Union (FSU), Uzbekistan was the main producer of cotton. The principal orientation of agriculture was the production of cotton fiber for export to

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1995 by almost 20 percent in 1996, at which depressed-level prices are projected to remain through to 2005.

<sup>1</sup> According to IMF estimates, the effective unemployment rate is approximately 15 percent of the total labor force, of which 12 percent is concentrated in rural areas.

<sup>2</sup> The Appraisal Mission consisted of H. Wei (Project Economist/Mission Leader), D. Edwards (Senior Economist), C. Wee (Counsel) and B. Carrasco (Young Professional). The Mission was supported by R. Collier (Consultant), J. Spurr (Consultant), and N. C. Singhal (Consultant).

<sup>3</sup> TA No. 2624-UZB: *Rural Enterprise Development Project*, for \$100,000, approved on July 1996.

other parts of the FSU. In addition, the country was amongst the largest producers of fruits and vegetables and was an important source of fresh and processed fruit and vegetable products to the other FSU republics. At the time of independence, Uzbekistan accounted for about 20 percent of the production of tomatoes and about 10 percent of apples in the FSU. According to trade figures prior to the breakup of the FSU, in 1990 Uzbekistan accounted for a 14 percent share in the total value of intra-Soviet trade in fruits and vegetables.<sup>1</sup> In contrast, it was a significant net importer of grains within the FSU trading system.

10. After the breakdown of the trade and payments systems of the FSU, Uzbekistan successfully reoriented the export of cotton fiber to higher value world markets. Moreover, earnings from cotton exports increased by over 100 percent between 1992 and 1995 because of a rise in world prices of cotton and the reorientation to non-FSU markets (see Table 1, Appendix 1). However, at the same time, the cost of grain imports rose significantly as previous FSU suppliers aligned primary product prices to world market prices. Grain import costs were further aggravated by rising transport costs and the requirement for payment in hard currency. In response, the Government adopted a policy of achieving self-sufficiency in grains, particularly wheat and barley. Consequently, grain production increased by more than 50 percent between 1991 and 1995, although yields (1.9 tons/ha for wheat in 1995) are not high by international standards (see Table 2, Appendix 1).

11. As in many other economies in transition, there were early disruptions to the productive system as a whole. After independence, there was a severe pressure on public finances as resource transfers from Moscow ceased. The payments system was thrown out of gear and the collapse of the ruble zone had a major impact on all productive sectors. As inflation soared, incentives to save and invest were also eroded. The decline in aggregate demand and the limited supply response capability of the economy resulted in a fall in real incomes. These macroeconomic developments had an economywide impact on all productive sectors. However, compared with other sectors of the economy, agriculture has experienced a smaller degree of contraction. There was a resumption of growth in 1995 and agricultural production increased by over 2 percent (see Table 3, Appendix 1). The growth revival was mainly the result of an increase in cropped area for grains and improvements in cotton productivity.

12. However, a general restructuring of agriculture and agro-processing industries under the Government's broader reform program has been impeded by a number of factors. First, investment, both public and private, has been severely squeezed. Faced with limited resources and hyperinflation, the share of capital investment in agriculture declined from 25.3 percent in 1991 to 7.2 percent in 1995 (see Table 4, Appendix 1). Second, rural enterprises have faced severe cash and credit constraints which led to a progressively worsening economic situation in rural areas. Many agro-enterprises have used reserves and cash holdings accumulated under the prior economic system to acquire their own enterprise shares under the privatization process, thus further aggravating their financial situation in the short term. Third, the inadequate development of the banking system has impaired the flow of credit to agriculture as a whole and to agro-processing enterprises. Banking procedures have imposed restrictions on cash transactions in the economy and this has posed other problems, e.g., payments for products have to be undertaken by bank transfer which has often led to slow and delayed

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<sup>1</sup> Post-independence data on such trade with the FSU has become more limited in scope and reliability due to the breakdown of the trade and payments systems and the increased prevalence of barter trade.

payments to farmers. Apart from cotton and grain, where the State order procurement system is still operational, the weaknesses in the payments system has eroded incentives for farmers of arable produce to deliver produce to processors. Fourth, the general transition of the economy as a whole has had implications for agriculture. In the face of growing difficulties with the previously important trade within the FSU and the decline in the demand for fresh produce in local markets, farm-gate prices and incomes have been depressed.

13. One of the consequences of the inadequate restructuring within agriculture has been growing underemployment. Employment has suffered as aggregate demand declined; a number of unviable enterprises have closed down. Many small-scale agro-industrial enterprises were privatized in the first phase of privatization. However, in the absence of capital investment and modernization, a number of these units were compelled to close. At the same time, new employment opportunities have been very limited. As large and medium-sized industrial units have scaled down, the possibility of rural labor being absorbed in industry has waned. The pressure of population growth has exacerbated the employment problem in rural areas. Unemployment in the rural areas has become a serious problem. Effective unemployment in agriculture is estimated to be around 1 million, or approximately 12 percent of the entire labor force. Furthermore, workers in agriculture receive amongst the lowest wages in the country, earning in 1995 on average approximately Sum777 (about \$19) per month compared with an economywide average of Sum1,066 (about \$27) per month (see Table 5, Appendix 1). Since independence, the ratio of the average wage in agriculture to the overall average wage has declined by 30 percent.

14. Although agriculture as a whole has been subject to various pressures outlined above, cotton and grains have been somewhat protected. The State order system has insulated both products from many of the problems faced by others, e.g. access to credit and crucial inputs. Liberalization and the initial privatization have had the greatest impact in markets for horticultural and dairy produce. Price liberalization for most of these products has created the basis for functioning markets. At the same time, small private farms have emerged as lands have been leased by the Government. And, as collective ownership has replaced State ownership, the initial corporatization has laid the foundation for many such farms and agro-processing enterprises to become responsible for their own production and marketing decisions.

15. In horticulture, however, the breakdown of the trade and payments system of the FSU has had an adverse impact on exports and Uzbekistan has been unable to exploit potential opportunities for shifting horticultural exports towards hard currency markets. This has been because of the nature of fruit and vegetable products which are less amenable than cotton fiber to the available bulk transportation, as well as to a less well-developed international commodity exchange for such products. Moreover, for processed products, the existing processing and packaging technology have not met international standards and marketing expertise is inadequate. For fresh produce, the main constraints have been the inadequate quality of products and packaging available as well as the lack of air freight capacity, appropriate marketing knowledge, and distribution infrastructure such as cold storage.

16. Post-harvest losses in horticulture are estimated to be at least 25 percent of total production. Two factors mainly account for such high post-harvest losses. First, harvesting methods have been wasteful. Poor practices have arisen under the old communal system in which farmers were wage labor and had no financial incentive to maximize revenues. However,

this is already changing as increasing numbers of farms become privately operated, but improvements are slow because of the continuing inefficient and bureaucratic marketing system that is characterized by delayed and part payments for farm produce. The second is the impact of lack of markets for processed horticultural products. As stated above, this has been a combination of the result of the inability to gain access to non-FSU markets and, after its breakup, the immediate loss of market access to the FSU other than on a more limited barter trade basis. Farm surveys suggest that, in some regions, as much as 50 percent of the crop produced has not been marketed.

17. Practical deficiencies have been evident; for instance, in the marketing of horticultural produce to agro-enterprises. Such practices have tended to be unsophisticated in that the product has been purchased ungraded and unsorted at the same price regardless of quality. As a result, it has not been possible for processors to procure inputs of optimal quality and price, either paying unnecessarily high prices for that part of inputs that exceeds quality requirement or suffering reduced quality of output, with subsequent lower selling price, on account of the processing of partial substandard inputs. For instance, apple juice in international standard production is usually made from the lowest quality of apples as appearance and damage to the solid apples do not influence the quality of juice produced. The most important European producers of apples for juice production are Poland and Italy. As a result of grading and sorting, European producers are able to purchase low quality apples at a current price of about \$40/ton, well below the average price of apples sold in Europe. Because of lack of grading, Uzbekistan's processors have not had the opportunity to follow a similar practice and have paid the average price for apples rather than a lower price for lower quality apples. Even so, this average price has been slightly lower than the price for low quality apples paid by European processors.

18. In horticulture and the dairy industry, producer associations<sup>1</sup> during the transition phase of the economy have tended to play an important role in the organization of agro-processing, though partly replicating aspects of the previous monopolistic structure. Nevertheless, they have provided a necessary intermediary role in securing agro-processors with marketing links and access to fuel, spare parts, supplies, transportation, and credit to procure material for processing. The activities and structure of the producer associations, however, have tended to preserve aspects of the previous monopsonistic relationship of agro-processors with farm produce suppliers.<sup>2</sup> While in the past, the producer associations and agro-processors may have displayed a competent grasp of technical processing issues and marketing as directed under the FSU system, they have not displayed the flexibility necessary to access existing opportunities in international markets. The realization of these opportunities will require the rapid acquiring and disseminating of knowledge and skills to upgrade produce procurement practices, equipment, market know-how, and pricing decisions.

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<sup>1</sup> Producer associations emerged from the previous FSU ministerial structure. They are now regarded as independent entities without budget support. Their function, in recent years, has evolved into that of providing services to enterprises which are members of a produce association. These services include technical and marketing assistance to enterprises as well as advice concerning technologies for enterprise rehabilitation and modernization. Enterprise members pay a fee to the producer association on the basis of an annual service agreement. The Association of Fruit and Vegetables Production, has up to 60 members for instance, involved in the agro-processing sector, each of which is a separate legal entity though under different forms of ownership structure.

<sup>2</sup> Many agro-processors also had a direct ownership link under the previous system with collective farm produce suppliers.

19. Despite many constraints, however, Uzbekistan retains several advantages for the development of an internationally competitive food-processing industry. Apart from favorable climatic conditions which allow for high quality produce, the extended growing season and limited annual climatic variations also will provide a more reliable and steady source of product supply for down-stream processors. This particularly would be the case in comparison with European producers of apples for juice production, which are characterized by unpredictable supplies and large price variations. In addition, an abundant labor supply provides potentially low production costs as labor is a major cost in horticulture, particularly in harvesting activities. Uzbekistan has a potential advantage from its low cost of labor compared with the higher and rising cost of labor in many alternative sources of supply for processed horticultural products, particularly Italy which is the largest European supplier of tomato paste. Nevertheless, in the past this advantage has been dissipated by inefficient on-farm and post-harvest factors (see paras. 16 and 17).

20. Uzbekistan continues to be a major aggregate producer of tomatoes. Food and Agriculture Organization (FAO) data for 1995 indicate production to have been between one third more to double that of countries such as Israel, Morocco and Bulgaria. Compared with various countries in the Mediterranean littoral, Uzbekistan would be among the top seven countries in per capita production of tomatoes in 1995, following Greece, Turkey, Israel, Italy, Egypt and Spain. By contrast with fresh produce, processed horticultural produce faces limited tariff barriers to entry in Western Europe.<sup>1</sup> However, Uzbekistan currently has a considerable economic disadvantage because of its location in relation to target Western European markets. Rail transport cost for tomato paste and fruit juice concentrate is \$200/ton to European centers, constituting about 22 percent of the delivered price for tomato paste and 13 percent for fruit juice concentrate. However, transport inefficiencies have been estimated to account for half of this cost; measures to alleviate these inefficiencies would significantly improve returns to horticultural and other exports.<sup>2</sup>

21. The labor cost advantage also applies, to a limited extent, to processing itself. However, the various advantages identified have been constrained by the inefficiencies in production, processing, marketing, transport and management. In the medium term, this inefficiency is expected to diminish with the move towards attainment of international efficiency levels as transport and market systems improve, and the labor cost advantage at the farm level translates into cost advantages in input supply. The investment in the rehabilitation and modernizing of existing agro-processing technology will be an important step to realize the potential advantages.

22. As a first stage in the reactivation of the agro-processing sector, it is expected that investment in rehabilitating agro-processing plant and equipment to realize a higher value added product will serve to mitigate rising rural unemployment and falling wages, assisting thereby to arrest the decline. In the long run, as structural reforms are deepened with market

<sup>1</sup> European Union Technical Assistance for Commonwealth of Independent States (EU-TACIS) reports that Uzbekistan has entered a special trade protocol with the European Union concerning import duties and quotas. This protocol lays down a schedule for the reduction of mutual trade barriers; most are expected to be removed by 1999, or at least substantially reduced.

<sup>2</sup> Facilitating efficiency gains in the railways has been identified as a priority within the Bank's interim operational strategy for Uzbekistan. The Bank's proposed Country Assistance Plan envisages an investment for railways in 1998.

reforms aligning domestic farmgate prices with comparable world levels and as antimonopoly measures take effect, it is expected that greater competitive forces will underpin gains in factor productivity and sustainable growth.

23. Of particular importance to attaining these objectives will be the phasing out of the previously dominant role of the producer associations. This will be facilitated by increased independence on the part of agro-processing enterprises made possible by the efficiency gains and higher value added product arising from the utilization of upgraded equipment and the establishment of direct marketing channels to non-FSU countries. The anticipated involvement of foreign joint-venture processors may be expected to accelerate this process. Over time, it would be desirable that the efficiency gains also be shared at the farm level through improved farm-gate prices and incomes (subject to the influence of movements in the international price for processed products in equally determining movements in market price for farm produce).

24. Within the dairy industry, pressure to introduce competition comes from the farmers as the source of raw milk supply and the largest group of dairy product consumers. Dairy products form a traditional part of the country's diet in the form of cheese, creams of differing thickness, butter, curds, and drinking milk. Under the former controlled system, raw milk was produced on large State farms and sold at low, fixed prices to State-owned milk factories which sold the produce at controlled prices. The price controls gave large margins to the factories at the expense of both farmers and consumers; under the State farm system the farmers and consumers were often the same people. These large margins appear not to have resulted in highly profitable, cash rich milk factories but to high levels of inefficiency and processing costs.

25. Reforms have resulted in privatization of the State farms as collectives and freedom of individual farmers, both on collectives and private farms, to keep dairy cattle. The milk factories have been corporatized and privatized, but with substantial remaining State share holdings. The reforms have yet to have real impact on competition and efficiency as the factories are still local monopsonists, able to depress input prices and sustain high output prices, and the factories require high margins to avoid reductions of inefficiency to reduce costs and reduce their high levels of employment - the employee's collectives being the major non-State shareholders. The markets for both raw milk and processed dairy product remain essentially local in the absence of the necessary temperature controlled storage and distribution facilities.

26. Consequently, low raw milk prices have made dairy cattle an unattractive farm activity and cows which are genetically capable of producing 20 liters/day or more are producing typically 7-8 liters/day and often, under individual ownership, as little as 3-4 liters/day because the raw milk prices do not justify the cash costs of feed or veterinary services needed to obtain higher yields.

## **B. Government Policies and Plans**

27. Since independence, the Government has pursued an agricultural policy that has sought to (i) improve cotton productivity and the development of downstream cotton processing capacities, and (ii) promote greater self-sufficiency in grain production through expansion of cultivated land. Furthermore, the Government has also implemented structural reform measures directed at imparting dynamism to the development of the agriculture sector. Major

reforms have included the privatization of State farms, corporatization of agro-processing enterprises, elimination of price controls on most agricultural commodities, dismantling of the State order procurement system (except for cotton and grain)<sup>1</sup>, leasing of land to collectives and individual farmers and the promotion of foreign investment.

28. Tax concessions<sup>2</sup> have been used to encourage the development of private farms as well as to offset the impact of the relatively low farmgate commodity prices. With these measures, the mobilization of investment to further reactivate agriculture, particularly non-cotton/non-grain activities, is a major challenge. As a component of meeting this challenge, the Government is concerned also to develop support services to ease the transition to private farming, de-emphasizing the control functions which customarily guided and determined farm-level decision making.

29. Under the Government's reform program, all State farms have been transformed into collectives or leased private farms. It is estimated that some 17,500 individually owned private farms have been created during the past four years. The privatization of the agro-processing sector was initiated in 1992. Agro-processing enterprises have been transformed into collectives, leased enterprises, cooperatives, joint-stock companies and other types of organizations. In the main, agro-processing enterprises have been converted into joint-stock companies. However, during the first stage of privatization many former State-owned enterprises (SOEs<sup>3</sup>) were corporatized as distinct from being wholly privatized. That is, while they were made managerially and financially autonomous, for many a significant portion of their shares were held on deposit at the Stock Exchange. For shares not so deposited, up to 25 percent would be held by the enterprise workers and up to 26 percent could be held by the State. However, the combined shareholding of the workers and the State was not to exceed 49 percent.

30. The Government initiated a second phase of privatization in 1995. The Government now proposes to accelerate the privatization under this phase, to be supported by the World Bank's proposed Enterprise Reform Project. This program is expected to complete the transformation of "privatized" enterprises from collective/State entities into more effectively functioning private entities. A component of the program emphasizes enhancing the role of Privatization Investment Funds (PIFs), which have been strengthened by a decree of June 1996. Under the accelerated privatization program, enterprise shares held on deposit will be made available on the basis of 19 percent for free sale.<sup>4</sup> Of the remainder, at least 30 percent of shares will be available for purchase by PIFs or foreign investors. On the presentation of reasonable investment programs, and subject to demand, PIFs or foreign investors may even purchase the State shareholding. Though the focus at this stage is more upon medium and

<sup>1</sup> The State order procurement for cotton has been reduced to 40 percent of total production which is purchased at 70 percent of world price. For grains, the State order procurement is set at 25 percent of total production to be purchased at 75 percent of the world price. State order procurement is scheduled to be eliminated by the end of 1997 for grain and by the end of 1998 for cotton.

<sup>2</sup> Not only is agriculture exempt from the value-added tax (VAT) but it is levied a lower profit tax rate than other sectors. In addition, individual farmers are exempt from profit tax and land tax for the first two years. More generally, tax concessions also apply to foreign joint ventures and export-oriented enterprises (see Appendix 9, Financial and Economic Analysis).

<sup>3</sup> Specifically, SOE refers to the enterprises with the State shareholding more than 50 percent.

<sup>4</sup> This provision for free sale has already been in existence with no restriction for designated enterprises on sale through the Stock Exchange. However, for many enterprises thus far such demand has been limited.

large enterprises, no limitation has been placed on PIFs or foreign investors being involved in food processing. Under the accelerated privatization program, 600 enterprises are targeted to have completed these procedures by the end of 1997 and 700 other enterprises will be subsequently privatized under other arrangements, including PIFs, to be finalized.

31. Apart from the program of accelerated privatization, the Government's concern to promote SMEs is of particular importance to the agro-processing sector. Measures adopted include the application of as much as 50 percent of the proceeds from privatization sales towards post-privatization support for newly privatized firms under the aegis of the Fund for Assistance in the Development of Small and Medium Business (Business Fund). Additionally, since March 1994, working collectives have been guaranteed (i) shares in own enterprises on preferential terms, (ii) the free transfer of fixed assets which had been depreciated to the extent of at least 70 percent, (iii) free use of social infrastructure, and (iv) a discount on the sale price of property resulting from the purchase of other fixed assets. Since May 1995, measures have been put in place to increase the liability of directors of enterprises for the settlement of payments. In principle, this has established the framework for bankruptcy proceeding against insolvent firms, though so far very few small enterprises have been so affected.

32. Since August 1995, several other measures of post-privatization support to SMEs have been established. Chambers of entrepreneurs are being set up across the country to support both private industry and farming. The potential export role of SMEs, including joint ventures, has been recognized, which would also require a more supportive credit delivery system. Among pilot programs under way are (i) a United Nations Development Programme (UNDP)-supported business incubator program located in Tashkent and Samarkand to provide business infrastructure facilities for SMEs, and (ii) an EU-TACIS supported Business Communications Center set up to match local and foreign firms interested in establishing joint ventures. In addition, several externally supported training programs and pilot enterprise activities have been initiated. These are aimed at inculcating private sector methods and business practices and values in order to change the standards of business operations, and the way of thinking and approaches to decision-making by managers.

33. The employment situation in rural areas is of major concern to the Government. Accordingly, one of the Government's development priorities is the rehabilitation and modernization of agro-processing enterprises with foreign joint-venture participation as appropriate. The Government's special rural employment program will also be directed at organizing rural service employment and developing rural infrastructure. A particular focus of this special program is fostering self employment/entrepreneurship among rural communities. In support of this objective, each region is to have organized centers for the dissemination of the values and characteristics of entrepreneurship and business methods, in support of SME development. Presently, 160 such centers have been established. Even though this special program targets the creation of 220,000 occupations a year (with at least 60 percent to be located in rural areas), the dimension of the employment problem to be tackled may be gauged from the fact that this number is approximately equal to the annual increase in the labor force.<sup>1</sup>

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<sup>1</sup> Government estimates place the cost of occupations/jobs created under this program at up to a unit cost of Sum400,000 (or up to an approximate \$10,000 equivalent).



### **C. External Assistance to the Sector**

34. The World Bank has adopted a country strategy which essentially supports the design and implementation of economic reforms. The following priority sectors have been identified: agriculture, infrastructure, health, finance and banking, and privatization. The World Bank approved a \$21 million TA loan for institution building in 1993, a \$160 million Rehabilitation Loan in March 1995 in support of the Government's structural reform program and a \$66 million Cotton Subsector Loan in May 1995. Policy-based lending includes an Enterprise Reform Loan (1997) and a Financial Sector Adjustment Loan (1998) which are currently in the World Bank's pipeline. The World Bank's medium-term investment program consists of a number of projects, viz., Farm Restructuring and Development Project (1997), Agricultural Support Services Project (1998), Agricultural Export Development Project (1998) and Drainage Project (1999). Issues that are expected to be addressed under these loans include pricing policy, land reform and farm restructuring, and rural financial intermediation.

35. Over the past three years, the European Bank for Reconstruction and Development (EBRD) has approved eight loans to Uzbekistan totalling approximately \$250 million. EBRD assistance has supported joint ventures, SME development and a trade facilitation program. Other projects proposed to EBRD include the modernization of the Fergana refinery, the rehabilitation of the Syr Darya thermal power station and improvement to the passenger terminal at Tashkent Airport. For SME development, EBRD has provided an onlending facility to NBU of \$60 million that has been fully committed. A second line of credit from EBRD is currently being considered, of which \$50 million is expected also to be channelled through NBU.

36. Other relevant assistance in support of agricultural policy reform has been received from the European Union's Technical Assistance for Commonwealth of Independent States (EU-TACIS) program. Additional financial and technical assistance has been provided to Uzbekistan by Germany, Japan, Republic of Korea, UNDP and the United States Agency for International Development (USAID).

### **D. Lessons Learned**

37. The Project has been formulated taking into account lessons learned during the Bank's past lending operations for agro-processing projects. A market-based approach has been adopted in the design of the proposed Project in order to promote the development of non-State SMEs as well as competition among enterprises. A relatively strong executing agency has been selected in order to offset the risks associated with limited recourse lending to subborrowers in a transition economy. The interest rates to be charged to subborrowers will reflect market conditions for subloans in US dollars; and subprojects will be screened and appraised by the executing agency in accordance with the sound criteria and procedures developed and refined under EBRD's ongoing line of credit.

38. Under the ongoing credit line financed by EBRD, NBU has learned valuable lessons which are generally consistent with the Bank's post-evaluation findings for lending to development finance institutions. The EBRD credit line to NBU had a slow start for several reasons: (i) NBU was inexperienced with limited recourse lending to the non-State sector; (ii) many of the business plans submitted by subborrowers were not in a good condition, resulting in time consuming revisions; and (iii) there was a high drop out rate for subprojects eventually

rated as unbankable. Based on this experience, NBU has enhanced its subproject appraisal and credit approval procedures and unbankable subprojects are now identified and dropped much earlier in the subproject cycle. The EBRD credit line (\$60 million) is now fully committed and disbursements as of September 1996 stood at about \$20 million.

39. Of the Bank's post-evaluation findings, the most relevant to NBU as the Executing Agency for the proposed Project are considered to be as follows: (i) indigenous subproject sponsors often need advice on the technical and commercial aspects of their proposals, (ii) subproject benefit monitoring and evaluation systems are an effective tool for the assessment of the financial performance and economic benefits of subprojects, (iii) the delegation of authority to branch offices can help the financial intermediary to become more dynamic and efficient, (iv) financial intermediaries with high quality appraisal, administrative and supervision procedures enhance the profitability of their subborrowers (and hence a low level of defaults), (v) expanded branch network of financial intermediaries can assist in achieving geographical diversification of subprojects, (vi) financial intermediaries' subproject appraisal quality can be enhanced by giving more emphasis to management capability of the subborrowers and the technology to be used, and (vii) the design of training programs should not be restricted to current needs but should include future development. The proposed advisory TA (see paras. 92-93) will assist NBU to enhance staff skills pertaining to limited recourse lending to the non-State sector.

#### **E. The Bank's Operational Strategy**

40. In consultation with the Government, the Bank has adopted an Interim Operational Strategy to guide its internal program of assistance to the country. The overriding principle of this strategy is to assist the Government in its objective to further the transition to a market economy. This approach will require Bank assistance in supporting (i) policy reforms, capacity building and institutional strengthening; (ii) improvements in efficiency; and, (iii) cost-effective investments<sup>1</sup> in rehabilitation. The designated sectoral priorities identified in collaboration with the Government include (i) agriculture, including financial support of SMEs in the agro-processing sector; (ii) transport infrastructure rehabilitation, especially in the road and railway subsectors; and (iii) education. The Bank will also actively support regional cooperation in Central Asia. The proposed Project, with its emphasis on the rehabilitation and modernization of agro-processing enterprises, is fully in accordance with this strategy.

#### **F. Policy Dialogue**

41. The Project design encompasses a number of policy issues as discussed with the Government. In this context, (i) SOEs will be excluded from participation as subborrowers under the Project; (ii) products with a presently more regulatory and distorted policy environment, such as cotton and grain, will be excluded from the Project scope; and (iii) onlending terms to subborrowers will be based on market-determined interest rates and other subloan conditions, such as setting criteria for assessing the financial soundness of subborrowers. In processing the Project, the importance was emphasized to the Government of its adhering to its intention under its IMF-supported program to: (i) abolish by the first quarter of 1997 the 30 percent surrender requirement of foreign exchange earnings from exports, and (ii) ensure current account convertibility for foreign exchange transactions.

42. The proposed Project will have a bearing on a number of other policy issues. Firstly, in promoting the transition to a market-oriented corporate structure with diversified ownership of agro-processing enterprises, including foreign joint ventures, the Project will promote competition within the sector. It will also help reduce the influence of residual monopolistic structures in agro-processing and facilitate the phasing out of the role of the producers associations in the transition to a market economy, particularly in horticulture. The Project's support to the introduction of microprocessing at the farm level will have a direct, even if limited, impact on abating monopsonistic practices in the dairy industry. Secondly, in strengthening the financial performance of agro-processing enterprises, the Project will improve their attractiveness as participants under the Government's accelerated privatization program whereby residual joint-stock company shares presently held on deposit at the Stock Exchange will be placed for sale through the PIFs. Thirdly, in promoting export diversification to hard currency markets, the Project will assist the country in developing trade arrangements alternative to barter trade arrangements with FSU countries. Future trade arrangements in this direction will have a positive impact on Uzbekistan's possible future accession to the World Trade Organization.

43. In developing its policy agenda, the Bank will be concerned through agriculture interventions to support improved farm practices leading to appropriate sorting, grading and post-harvest practices in order to ensure the maintenance of continuity of supply to processors as well as to reduce losses and improve quality, in particular of horticultural produce. In support of this objective, the Bank will be concerned also to monitor the incentive impact on farm-gate prices and incomes flowing through from the anticipated efficiency gains and higher value added resulting from the Project.

#### **IV. THE PROPOSED PROJECT**

##### **A. Rationale**

44. Uzbekistan has the potential for developing an internationally competitive agro-processing industry to process domestically produced raw materials, particularly horticultural products. The existing agro-processing is constrained by outmoded equipment in former SOEs and the lack of microprocessing facilities on collective and family farms. Accordingly, the proposed Project will focus on the rehabilitation and modernization of the agro-processing sector. The Project will arrest further deterioration of production facilities, sustain demand for agricultural outputs and labor, improve efficiency and product quality through the introduction of new technology, increase value added, and facilitate export diversification and efficient import substitution. A project framework for the Project is given in Appendix 2.

##### **B. Objectives and Scope**

45. The objectives of the Project are to (i) rehabilitate and modernize existing SMEs in the agro-processing sector so as to sustain primary production levels and increase exports, and (ii) provide collective and family farms with new microprocessing facilities to increase value added and rural incomes. In selecting the SMEs, priority will be given to export-oriented investment proposals that focus on rehabilitating and modernizing processing and packaging lines. Modern processing and packaging to international standards will enable the selected SMEs to access new export markets beyond Uzbekistan's traditional FSU markets. This is particularly true for those intermediate products such as tomato paste and fruit juice

concentrate that require a small number of large customers rather than fragmented retail marketing. The subprojects to be financed under the proposed Bank loan will be mainly for the processing of fruits and vegetables. In addition, financing will be provided for suitable microprocessing subprojects with focus on milk processing as there is high demand for appropriately packaged milk products. Overall, the proposed Project aims at investments in 25-50 SMEs and farms.

46. The Project will support selected agro-processing SMEs, taking into account the present marketing, processing, and raw material supply capabilities. Uzbekistan's SMEs have traditional export markets in FSU countries where their products are known and can be sold as retail consumer products. However, in new, brand-conscious Western European markets Uzbekistan's products are not known and SMEs have little retail marketing experience there. Thus, in diversifying export markets emphasis will be placed on sales of intermediate products to industrial purchasers in the Western countries which will arrange for further processing, distribution and retail sales.

47. Existing processing technology is based on FSU equipment that generally operates at a significantly lower efficiency than Western technology, produces inferior quality products, and uses packaging types and sizes which are not acceptable in non-FSU markets. The Project will support rehabilitation and modernization of existing plants to produce export products that meet international standards. Packaging has been identified as a major area for modernization to (i) increase capacity utilization by removing constraints caused by lack of packaging material, (ii) supply goods in acceptable type and size of wholesale pack to increase export prices, and (iii) reduce costs through increased efficiency and lower packaging material costs. Existing products, which are marginally below international standards, can be exported at a discount in appropriate packaging, generating increased cash flows for later reinvestment in improved production equipment.

48. Dislocation of marketing, after the breakup of the FSU, has increased imbalances between primary production and final consumer markets and resulted in large quantities of products left unharvested or wasted because of lack of effective marketing channels. The Project will support processing activities that increase economic efficiency and value added by utilizing existing raw material production capacity. In addition to export-oriented subprojects, the Project will also support efficient import substitution subprojects that provide value added to local production.

49. The Project will support non-State SMEs. SMEs which could, in principle, qualify for support include (i) new and existing joint ventures with foreign partners which target export markets and have export marketing agreements; (ii) new and existing private joint-stock companies (with the State share less than 50 percent), including collectives; (iii) former SOEs that have been privatized and restructured as joint-stock companies and have an adequate financial base, whose incremental investments generally yield high returns resulting from increased capacity utilization of existing assets and higher export prices; and (iv) collective and family farms that seek to increase value added for their produce and avoid local monopsonies of former SOEs by developing microprocessing of their primary production.

### C. Technical Justification

50. A pipeline of potential subprojects is given in Appendix 3. As can be observed, most proposals relate to one of four main product groups described below.

#### 1. Tomato Paste Processing and Packaging

51. Uzbekistan was the supplier of tomato paste to the FSU as an intermediate product for such final food products as fish canned in tomato sauce and ketchup, with exports accounting for 90 percent of tomato paste production.<sup>1</sup> Dislocations caused by the breakup of the FSU have resulted in shortages of imported packaging materials and the inability to export paste to traditional, as well as non-traditional markets, limiting the ability both to produce and sell paste. In consequence, large quantities of tomatoes grown are wasted. Producers have sought to diversify exports to new markets but have been hindered as FSU production and packaging standards do not meet international standards and, consequently, export prices have been discounted below international prices. For example, the FSU standard packaging of 9 kilogram (kg) cans has resulted in a \$100/ton discount on Uzbekistan's product due to higher handling costs by importers and a \$95/ton higher packaging material cost, compared with the product available in international standard 200kg reusable containers lined with disposable aseptic bags. In addition, the processing equipment gives about 10 percent less output per unit input and is obsolete. Since frequent disruptions of production result in wasted raw materials and a lower quality final product, upgrading of the processing equipment is likely to generate additional revenue and cost savings in excess of \$100/ton of product.

52. Marketing would seek to maintain existing FSU market share and diversify exports principally to Western Europe and the Middle East. The main importing countries in Europe are Germany, United Kingdom, Italy and Denmark but with significant imports by most other countries. The imported, concentrated tomato paste is repackaged for retail sale or reprocessed into sauces, juices, soups and similar products. The paste is a part of normal daily diet through direct use or as part of other food products and per capita consumption in Western Europe is much higher than FSU countries. However, per capita FSU consumption is increasing as tastes and diets change, and maintenance of market share in these countries offers considerable potential for growth in export volumes.

53. Paste prices are based on the degree of concentration, which determines the quantity of final product than can be produced. Concentration is conventionally measured by sugar content in three main product groups: 18 Brix, 28-30 Brix and 36-38 Brix. The best former Soviet technology can achieve concentrations of only up to 30 Brix, but in doing so overheats the paste to produce a dark color and less acceptable taste. Prices are set for the best quality 36-38 Brix paste, currently in the range \$900-\$950/ton delivered, and lower concentrations and qualities are discounted below this price.

54. In principle, such proposals are consistent with the emphasis on export orientation, improved processing efficiency and increased utilization of existing raw material supplies. Sponsors are generally either joint ventures with foreign partners, in which the local partner contributes an existing factory as equity, or privatized SOEs.

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<sup>1</sup> Source: Association of Fruits and Vegetables Production of the Republic of Uzbekistan.

## 2. Fruit Juice and Concentrate Production

55. Uzbekistan produces apple, grape, peach, plum, cherry, apricot and other fruit juices, of which the major export is apple juice concentrate. However, the concentrate is dark in color, lacks aroma and tends to be contaminated in the production process, thus requiring further processing by the importing Western countries and a consequent discount of at least \$300-\$400/ton. The concentrate is exported to Western Europe, particularly Germany, where it is reprocessed but remains a low quality product which is either blended with better quality juice for low-priced sales in Western Europe or reexported to Eastern European and FSU countries, including Uzbekistan.

56. The Western European market for fruit juices is well established. Orange juice has the largest sales but apple juice has the second largest. Increasingly, demand requires a natural, clear juice with no or very limited additives putting increased emphasis on the need for a good quality basic product rather than relying on downstream processing of a poor quality product. The importing countries, of which Germany, the United Kingdom and Denmark are the largest, purchase juice concentrated to a sugar content of 70 Brix and dilute pack the juice for retail sale. Though concentration is the basic criteria in pricing, increasing importance is given to clarity, color and aroma of the juices in response to consumer demand. The Soviet technology used in Uzbekistan's factories cannot produce high standard juice principally because of inadequate filtration and treatment of the juice and the lack of equipment to retain the volatile aroma. European prices for delivered high quality concentrate are \$1,400-\$1,500/ton, giving potential ex-factory prices in Uzbekistan of \$1,200-\$1,300/ton. Actual ex-factory prices for exports to Europe are currently of the order of \$700/ton because of low quality, and samples of product from some factories which have been tested under the EU-TACIS program are regarded as unsaleable at any price.

57. The most important European producers of apples for juice production are Italy and Poland but apple production, especially harvesting, is labor intensive, so production costs are high and rising. Also, the climate in European countries varies substantially from year to year and the size of the harvest consequently varies, resulting in unpredictable supplies and large price variations. Uzbekistan has cheap labor and dependable harvests on account of the absence of inter-seasonal climatic variations and these could make Uzbekistan a highly competitive source of supply if the processing technology is upgraded to Western standards of quality and efficiency.

58. As an intermediate, liquid product the exports are transported in bulk containers by rail and no additional packaging facilities are required. However, for import substituting local sales of upgraded juice in retail packs additional investment is required to allow packaging in screw cap bottles and Tetrapak-type aseptic packaging. Concentrate marketing would target European countries. In principle, such proposals are also consistent with the emphasis on export orientation, increased processing efficiency and increased utilization of existing raw material supplies. Sponsors are generally either joint ventures with foreign partners, in which the local partner contributes an existing factory as equity, or privatized former SOEs.

### 3. Dairy Processing

59. Large numbers of collective farms, as well as private farms and companies, seek to invest in microdairies to process 1,500-5,000 liters of raw milk per day and are prepared to buy raw milk at prices 50 percent higher than those paid by the former state farms. The inefficiency of the large former State factories, which should enjoy economies of scale, is demonstrated by the fact that such small-scale competitors can operate profitably with the same output prices despite paying much higher prices for inputs.

60. The higher prices paid by the microdairies could, therefore, have a substantial and rapid impact on raw milk production because of better price signals created by introducing effective competition into the presently monopsonistic market for raw milk. In the longer term, the entry into the market of a large number of new, more efficient dairy processors would create competition in the consumer markets to set market prices rather than the continuation of the old high price system that has been institutionalized in the present dominance of the inefficient, high-cost production of the former State enterprises.

61. Thus, whilst the dairy projects would clearly be aimed at the domestic market with import substitution effects they would have significant benefits consistent with Project objectives in the form of (i) substantial and early increases in rural incomes and on-farm value added, and (ii) support for privatization and market reform programs through the introduction of effective competition for input supplies and outputs.

### 4. Packaging Material Production

62. Within the FSU system, Uzbekistan imported packaging materials from other countries. Local production remains insufficient to meet the needs and is generally below international standards.<sup>1</sup> Shortages of packaging materials, including bottles, jars, cans and cardboard boxes, are a major constraint on agro-processing. Removal of this constraint will yield high returns in the form of increased utilization of existing production capacity for both local and export markets. Inclusion of packaging production in the Project scope is a logical and necessary complement to the promotion of agro-processing activities and will give support to such enterprises and locations that do not directly benefit from the loan. Though targeting the domestic market, such proposals will facilitate increased exports and support increased production efficiency and utilization of raw material supplies through higher production capacity utilization. Sponsors will be joint ventures and privatized SOEs.

### D. Cost Estimates

63. The total cost of the Project, including interest during construction (IDC) and other charges, is estimated at \$87 million equivalent, comprising a foreign exchange cost of \$57 million (65 percent), and a local currency cost of \$30 million equivalent (35 percent). The cost estimates include appropriate provision for physical contingencies and price escalation (see Table 1 for detailed Cost Estimates and Financing Plan).

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<sup>1</sup> Locally made cans include lead as a sealant, which would not be permitted in developed country markets.

## E. Financing Plan

64. The Government has requested a loan of \$50 million from the Bank's ordinary capital resources (OCR). The Bank will finance up to 100 percent of the direct and indirect foreign exchange costs of subprojects, including IDC. The subborrowers will provide equity financing of not less than 25 percent of the total subproject costs, including existing fixed assets necessary for the purposes of the subproject. Where necessary, NBU and other local financial institutions are expected to provide any loan funds required in the local currency and in excess of the subborrower's 25 percent equity contribution. The cost of acquisition of land-use rights, taxes and duties, and wages will not be eligible for financing under the Bank loan.

**Table 1: Cost Estimates and Financing Plan**  
(\$ million)

Source	Foreign Exchange	Local Currency	Total Cost
Bank	50	-	50
Other Foreign Financing <sup>a</sup>	7	-	7
Subborrowers and Local Financial Institutions	-	30	30
<b>Total</b>	<b>57</b>	<b>30</b>	<b>87</b>

<sup>a</sup> Supplier credits and anticipated equity financing from foreign commercial banks through joint-venture partners.

65. The Overseas Economic Cooperation Fund of Japan is considering cofinancing with the Bank. Preliminary discussions have taken place regarding the possibility to expand accordingly the Project scope at a later stage.

66. The Borrower of the Bank loan will be the Republic of Uzbekistan. The Bank will enter into a Loan Agreement with the Borrower and a Project Agreement with NBU. The Borrower will relend the Bank's loan funds to NBU under a Subsidiary Loan Agreement. NBU will onlend to eligible subborrowers under subloan agreements.

67. The Bank loan will be in US dollars from the Bank's ordinary capital resources. Relending to NBU and onlending to subborrowers will also be in US dollars. The foreign exchange and interest rate variation risks will be borne by the subborrowers.

68. The terms of the Bank loan include interest to be determined in accordance with the Bank's pool-based variable lending rate system for US dollar loans, the standard commitment charge of 0.75 percent per annum and a repayment period of 15 years, including a grace period of three years. The terms and conditions for relending to NBU will be identical to



those of the Bank loan to the borrower. The onlending interest rates to be charged by NBU to the subborrowers will be based on market rates in Uzbekistan and NBU's price assessment to cover the cost of funds, administrative costs, credit risk and a margin of profit.<sup>1</sup> Subloans from NBU to subborrowers will be repayable up to eight years, including a grace period not exceeding three years. Subloan repayment schedules will be based on the cash-flow forecasts for the subprojects. NBU will charge a commitment fee on the committed but undisbursed amounts of subloans, as well as fees for services provided including due diligence work.

69. The Bank loan will have a commitment period of three years and a disbursement period of five years. The closing date for submission of subloan applications for approval and authorization for withdrawals will be three years after the date of loan effectiveness. The closing date for disbursement will be five years from the date of loan effectiveness.

## **F. Implementation Arrangements**

### **1. Project Organization**

70. The Executing Agency for the proposed Project will be NBU. To facilitate implementation, a Project Implementation Unit (PIU) will be set up in NBU's SME Unit under its Credit Department. The PIU staff will be exclusively assigned to the Project. PIU will oversee the preparation and appraisal of all Project subloans and monitor subsequent implementation and supervision. Under an earlier TA from EBRD, NBU's Credit Department developed, documented and implemented satisfactory credit approval procedures based on international practices. None of the subborrowers under EBRD's ongoing credit line are delinquent. The proposed TA in conjunction with the Project will assist NBU to deepen its institutional building program by strengthening the capacity of its branch offices to deal with limited recourse lending to the non-State sector (see paras. 92-93).

### **2. Selection, Appraisal, and Approval of Subprojects**

71. Only non-State SMEs, including private enterprises, collective enterprises, joint ventures with foreign partners and joint-stock companies with a State shareholding of less than 50 percent will be eligible for financing under the proposed Project. In addition, all subloans will have to comply with the following conditions: (i) the subloan amount will not exceed 75 percent of total subproject cost; (ii) subloans will be secured by collateral with a value of at least 120 percent of subloan amounts; and (iii) subloans will finance only investment goods for new projects, the modernization and rehabilitation of existing businesses, associated initial incremental working capital and related services.

72. The entire foreign exchange expenditure of subprojects (direct and indirect foreign exchange costs) will be eligible for financing under the loan. Expenditures incurred within 120 days prior to the receipt by the Bank of a subloan application (either in the form of an

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<sup>1</sup> The lending rates prevalent at market at the time of appraisal for dollar loans average 10-12 percent for long-term (over a year) project financing and about 15 or more percent for short-term trade financing. The interest rates for subprojects under EBRD's ongoing credit line average 10-11 percent for dollar loans, reflecting a spread of 3-4 percent above the cost of funds. The lending rates for local currency loans at the appraisal average 34 percent per annum for loans that have maturity more than five years, 43 percent for loan between 3-5 years, 65 percent for loans from 6-12 months and 88 percent for loans less than one month.

application for approval or information regarding the subloan concerned) will be eligible for reimbursement.

73. The selection of subprojects will be based on sound credit criteria. First priority will be given to subprojects with the potential to generate export earnings, and second priority to subprojects that save foreign exchange through efficient import substitution. The following criteria have to be met to be eligible for financing: (i) subborrowers must have the capacity to contribute a minimum of 25 percent of subproject cost in equity; (ii) subprojects should have a projected economic internal rate of return (EIRR) of at least 12 percent and a projected financial internal rate of return (FIRR) in excess of the subproject's weighted average cost of capital; (iii) the projected debt-service coverage ratio for the subproject should be at least 1.5 times based on the debt of the sub-borrower as of the time by which the subproject is expected to attain normal production capacity; and (iv) the subproject should be environmentally sound and should contribute to the economic development of Uzbekistan by creating or sustaining employment opportunities, providing new and better products for the market, and improving the situation of the country's balance of payments.

74. The subproject evaluation would need to demonstrate that financial viability does not depend on a distorted economic framework. The eligible types of businesses for financing will be non-State SMEs engaged in food processing and in the manufacture of packaging materials for processed foods. Subprojects involving the production or processing of cotton, grain, spirits or tobacco will not be eligible for financing.

75. The selection and appraisal of subprojects by NBU will be consistent with sound banking and financial principles and procedures and in accordance with NBU's lending policies. NBU will appraise all subprojects proposed for financing under the Bank loan in accordance with a standard appraisal report format agreed upon with the Bank. The appraisal reports will include a business plan and projected financial statements (including income statements, balance sheets and cash-flow statements) and an explanation of the assumptions on which such statements would be based. NBU will ensure that all subprojects comply with all applicable Government environmental regulations and legislation, including compliance with environmental quality standards and requirements for environmental impact assessment as well as the Bank's environment assessment requirements. NBU will further ensure that appropriate safeguards and equipment for compliance are built into each subproject, as necessary.

76. The maximum subloan size will not exceed \$5 million. Except for the first four subloans, there will be a free limit of \$2 million. The first four subloans irrespective of their amount as well as all subsequent subloans greater than \$2 million will be subject to a prior approval of the Bank. In addition, subloans for subprojects which do not generate foreign exchange earnings will also be subject to a prior approval of the Bank even if their amount is below \$2 million.

### **3. Procurement**

77. The Bank's *Guidelines for Procurement* applicable to loans to development finance institutions will be followed, which require subborrowers to (i) demonstrate that the procurement procedures adopted are appropriate in the circumstances; (ii) ensure that the goods and services to be financed by subloans are purchased at a reasonable price, account also being taken of other relevant factors such as time of delivery, efficiency and reliability of

the goods and their suitability for the subproject, the availability of maintenance facilities and spare parts and, in the case of services, the quality and the competence of the parties rendering them; and (iii) ensure that all goods and services financed under the loan are procured from Bank member countries. NBU will be encouraged to require subborrowers to adopt international competitive bidding procedures where the estimated contract value is sufficiently high and where it would be in the interest of efficiency and economy to follow such procedures.

#### **4. Disbursements and Imprest Account**

78. NBU will be responsible for collecting supporting documents and preparing withdrawal applications and sending them to the Bank in accordance with Bank's *Loan Disbursements Handbook*. Commitment procedure will be used for import contracts valued at more than \$500,000. Once subborrowers have signed contracts for importing equipment with suppliers, they will apply for non-operative letters of credit from NBU. Upon NBU's request, the Bank will issue a commitment letter and disburse against the claims received from the advising/negotiating bank of the supplier. For import contracts with a value less than or equal to \$500,000, imprest fund procedure will be used. The Government will establish an imprest account. The Bank will deposit into the imprest account an initial amount not exceeding \$5 million. The imprest account will be established, managed and replenished in accordance with the Bank's guidelines. To apply for replenishment of the imprest account, NBU will furnish copies of relevant documents to the Bank including contracts, letters of credit, evidence of payment, and bills of lading.

#### **5. Reporting Requirements**

79. NBU will have its accounts and financial statements (balance sheet, income statement, and statement of sources and applications of funds) audited annually in accordance with sound auditing standards by independent external auditors acceptable to the Bank. NBU will submit to the Bank not later than six months after the close of each financial year its audited financial statements; and the auditor's long-form audit report relating to supplementary information on its accounts, including an assessment of the quality of its long-term loans and the adequacy of the provision for doubtful loans.

80. NBU will submit to the Bank all such reports and information as the Bank may reasonably request concerning the loan and its utilization; the subloans; other matters relating to the purposes of the Project; quarterly progress reports, in a format to be agreed upon with the Bank, within 60 days after the end of the relevant quarter; and a Project completion report within three months of the loan closing date.

81. The Government and NBU will ensure that the Bank is given an opportunity to comment on any substantial amendments which may be proposed to NBU's Charter. Except as the Bank may otherwise agree, NBU will (i) consult with the Bank prior to making any changes in its operational policies that would materially affect Project Implementation; and (ii) inform the Bank of any changes in the appointment of its Chairman.

## **6. Benefit Monitoring and Evaluation**

82. NBU will monitor the financial and economic performance of subprojects, as well as evaluate their socioeconomic and environmental benefits. In addition, a random sample of five subprojects will be selected for ongoing, long-term benefit monitoring and evaluation. Part of the proposed advisory TA (paras. 92-93) will assist NBU to design and install appropriate benefit monitoring and evaluation systems. Specific data collection and reporting formats will be developed and implemented using a computerized database. Specific areas to be covered include: (i) financial and operational performance of the subprojects; (ii) direct employment creation and impact on the poor, women and other vulnerable groups; and (iii) indirect employment creation (e.g., raw material supply).

## **G. The Executing Agency**

### **1. Organization**

83. NBU was established as a joint-stock company in September 1991. The original shareholders of NBU were 16 SOEs. Now the sole shareholder is the Government. NBU's Charter provides that up to 40 percent of its shares can be sold to foreign and domestic banks, with the Government maintaining a 60 percent stake.

84. NBU is both a State bank, that operates as a profit-oriented financial institution, and an agency of the Government responsible for implementing official policies concerning international trade and cooperation with other countries. At the same time, NBU operates as a regular commercial bank working within the guidelines of existing legislation for financial institutions. NBU's Charter stresses two important priorities for lending: (i) to meet the foreign currency investment needs for developing production destined for export; and (ii) to finance projects that involve the transfer of new technology and know-how to the country, the processing of agricultural raw materials, the modernization of industrial enterprises, and the creation of jobs through the production of consumer goods.

85. Despite its status as a State Bank, NBU is now giving more emphasis to commercial lending and the promotion of the private sector. Specifically, NBU aims to (i) further expand credit operations for viable commercial enterprises; (ii) focus on sectors considered vital for a growing market economy, including the development of SMEs; (iii) develop close links with international financial institutions; and (iv) further develop its correspondent bank network. In addition to its Headquarters in Tashkent, NBU currently has 17 branches and plans to open about 35 more before the year 2000. Overall, NBU has about 1,250 staff. An organization chart of NBU is in Appendix 4.

### **2. Management**

86. The management of NBU rests with its Board of Directors, headed by its Chairman, who is appointed by the President of the Republic of Uzbekistan. Membership of the Board is determined by its Chairman, subject to approval by the Cabinet of Ministers of the Government. At present, the Board is made up of 12 members, comprising eight full-time executives of NBU including the Chairman, the First Deputy Chairman, three deputy Chairmen and three other executives; and four non-executive directors, including the Minister of Finance, and the Chairman of the Central Bank.

87. NBU's operational decision making rests with its Executive Committee, which is headed by the Chairman of NBU with all the heads of department being members. The Executive Committee is responsible for all major operational decisions, including credit approvals (in excess of the authority delegated to the Credit Committee), investment decisions, and operational strategies.

88. Credits are approved by NBU's Credit Committee which is presided by the First Deputy Chairman, and consists of Heads of Treasury, Credit, Project Finance, Legal, International Finance, and Monitoring Departments. The Credit Committee is authorized to approve credits up to 15 percent of NBU's capital, comprising share capital and reserves. Proposals in excess of the 15 percent threshold are referred to the Executive Committee.

### **3. NBU's Financial Condition**

89. NBU has a strong balance sheet. As of December 1995, it had capital and reserves of \$340 million and borrowings of \$1,035 million, giving a debt equity ratio of 3:1. Its capital adequacy is greatly in excess of the 8 percent minimum ratio for total risk weighted assets to capital as defined by the Bank for International Settlements (BIS). Of NBU's loan portfolio, about 98 percent is lending in foreign currency. About 19 percent of the portfolio represents direct lending to the Government while about 77 percent is lending to Government agencies under Government guarantee. NBU's lending to the private sector mainly started under the \$60 million credit line provided by EBRD in 1993. This credit line is fully committed and disbursements currently stand at about \$20 million. More details on NBU's financial condition are provided in Appendix 5.

90. NBU's loan portfolio grew by 36 percent between 1994 and 1995. The provision for loan losses is low, at about 1 percent of the total portfolio, but this reflects that no provision is made for loans to the Government and loans guaranteed by the Government. NBU's profit before tax and provisions amounted to \$81.8 million in 1995. Its return on equity amounted to 27.4 percent in 1995. More than 90 percent of NBU's assets and liabilities are denominated in hard currencies. In November 1996, NBU will change over to a new computerized accounting system which will enable it to produce its accounts in accordance with international standards. Financial projections for NBU up to the year 2000 is given in Appendix 6. The financial projections indicate that NBU will maintain a sound financial condition during the forecast period, with a capital adequacy ratio well in excess of the 8 percent minimum ratio as defined by BIS.

91. Under the Project, NBU will be required to meet and maintain prudential standards and undertake the necessary management actions. Specifically, NBU will:

- (i) maintain the total debt/equity ratio below a maximum of 12:1;
- (ii) maintain a ratio for equity to risk adjusted assets, as per BIS definition, of at least 8 percent;
- (iii) build up adequate provisions for loan losses and write-offs for bad debts in accordance with international standards;

- (iv) maintain a minimum debt-service coverage ratio (defined as the ratio of the annual net income after taxes but before interest expenses and other charges on debt and depreciation plus principal collections under the loan portfolio, to the aggregate amount of annual amortization and interest expenses and other charges on debt) of not less than 1.25 after taxes;
- (v) ensure that its maximum exposure to a single borrower, or to a group of related borrowers (excluding such loans and obligations that are fully guaranteed by the Government), shall not exceed 15 percent of its capital and reserves (excluding revaluation reserves);
- (vi) maintain a reasonably diversified portfolio by sector, so that not more than 20 percent of its total portfolio is accounted for by any one sector;
- (vii) maintain international accounting standards; and
- (viii) introduce financial discipline among its subborrowers, to ensure that the respective enterprises maintain a minimum debt-service ratio of 1.5 times.

#### **H. Technical Assistance**

92. With EBRD assistance, NBU Headquarters has established satisfactory subproject appraisal and credit approval procedures. This assistance is expected to be completed by the end of 1996. At present, however, NBU's loan portfolio to the non-State sector is very young and its branch offices lack experience and skills in dealing with loan applications with non-State subborrowers. This leads to bottlenecks and delays and results in the Project Financing Centre in the Headquarters having to be involved in matters that should be handled by the branch office level. Another weakness of NBU is that systems for subproject benefit monitoring and evaluation are not in place. The Government has requested the Bank to provide advisory TA to enable NBU to further strengthen its institutional capacity. The proposed TA covers two main areas: (i) strengthening the capacity of NBU's branch offices to appraise subprojects to be financed from the Bank's loan, including advice to subborrowers on business plan preparation; and (ii) assistance to NBU's Headquarters for the design and implementation of systems for subproject benefit monitoring and evaluation. The Executing Agency for the TA will be NBU through its Headquarters SME Unit. The focus on branch offices will enable NBU to deepen its institution building program and assist branch offices to develop banking skills necessary for limited recourse lending to the non-State sector.

93. Outline terms of reference for the proposed TA are provided in Appendix 7. The TA will be carried out by an international consulting firm to be engaged by the Bank in accordance with the Bank's *Guidelines on the Use of Consultants*. Local counterpart staff will be provided by NBU, mainly drawn from NBU's SME Unit and branch offices. The international experts will be from various disciplines to provide advice to branch offices on techniques for dealing with limited recourse loan applications and advice to Headquarters on systems for subproject benefit monitoring and evaluation. The TA will provide a total of 25 person-months for international consulting services. The overall cost of the TA is estimated at \$880,000 equivalent. It is proposed that the Bank finance, on a grant basis, the entire foreign exchange cost (\$790,000) and part of the local currency cost (\$40,000 equivalent) amounting to a total of

\$830,000 equivalent. The remaining local currency cost of \$50,000 equivalent will be financed by NBU in cash and in kind (see Appendix 8).

## V. PROJECT JUSTIFICATION

### A. Financial and Economic Analysis

94. During Project preparation, the proposed pipeline of subprojects was reviewed and eight subprojects were selected for a more detailed review and preliminary business plans were prepared.<sup>1</sup> The selection was made so as to provide a representative sample of the mix of projects in the pipeline in terms of type of product, ownership, structure, and size.

95. In the pre-identification process, all SOEs at national, provincial, and municipal level have been excluded to ensure compliance with the loan requirement for non-State ownership. The borrowing enterprises take one of four forms: (i) joint ventures with international partners, (ii) private joint-stock companies, (iii) former State enterprises privatized and restructured as joint-stock companies, and (iv) private and collective farms.

96. The geographic distribution of the subprojects covers the whole country with the concentration of subprojects in the southern regions of Samarkand-Tashkent-Fergana valley, reflecting the concentration of both population and agricultural production in these areas.

97. The eight subprojects selected for detailed review are financially and economically sound with the FIRR ranging from 17.3 percent to 28.8 percent, and the EIRR from 25.8 percent to 43.7 percent. The rates of return are generally high because of the nature of the subprojects in rehabilitating and modernizing existing investments to achieve higher efficiency and productivity from the existing assets through the addition of a marginal investment in new assets that removes constraints from present production levels. The sum of the cash flows of the eight subprojects evaluated gives an overall FIRR of 23.6 percent and an EIRR of 35.3 percent. Calculations of FIRR and EIRR have also undertaken assuming that agro-processing enterprises do not enjoy any tax privileges and that the level of the shadow exchange rate varies within a range of a base rate of \$1 = Sum50. The results of the calculations under such assumptions indicate that the eight selected subprojects are still financially and economically viable.

98. The sensitivity analysis suggests a marginal sensitivity to adverse changes in investment costs, but a greater sensitivity to adverse changes in operating costs and revenues. However, the latter is not considered to represent a major risk as the prices of processed outputs are likely to move with the price of raw material inputs, e.g., lower prices of tomato paste being reflected in lower prices of fresh tomatoes. Details of the financial and economic analysis for the eight subprojects are given in Appendix 9.

99. The total potential credit demand of the 108 pre-identified subprojects is \$186.5 million out of total Project costs totalling \$270.5 million. In the case of some subprojects, part of

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<sup>1</sup> Under this review by Bank-financed consultants, 26 potential subprojects were visited to undertake initial due diligence that consisted of a review of the technical, financial and marketing aspects of the proposed subprojects. Based on this initial screening, eight subprojects were selected as a representative sample of the mix of subprojects likely to be proposed.

the credit requirements will be met by foreign commercial lending in parallel with Project lending. The total credit requirement is distributed amongst different activities as follows: (i) fruit and vegetable processing and packaging, \$114.1 million (61 percent); (ii) milk processing, \$17.7 million (9.5 percent); and (iii) packaging and other production activities, \$54.8 million (29.4 percent).

100. In addition to the direct benefits, the Project seeks indirect benefits in the form of increased demand for the farm produce to be processed to provide higher farm incomes. These indirect benefits are expected to be significant as most of the additional inputs required will be supplied from the substantial surplus of harvested production which has not been possible to market as fresh produce since the breakdown of the FSU marketing system. Thus, the Project should contribute significantly to higher farm incomes without requiring proportional increase in farm production costs.

101. The Project also seeks to increase Uzbekistan's foreign exchange earnings by promoting exports. The horticulture-based subprojects are expected to generate substantial export earnings compared with the foreign exchange required for the investments. For six out of eight subprojects evaluated, the projected net annual foreign exchange earnings for Uzbekistan, after completion of debt service, range from 76 percent to 176 percent of the foreign exchange cost of the initial investments.

## **B. Environment**

102. The Project will generally have beneficial environmental impact through its replacement of obsolete technology by new, more environment-friendly technology and the specific incorporation in new investment of appropriate waste treatment equipment and facilities to recycle process water. Liquid waste will be minimized by recycling and treatment before discharge. Solid waste from the production processes will be mainly vegetable matter which will be used as livestock fodder. There will be no significant gaseous waste or noise pollution.

## **C. Social Dimensions**

103. The dislocation of markets caused by the break up of the FSU has resulted in a loss of export markets for producers. In seeking new markets, the SMEs need to produce goods with quality and packaging which their old, FSU-sourced equipment is unable to provide. Without substantial investment in new technology, it is not possible for them to process exportable goods and both the SMEs and the farmers who supply them face considerable losses of income and/or unemployment. The social costs would continue to mount if no measures were taken.

104. Although the Project will create some new employment in specific cases, much of which will be seasonal, its major impact on employment will be the avoidance of the social costs of increased poverty and unemployment both in the agro-processing sector and at farm level. In addition to this impact from the growth and diversification of exports, the Project will also support new rural industries, particularly in dairy processing, which will allow farmers and farmer groups to increase incomes and local value added through downstream processing and marketing of their primary produce.



## D. Project Risks

105. The subborrowers will be exposed to exchange rate and interest rate variation risks. The foreign exchange rate risk will be mitigated by giving priority to subprojects that generate foreign exchange earnings. For import substitution subprojects, subborrowers will have access to foreign exchange for debt-service through sources arranged and assured by the Government and NBU, including NBU's own foreign exchange resources. In addition, the exchange rate risk of non-export oriented subprojects will be safeguarded against by the requirement for a prior approval by the Bank regardless of their subloan amount.

106. The financial risks of non-repayment of subloans will be safeguarded by strict application of the requirements for financial soundness of the subborrower and viability of the new investment. Under the EBRD credit line, NBU Headquarters has demonstrated an ability to apply such criteria in loan processing. NBU's nationwide branch network gives access to local knowledge as to the past performance and character of the applicants. This capacity will be strengthened under the proposed TA that is targeted at capacity building at branch level.

107. Borrowing SMEs are sensitive to marketing risks, particularly in export markets, and failure in marketing would reduce their financial viability and ability to service debt. This risk is mitigated by the Project design that focuses on products which are already exported, rather than promoting new products for exports. Subborrowers will be required to demonstrate their marketing ability both by past track record and through marketing agreements with importing countries. Revenues would also be at risk through a failure of management to achieve the necessary levels of capacity utilization. Management in former SOEs often suffers from a lack of enterprise management skills, since the previous system received direction from central agencies in such matters as raw material supply, marketing and financial management. The review of subloan applications will therefore include a review of management capability. In both marketing and management, foreign joint-venture partners can play a major role beyond their investment.

## VI. ASSURANCES

108. The Government and NBU have given the following assurances, in addition to the standard assurances, which have been incorporated in the legal documents:

- (i) All subprojects to be funded by the Project will meet the selection criteria agreed upon with the Bank,
- (ii) The first four subprojects to be financed from the loan proceeds will be submitted to the Bank for approval, and
- (iii) Subsequently, subloans greater than \$2 million as well as all subloans for subprojects which will not generate foreign exchange earnings will be submitted to the Bank for prior approval.

109. In addition, the Government has assured the Bank that it will use its best efforts to avoid any duplication between the EBRD's proposed second credit line and the Bank loan. In the agriculture sector, the former will focus on supporting cotton processing as well as

manufacturing industries while the latter will concentrate primarily on SMEs engaged in agro-processing.

110. The Government has assured the Bank that it will permit all subborrowers timely access to foreign currency for repayments of their foreign currency loans, either through direct export earnings of the subprojects or currency auctions or the Government's or NBU's foreign exchange sources.

111. The Government has confirmed that the proposed subprojects to be financed by the Bank currently enjoy exemption from taxes and duties on imported equipment.

## VII. RECOMMENDATION

112. I am satisfied that the proposed loan and technical assistance would comply with the Articles of Agreement of the Bank and recommend that the Board approve:

- (i) the loan of \$50,000,000 to the Republic of Uzbekistan for the Rural Enterprise Development Project from the Bank's ordinary capital resources, with interest to be determined in accordance with the Bank's pool-based variable lending rate system for US dollar loans and with an amortization period of 15 years, including a grace period of three years, and such other terms and conditions as are substantially in accordance with those set forth in the draft Loan and Project Agreements presented to the Board; and
- (ii) the provision of technical assistance, on a grant basis, in an amount not exceeding the equivalent of \$830,000 to the Government of the Republic of Uzbekistan for Institutional Strengthening of NBU.

MITSUO SATO  
President

22 November 1996

## APPENDIXES

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Note: Supplementary Appendixes: available on request including preliminary business plans for eight selected representative subprojects.

## SELECTED ECONOMIC AND AGRICULTURE STATISTICS

Table 1: Direction of Trade with Nontraditional Trading Partners <sup>a</sup>  
(In \$ million)

Item	Exports					Imports				
	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Total trade	869.3	919.3	1,006.3	1,791.7	1,919.4	929.4	980.9	1,193.1	1,919.4	1,919.4
Current and Former Socialist countries <sup>b</sup>	167.0	195.1	115.6	91.8	278.9	116.1	112.0	192.4	278.9	278.9
Of which:										
Asia	44.5	138.4	80.0	36.7	50.8	70.3	37.6	90.2	50.8	50.8
Europe	122.5	56.7	35.6	55.1	228.1	45.8	74.4	102.2	228.1	228.1
Industrial Countries	498.8	449.5	710.7	1,002.4	841.0	344.3	567.7	818.0	841.0	841.0
Of which:										
Asia	8.0	18.9	5.2	1.6	1.1	10.7	41.2	48.0	1.1	1.1
Europe	453.0	386.0	684.8	988.3	661.5	312.2	494.7	668.5	661.5	661.5
Western Hemisphere	37.8	44.6	20.7	12.5	178.4	21.4	31.8	101.5	178.4	178.4
Developing Countries	195.9	184.2	158.9	312.3	523.0	90.6	298.9	142.9	523.0	523.0
Of which:										
Asia	71.9	126.7	95.6	182.9	131.4	53.2	61.8	66.8	131.4	131.4
Europe	81.2	41.9	43.0	112.7	194.4	36.5	228.6	67.9	194.4	194.4
Middle East	18.3	15.6	20.3	16.7	196.9	0.9	8.5	8.2	196.9	196.9
Western Hemisphere	24.5	-	-	-	0.3	-	-	-	0.3	0.3
Other Countries <sup>c</sup>	7.5	90.5	21.1	385.2	276.5	378.4	2.4	39.8	276.5	276.5

<sup>a</sup> Countries other than the Baltic countries, the Russian Federation and other countries of the former USSR.<sup>b</sup> Not included elsewhere.<sup>c</sup> Bulgaria, China, PRC, Czechoslovakia, Hungary, North Korea, Mongolia, Poland, Romania, Viet Nam and Yugoslavia

Source: State Committee for Forecasting and Statistics

# SELECTED ECONOMIC AND AGRICULTURE STATISTICS

**Table 2: Production of Important Agricultural Products**  
(**'000 tons**)

Item	1985	1990	1991	1992	1993	1994	1995
Cotton	5,382.0	5,058.0	4,645.8	4,128.3	4,234.5	3,937.8	3,934.0
Grains (Total)	1,541.2	1,899.0	1,908.2	2,257.2	2,142.4	2,466.9	3,215.3
Wheat + Barley	-	1,039.0	973.0	1,333.4	1,176.0	1,675.0	2,680.4
Rice	482.9	503.0	514.9	532.9	544.6	498.3	327.6
Vegetables	2,386.0	2,843.0	3,348.0	3,494.3	3,038.7	2,975.3	2,724.7
Fruits	633.0	660.4	516.0	701.5	560.1	555.1	602.3
Meat (liveweight)	-	-	800.2	777.0	814.1	827.2	871.0
Milk	-	-	3,331.4	3,679.2	3,764.0	3,733.4	3,665.4
Eggs ('000 unit)	-	-	2,347.0	1,897.7	1,787.8	1,573.6	1,231.8
Wool	-	-	25.3	27.4	26.6	24.9	19.5
Skins (unit)	-	-	1,475.8	1,603.8	1,617.1	1,540.2	1,392.9

Source: State Committee for Forecasting and Statistics.

## SELECTED ECONOMIC AND AGRICULTURE STATISTICS

Table 3: Major Economic Indicators

Item	1991	1992	1993	1994	1995	1996*
<b>The Real Economy</b>						
GDP (million rubles/sums) <sup>a</sup>	61,549	444	5,095	64,878	298,530	
Real GDP growth rate (%)	-0.5	-11.1	-2.3	-4.2	-1.2	1.1
Real agricultural growth rate (%)	-1.1	-6.4	1.3	-7.3	2.3	
Real industrial growth rate (%)	1.5	-5.3	1.9	-0.3	-0.1	
Real growth rate of GDP per capita (%)	-2.6	-13.2	-4.5	-6.0	-2.9	
As shares of net material product						
Agriculture and forestry	45.0	41.7	31.0	41.4	35.0	
Industry and construction	43.2	43.9	40.7	30.6	30.2	
Transport and communications	3.9	5.5	5.0	5.5	6.8	
Other sectors	7.9	8.9	23.3	22.5	28.0	
Inflation (% change in consumer price index)						
End of period				1281.4	117.4	35
Period average	82.2	635.9	482.3	1522.7	516.0	
Average nominal wage (rubles/sums per month) <sup>b</sup>	460	2	29	305	1,939	
Minimum nominal wage (rubles/sums per month) <sup>c</sup>	70	1	9	103	251	
Official unemployment rate (%)		0.1	0.1	0.2	0.2	
<b>Fiscal Accounts (percent of GDP)</b>						
Total revenues	48.7	31.5	36.0	32.3	35.1	
Total expenditures	51.3	43.8	39.1	38.2	38.6	
Current account balance	3.4	-9.5	-0.9	-2.5	3.2	
Consolidated fiscal balance	-2.6	-18.6	-4.3	-6.1	-4.1	-3.2
<b>Monetary and Financial Sector (% change)</b>						
Banking credit to the economy		1,390.6	686.4	381.7	72.1	
Broad money		327.8	1,080.1	680.0	158.1	
<b>External Sector</b>						
Exports (million dollars)	11,829	1,424	2,877	2,940	3,805	
Cotton Fiber		861	1,172	1,508	1,798	
Gold			559	375	611	
Imports (million dollars)	11,141	1,659	3,255	2,727	3,598	
Trade balance (million dollars)	688	-235	-378	213	207	
Current account balance (percent of GDP)		-11.8	-7.8	2.1	-0.5	-4.7
Gross official foreign reserves (million dollars)		530	1,021	1,330	1,868	
(in months of imports)		3.8	3.8	5.9	6.2	
External debt (million dollars)		65.0	948.1	1,118.6	1,555.8	
Debt service ratio (percent of exports)		0.4	0.7	10.5	17.9	

\* Projections

<sup>a</sup> 1991 in million rubles and 1992-1995 in million sums.<sup>b</sup> 1991 in rubles and 1992-1994 in sums; for 1995 as of December 1995<sup>c</sup> 1991-1993 in rubles per dollar and 1994-1995 in sums per dollar.

Sources: Uzbekistan authorities, IMF and Bank staff estimates.

# SELECTED ECONOMIC AND AGRICULTURE STATISTICS

Table 4: Capital Investment by Source of Financing, Sector and Type of Organization, 1991-1995

Item	1991	1992	1993	1994	1995	1991	1992	1993	1994	1995
	(In millions of sum)					(In percent)				
Sources of financing	11.6	103.6	1,272.6	14,117.3	82,164.1	100.0	100.0	96.3	100.0	100.0
Budgetary financing	4.7	28.1	184.7	3,569.5	20,533.0	40.5	27.1	14.5	25.2	25.0
Enterprise financing	3.4	37.3	468.3	6,994.3	34,726.3	29.8	36.0	36.8	42.5	42.3
Bank credit	0.6	6.0	331.6	1,562.5	7,931.8	5.3	5.8	26.1	11.1	9.7
Of which:										
Preferential loans	-	-	225.9	978.9	2,220.3	-	-	17.8	6.9	2.7
Collective farm financing	0.8	7.9	86.8	580.0	1,809.6	7.2	7.6	6.8	4.1	2.2
Assets of the population	1.6	18.8	148.6	1,478.3	5,383.8	13.7	18.2	11.7	10.5	6.5
Other financing	0.4	5.5	5.3	932.7	11,779.6	3.5	5.3	0.4	6.6	14.3
Of which:										
Foreign sources	-	-	-	79.0	11,779.6	-	-	-	0.6	14.3
Sector	11.6	103.6	1,272.6	14,117.3	82,164.1	100.0	100.0	100.0	100.0	100.0
Industry	2.2	24.8	397.2	5,831.1	39,125.1	19.4	24.0	31.2	41.3	47.6
Agriculture	2.9	14.6	185.4	1,523.6	5,878.8	25.3	14.1	14.6	10.8	7.2
Construction	0.3	0.9	11.6	116.2	176.6	2.3	0.8	0.9	0.8	0.2
Transport and communications	0.8	5.0	75.3	1,056.6	5,755.5	6.5	4.9	5.9	7.5	7.0
Housing	2.8	32.7	270.1	2,596.1	10,804.4	24.1	31.5	21.2	18.4	13.2
Other <sup>a</sup>	2.6	25.5	333.0	2,993.7	20,423.7	22.4	24.6	26.2	21.2	24.8
Memorandum Items:										
Total capacity investment										
Real capital investment										
(in percentage changes)	-	-	-	-1.0	2.0	-	-	-	-	-

<sup>a</sup> Includes trade and public catering, material and technical supply, information and computer services, storage, forestry, municipal economy, science, culture, arts education and healthcare.

# SELECTED ECONOMIC AND AGRICULTURE STATISTICS

**Table 5: Wages by Sector and Type of Organizations, 1991-1995 <sup>a</sup>**  
(In Sum per month)

Item	1991	1992	1993	1994	1995
All workers	0.3	2.5	30.4	274.2	1,066.0
Material production					
Industry	0.4	3.2	42.6	406.2	1,529.0
Agriculture	0.4	2.6	23.5	233.6	777.0
Forestry	0.2	1.6	16.9	156.7	694.2
Construction	0.4	2.8	41.7	421.5	1656.3
Transportation	0.4	3.0	35.9	346.9	1427.1
Communications	0.3	2.5	33.5	347.9	1521.1
Trade, social service, material					
technical supply and storage	0.3	1.8	21.7	175.6	685.4
Information, computer services	0.4	2.2	32.3	243.9	1715.9
Housing - communal economy,					
nonproductive social service	0.3	2.1	29.1	257.8	1068.8

<sup>a</sup> Data represent averages of monthly wages during the period

Sources: State Committee for Forecasting and Statistics; and staff estimates.



## PROJECT FRAMEWORK

Design Summary	Targets	Project Monitoring Mechanism	Risks
<b>1. Sector Goals</b> support the development of SMEs in the agro-processing sector including access to new export markets, and mitigate rural unemployment	<ul style="list-style-type: none"> <li>improve economic efficiency and product quality</li> <li>diversify export markets</li> </ul>	<ul style="list-style-type: none"> <li>government statistics</li> <li>project progress reports</li> <li>review missions</li> </ul>	<ul style="list-style-type: none"> <li>slowdown in transition to a market economy</li> <li>macroeconomic instability</li> </ul>
<b>2. Objectives Proposed</b> rehabilitate and modernize existing SMEs in the agro-processing subsector and provide collective and family farms with new dairy micro-processing facilities to increase value added and rural income. <ul style="list-style-type: none"> <li>first priority - export oriented medium scale enterprises</li> <li>second priority - small scale import substitution projects</li> <li>investments will modernize existing outmoded facilities, particularly processing and packaging lines</li> </ul>	<ul style="list-style-type: none"> <li>arrest further deterioration of production facilities</li> <li>sustain demand for agricultural outputs and employment</li> <li>improve efficiency (by about 25%) and product standards in medium scale enterprises with export potential</li> <li>modernize small enterprises to provide better standard products for the local market</li> <li>increase share of exports paid for in hard currency</li> </ul>	<ul style="list-style-type: none"> <li>project progress reports and review missions</li> <li>annual reports from enterprises to ascertain level of gains in efficiency (gross margin), product standards, value-added, exports, and job preservation</li> </ul>	<ul style="list-style-type: none"> <li>lack of management and marketing skills</li> <li>failure to capture new export markets due to insufficient improvements in product standards</li> <li>access to foreign exchange</li> <li>inadequate price incentives for input producers</li> </ul>
<b>3. Project Outputs</b> 3.1 economically and financially viable agro-processing projects	<ul style="list-style-type: none"> <li>the financing of 25 to 50 projects consistent with the objectives and priorities</li> </ul>	<ul style="list-style-type: none"> <li>the first four projects will be subject to Bank approval</li> <li>projects above the free limit will be subject to Bank approval</li> </ul>	<ul style="list-style-type: none"> <li>inability of credit applicants to meet lending criteria</li> <li>lack of experience with Bank procedures</li> </ul>
3.2 enhanced underlying value and marketability of enterprise shares through increased returns and stronger balance sheets			<ul style="list-style-type: none"> <li>insufficient funds for investment and inadequate capital market development</li> </ul>
3.3 project management and institutional development: <ul style="list-style-type: none"> <li>sound project design and business plans including technical, marketing and financial aspects</li> <li>sound risk analysis and credit approval procedures</li> </ul>	<ul style="list-style-type: none"> <li>achieved EIRR for each project of at least 12%</li> <li>achieved FIRR for each project above the cost of capital</li> <li>enhanced systems for risk analysis and credit approval procedures</li> <li>guidelines for addressing debt recovery/ delinquency</li> <li>models for sponsors on business plan preparation</li> <li>establishment of a competent PIU</li> </ul>	<ul style="list-style-type: none"> <li>annual financial statements and other data from the project enterprises</li> <li>review missions</li> <li>project progress reports and review missions</li> </ul>	<ul style="list-style-type: none"> <li>absorptive capacity of counterpart staff</li> <li>inability to retain competent staff</li> </ul>
4. Activities	Inputs	Project Monitoring Mechanism	Risks
4.1 project finance	<ul style="list-style-type: none"> <li>\$50 million</li> </ul>	<ul style="list-style-type: none"> <li>project progress reports and review missions</li> </ul>	<ul style="list-style-type: none"> <li>slowdown in transition to a market economy</li> </ul>
4.2 technical assistance for capacity building of NBU and project sponsors	<ul style="list-style-type: none"> <li>ADTA \$830,000</li> <li>25 person months of consulting services</li> </ul>	<ul style="list-style-type: none"> <li>PCR/PPAR</li> </ul>	<ul style="list-style-type: none"> <li>macroeconomic instability</li> </ul>

## PIPELINE OF POTENTIAL SUBPROJECTS

			Loan	Total	
Name of Sponsors	Location	Project Description	Size (\$ m)	Cost (\$ m)	Notes
Fruit and Vegetable Processing and Packaging					
1 Agrofirma Andijan	Andijan	Fresh fruit and vegetable packaging at 10 tons/hour	0.70	0.95	
2 Agrofirma Andijan	Andijan	Fruit juice packaging and bottling line	1.69	2.32	
3 Agroprom Company	Andijan	Fruit juice bottling line	2.50	4.00	V
4 Agroprom Company	Andijan	Tomato ketchup production line	0.50	0.65	V
5 Agroprom Company	Andijan	Fruit juice packaging line	2.00	2.75	V
6 Bayram-Fiesta J.V. (Uz/Spain)	Andijan	Production and packaging of 3,000 liters/hour natural fruit juices	3.00	4.00	
7 Khoju-Abad Cannery	Andijan	Tomato paste aseptic packaging line	1.20	1.70	
8 Mask J.V. (Uz/Brit/Rus/Saudi)	Andijan	Annual production of 1,875 tons apple concentrate & 80 tons aroma	3.67	5.70	PBP
9 Asakin cannery	Asakin	Tomato paste aseptic packaging line	1.20	1.70	
10 Bulungur Cannery J.V. (Uz/Ger)	Bulungur	Tomato paste and ketchup production and aseptic packaging	4.00	6.50	
11 Uzfood Apple J.V. (Uz/Brit/Ger)	Bulungur	Production line for 3,200 tons of clear apple juice concentrate	4.07	5.59	PBP
12 Ypack Yuli J.V. (Uz/Brit)	Bulungur	5,000 tons/year tomato paste production and aseptic packaging	1.91	2.93	PBP
13 Bulungur Dried Fruit J.V.	Bulungur	Modernisation of dried fruit production line	1.17	2.25	PBP
14 Fergana Cannery	Fergana	Tomato paste production and packaging lines	5.00	7.00	
15 Fergana Cannery *	Fergana	Fruits and vegetables packaging line	0.20	0.30	
16 Gazalkent cannery	Gazalkent	Tomato paste production line	5.00	7.00	
17 Gazalkent Cannery	Gazalkent	Fruits and vegetables production line	3.00	4.00	
18 Gulistan Cannery	Gulistan	Tomato paste and fruit processing line	3.00	4.00	
19 Hadjiabad Cannery	Hadjiabad	8 tons/hour dejuicing line & 2.4 tons/hour tomato paste packaging unit	1.70	2.52	PBP
20 Hadjiabad Cannery	Hadjiabad	Apple juice filtering and concentrate production line	3.00	4.00	V
21 Hadjiabad Dried Fruit	Hadjiabad	Fruit drying line rehabilitation	0.15	0.25	V
22 Zamon Company	Kashkadarya	Processing and packaging for 1,415 tons/year of tomato paste	2.11	2.85	
23 Kibray Collective Farm	Kibray	Fruit juice and concentrate production line	3.67	5.70	V
24 Kildon Cannery	Kildon	Aseptic packaging of tomato paste at 2.4 tons/hour	1.20	2.43	
25 Chartak district	Namangan	Tomato paste and fruit processing line	3.00	4.00	
26 Kasansay RTPO Cannery	Namangan	Aseptic packaging of tomato paste at 2.4 tons/hour	1.20	1.70	
27 Namangan Cannery	Namangan	Fruit juice reprocessing and packaging line	0.70	1.20	V
28 Namangan Cannery	Namangan	2 tomato paste packaging lines & ketchup production line	2.00	2.70	PBP
29 Trade Industrial Association	Namangan	Aseptic packaging of tomato paste at 2.4 tons/hour	1.20	1.50	
30 Nukus Cannery	Nukus	Tomato paste production line	2.60	3.50	
31 Ishtirman Cannery	Samarkand	Tomato paste production line	3.10	4.50	
32 Kishmish Collective	Samarkand	Aseptic packaging of tomato paste at 2.4 tons/hour	1.37	1.86	
33 SamarkandKonserva	Samarkand	Aseptic packaging of tomato paste at 2.4 tons/hour	1.20	2.54	V
34 Agrifirm "Sariasia" **	Sariassy	Fruit juice processing and packaging line	8.00	11.00	
35 Sariassy Cannery	Sariassy	Fruits and vegetables production line	3.00	4.50	
36 Shahrisaby Cannery	Shahrisaby	Tomato paste 200kg aseptic packaging unit	1.20	1.70	
37 Shahrisaby Cannery	Shahrisaby	Tomato paste production line	5.00	7.00	
38 Novotashkent Cannery	Tashkent	Aseptic packaging of tomato paste at 2.4 tons/hour	1.37	1.84	V
39 Novotashkent Cannery	Tashkent	Fruit juice production line	5.00	7.00	V
40 Novotashkent Cannery	Tashkent	Tomato paste production line	5.00	7.00	V
41 Novotashkent Cannery	Tashkent	Aseptic packaging of 3,600 liters/hour of natural, puree based juices	3.20	4.35	V
42 Taylyak Conserva Joint Venture	Taylyak	Aseptic packaging of tomato paste at 2.4 tons/hour	1.18	1.77	
43 Uchkupruk cannery	Uchkupruk	Tomato paste packaging unit	1.20	1.70	
44 Halkaabad Company	Yangiyul	Fruit juice & concentrate production from 15,000 tons/year input	3.67	5.00	V
45 Yangiyul Cannery	Yangiyul	Aseptic packaging of tomato paste at 2.5 tons/hour	1.22	2.43	
46 Yangiyul Cannery	Yangiyul	Fruits and vegetables production line	3.00	4.50	
Sub-Total			114.05	164.38	19

\* Potential subprojects in the pipeline of the Fergana NBU branch awaiting processing to NBU head office

\*\* Included subject to additional foreign exchange loan or equity finance consistent with lending requirements

V Visited.

PBP Preliminary Business Plan prepared.

## PIPELINE OF POTENTIAL SUBPROJECTS

			Loan	Total	Note	
Name of Sponsors	Location	Project Description	Size (\$ m)	Cost (\$ m)		
Milk and Meat Processing						
47	Andijan Milk Processing Factory	Andijan	Aseptic retail packaging of milk and juices	3.50	5.50	V
48	Turon	Andijan	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
49	Abdulla Farm *	Fergana	Mini-factory for meat and dairy processing	0.02	0.03	
50	Alijon	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
51	A. Navoi Collective Farm *	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
52	Dehkanova Collective Farm *	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
53	Dustlik Collective Farm *	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
54	Fergana Collective Farm *	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
55	Fergana Milk Processing Factory	Fergana	Ice cream production line	0.47	0.87	
56	H. Hekimzade Collective Farm *	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
57	Istiklol Farm *	Fergana	Dairy products processing with 2,000 liters/day milk input	0.22	0.31	
58	M. Rakhimov Collective Farm *	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
59	Navoi Collective Farm *	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
60	Novbahor Collective Farm	Fergana	Production of milk products with input of 2,000 liters milk/8hours	0.20	0.29	
61	Novkent Company *	Fergana	Meat processing factory	0.24	0.35	PBP
62	Odiljon Farm	Fergana	Dairy products processing with 2,000 liters/day milk input	0.22	0.31	
63	Orom Company *	Fergana	Small scale meat processing facility	0.02	0.04	V
64	Sakkokiy Company *	Fergana	Tannery facility	0.07	0.10	
65	Selkhoztekhnika Company *	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.18	0.25	
66	Shark Yulduzi Collective Farm *	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.18	0.25	
67	S Hurat	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
68	Tomosha Company	Fergana	Meat processing factory	5.00	7.50	
69	Ulmas Company	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
70	Uzbekistan Collective Farm*	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
71	U. Akunbabaev Collective Farm*	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
72	Yakkatut Collective Farm*	Fergana	Processing of meat and milk products	0.42	0.60	
73	Yangi Hayot Collective Farm *	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	V
74	Yangi Kadam Collective Farm *	Fergana	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
75	Kalajic Company	Haresm	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
76	Insanservis	Karakalpakstan	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
77	Urgench-sut Company	Khorezm	Cheese and butter production and packaging	0.22	1.29	
78	Gurmsaran Cooperative Farm	Namangan	Milk processing line	0.30	0.50	
79	Moscow Farmers Association'	Namangan	Milk processing line	0.30	0.50	
80	Nihol Trading & Manufacturing	Namangan	Production of milk products with input of 3,000 liters milk/8hours	0.28	0.48	
81	Zarbdor Corporation	Namangan	Milk processing line	0.30	0.50	
82	Molgusar	Sirdarya	Mini-dairy for milk, yoghurt, cheese, cream & butter	0.20	0.29	
83	Kanabecata	Sirdarya	Meat processing factory	0.23	0.30	
84	Denau-sut	Surhandarya	Production of 2.83 million litres of yoghurt per year	0.55	1.70	
85	Gappar Company	Surhandarya	Mini-dairy for 1,500 liters of raw milk input per day	0.20	0.25	PBP
86	Gaopar Company	Surhandarya	Processing of 400 tons of meat	0.50	0.69	
87	Kugai Cooperative	Tashkent	Milk processing line	0.30	0.50	
88	Sadull Private Farm	Tashkent	Milk processing line	0.20	0.29	
Sub-Total			17.72	28.60	5	

- \* Potential subprojects in the pipeline of the Fergana NBU branch awaiting processing to NBU head office
- V Visited
- PBP Preliminary Business Plan prepared.

## PIPELINE OF POTENTIAL SUBPROJECTS

Name of Sponsors	Location	Project Description	Loan Size (\$ m)	Total Cost (\$ m)	Note	
Soft Drinks Processing						
89 Alte-Aryk Company	Andijan	Mineral water production of 4,500 liters/hour	2.70	3.75	PBP	
90 Oltyin-Boshok Company	Bukhara	Softdrinks production	5.00	7.00		
91 Kronos AG Company	Kharsi Plant	Softdrinks production	3.30	4.46		
92 Samarkand J.V.	Samarkand	Mineral water production	2.70	3.75		
93 Shahrisaby Bottling	Shahrisaby	Mineral water production	2.70	3.75		
94 Shifo-Bulok Company	Tashkent	Mineral water production	2.70	3.75		
95 Lassat Company	Tashkent	Softdrinks production	3.60	4.86		
96 Turkistan Company	Tizak	Softdrinks production	4.50	6.08		
			Sub-Total	27.20	37.39	1
Other Agro-Food Industry						
97 Bobir Company*	Fergana	Agro-products processing	0.20	0.35		
98 Small Business Sogdiana *	Fergana	Agro-products processing	0.05	0.10		
99 Yunushodja Company*	Fergana	Agro-products processing	0.10	0.20		
100 Agra-service	Gulistan	Doka bread mill and bakery	5.00	6.75		
101 Jaychi	Kashkadarya	Fish processing	0.25	0.40		
102 Shirinlik Company	Namangan	Agro-products processing	1.10	1.49		
103 Kanabecata	Sirdarya	Cotton seed oil processing	0.15	0.25		
104 Shark	Sirdarya	Cotton seed oil processing and flour milling	0.20	0.30		
105 Small Business Agroservis	Sirdarya	Bakery for 6,000 tons bread per year	5.00	6.75		
106		Tin cans production **	6.50	10.00		
107		Tin cans production **	6.00	9.00		
108		Plastic packaging materials production	3.00	4.50		
			Sub-Total	27.55	40.09	0
TOTAL			186.51	270.46	25	

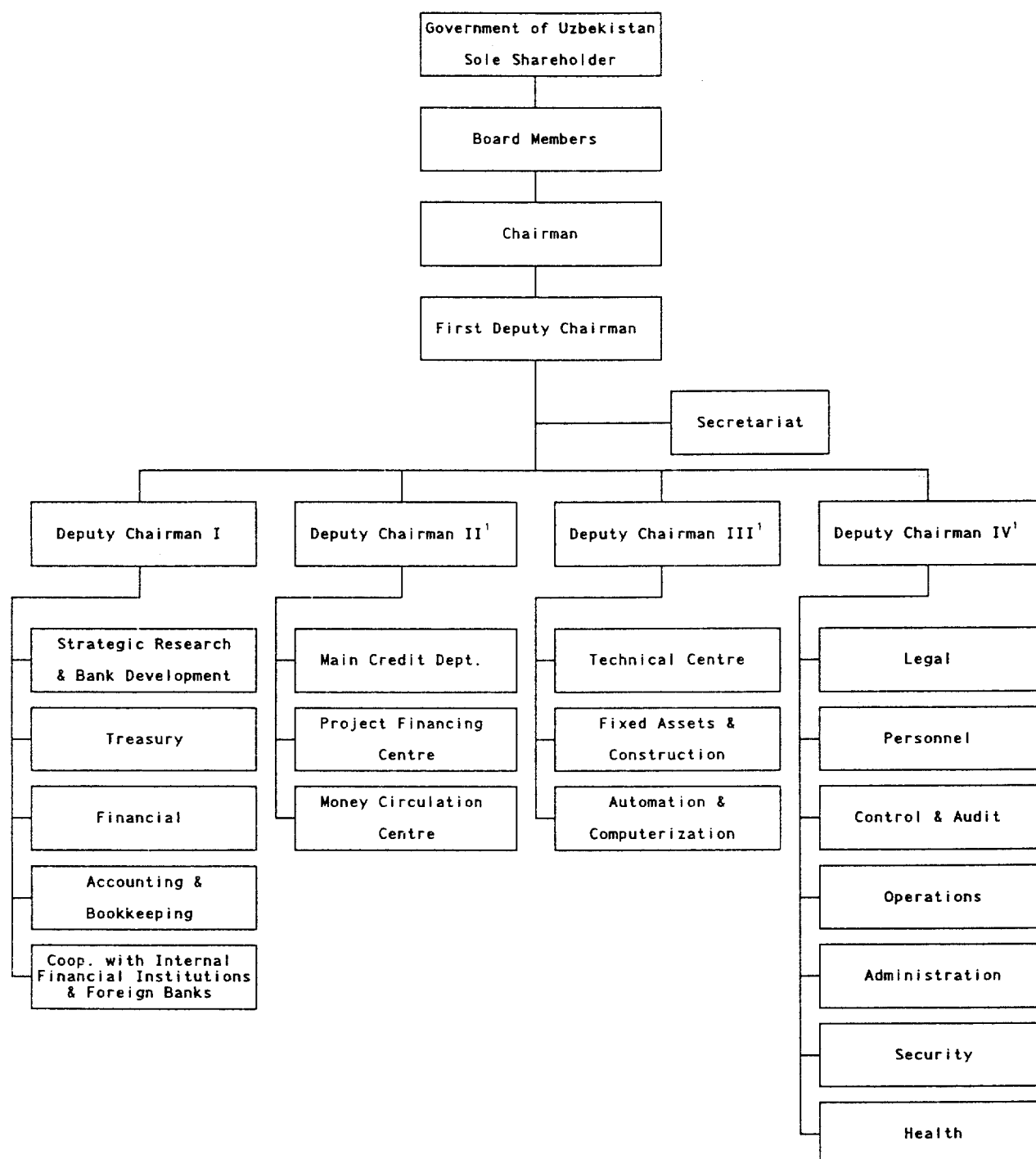
\* Potential subprojects in the pipeline of the Fergana NBU branch awaiting processing to NBU head office

\*\* Included subject to additional foreign exchange loan or equity finance consistent with lending requirements

PBP Preliminary Business Plan prepared.

## NATIONAL BANK OF UZBEKISTAN

## Organization Chart

<sup>1</sup> Positions Vacant

**NATIONAL BANK OF UZBEKISTAN**  
**BALANCE SHEET**  
(\$'000)

Item	1993	1994	1995
<b>ASSETS</b>			
Cash	24,011	149,092	22,085
Due from the Central Bank	78,056	16,797	136,047
Placements with Other Banks	605,506	635,403	981,560
Commercial Loans	504,690	451,939	615,242
Investments	30	229	6,786
Fixed Assets	346	33,329	50,598
Other Assets	51,457	47,498	42,741
<b>Total Assets</b>	<b>1,264,096</b>	<b>1,334,287</b>	<b>1,855,059</b>
<b>LIABILITIES</b>			
Deposits from Other Banks	8,251	20,989	163,439
Current Accounts	419,824	332,196	363,270
Deposit Accounts	210,174	452,239	534,268
Long-term Debt Received	223,854	138,429	306,859
Letters of Credit Obligation	109,159	114,455	124,986
Other Liabilities	101,683	39,996	22,198
<b>Total Liabilities</b>	<b>1,072,945</b>	<b>1,098,304</b>	<b>1,515,020</b>
<b>EQUITY</b>			
Charter Fund	202,982	202,982	239,982
Additional Contributed Capital			20,000
Retained Profit/(Loss)	(11,847)	7,279	54,843
Revaluation Reserve		25,708	25,212
<b>Total Equity</b>	<b>191,135</b>	<b>235,969</b>	<b>340,037</b>
<b>Total Liabilities and Equity</b>	<b>1,264,080</b>	<b>1,334,273</b>	<b>1,855,057</b>
<b>Ratios</b>			
Total Liabilities/Equity	5.61	4.65	4.46
Total Assets/Equity	6.61	5.65	5.46

Source: NBU Annual Report (Financial Statements audited by Ernst & Young).

**NATIONAL BANK OF UZBEKISTAN**  
**INCOME STATEMENTS**  
(\$'000)

Item	1993	1994	1995
Profit Before Tax and Provision	30,465	22,468	81,811
Provision for Losses on Commercial Loans	(2,664)	(873)	(2,779)
Profit on Ordinary Activities Before Taxation and Ordinary Items	27,801	21,595	79,032
Taxation Extraordinary Item	(2,909)	1,531	29,455
Profit for the Period	24,892	23,126	108,487
Dividends Paid	(80)	(4,000)	(61,417)
Retained Profit for the Period	24,812	19,126	47,070
Average Assets	858,215	1,299,192	1,594,672
<b>Total Equity</b>	<b>191,566</b>	<b>235,983</b>	<b>340,037</b>
<b>Ratios</b>			
Earnings/Average Assets	2.90 %	1.78 %	6.80 %
Earnings/Total Equity	12.99 %	9.80 %	31.90 %
Total Equity/Average Assets	22.32 %	18.16 %	21.32 %

Source: NBU Annual Report (Financial Statements audited by Ernst & Young).

**NATIONAL BANK OF UZBEKISTAN**  
**STATEMENT OF CHANGES IN FINANCIAL POSITION**  
**(\$'000)**

Item	1993	1994	1995
<b>Operating Activities</b>			
Net Income Before Taxation	27,801	21,595	79,032
Add/(Deduct) Non-Cash Adjustments-			
Depreciation	810	(528)	1,078
Provision for Placements with Other Banks	(3,401)	(439)	-
Provision for Loan Losses	2,083	873	2,779
Increase in Interest Receivable and Prepaid Expenses	(3,878)	(4,285)	(7,866)
Decrease in Accounts Payable and Accrued Expenses	(469)	9,709	4,824
Net Cash Inflow from Trading Activities	22,946	26,925	79,847
Net Decrease/(Increase) in Loans to Customers	(182,750)	51,878	(166,082)
Net Decrease/(Increase) in Other Assets	(44,063)	8,244	12,623
Net Decrease/(Increase) in Current Accts.	281,618	(87,628)	60,529
Net Increase in Corporate Deposits	210,059	242,065	82,029
Net (Decrease)/Increase in Interstate Credits	97,907	(85,425)	168,430
Net Increase in Letters of Credit	109,057	5,296	10,531
Net (Decrease)/Increase in Other Liabilities	95,300	(69,531)	(22,622)
Net Cash Flow from Operating Activities	590,074	91,824	225,285
<b>Servicing of Finance and Taxation</b>			
Income Tax Paid	(2,360)	(334)	-
Dividends Paid	(44)	(4,000)	(4,433)
	(2,404)	(4,334)	(4,433)
<b>Investing Activities</b>			
Purchase of Fixed Assets	(962)	(6,749)	(18,345)
Purchase of Investments	(19)	(199)	(6,557)
Net Cash Flow from Investing Activities	(981)	(6,948)	(24,902)
Net Cash Flow Before Financing Activities	586,689	80,542	195,950
<b>Financing Activities</b>			
Charter Fund Contributions	(738)	-	-
Net Cash Flow	<u>585,951</u>	<u>80,542</u>	<u>195,950</u>
<b>Analysis of Movements in Cash and Cash Equivalents</b>			
Cash	13,103	125,081	(127,007)
Balances Due from Central Bank	66,754	(61,259)	119,250
Placements with Other Banks	500,141	29,458	346,157
Deposits from other Banks	5,953	(12,738)	(142,450)
	<u>585,951</u>	<u>80,542</u>	<u>195,950</u>

Source: NBU Annual Report (Financial Statements audited by Ernst & Young).



# **NATIONAL BANK OF UZBEKISTAN**

## **ASSUMPTIONS UNDERLYING FINANCIAL PROJECTIONS (1996-2000)**

### **A. Loans**

1. Disbursements of loans approved, which represent additions to the loan portfolio comprising corporate loans (short term, medium term and long term), refinancing loans, and other loan facilities, are projected to be as follows:

	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>
Yearly total disbursements (\$ million)	1,422.7	1,330.3	1,519.9	1,757.8	2,052.5
Percent growth rate	(8.61)	14.25	15.65	16.77	

Loan disbursements are expected to decrease in 1997 with the emergence of new banks gaining a foothold in the market. However, NBU is envisaged to improve its lending operations in the remaining years of the forecast period registering gradual increases in loan approvals and disbursements. The envisaged increases in the latter part of the forecast period will be brought about by NBU's more aggressive promotion work and the expected improvement in the economy of the country.

2. Collections of loans are projected to be as follows:

	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>
Yearly total collections (\$ million)	1,066	1,198	1,354	1,542	1,772
Percent growth rate		12.38	13.02	13.88	14.92

Loan collections are expected to register gradual increases during the forecast period, directly linked to the size of the portfolio.

3. As a result of increasing disbursement, NBU's portfolio would continuously grow as follows:

	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>
Yearly total portfolio (\$ million)	1,215	1,365	1,543	1,757	2,019
Percent growth rate		12.35	13.04	13.87	14.91

4. Interest rates for loans during the forecast period, which would be for both local currency and foreign currency lending, are envisaged to average 7.37 percent in 1996, 7.89 percent in 1997, 7.72 percent in 1998, 7.61 percent in 1999 and 7.46 percent in 2000. The annual averages are expected to gradually decrease during the forecast period based on the

expected yearly decreases in the inflation rate on account of stabilization of the economy, and increasing competition for NBU from other domestic and foreign banks.

## B. Borrowings

5. Additions to borrowings, including deposits received from customers comprising current accounts, savings, time and L/C deposits, are projected as follows:

	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>
Yearly totals (\$ million)	941	1,527	1,802	2,141	2,557
Percent growth rate		62.27	18.00	18.81	19.43

The very high increase in 1997 is because of a cut in deposits in 1996.

6. Interest rates on deposits in local and foreign currencies are expected to average 3.09 percent in 1996, 1.40 percent in 1997, 1.23 percent in 1998, 1.17 percent in 1999 and 1.11 percent in 2000. The very low cost of deposits is mainly because most of deposits are in current account, which do not carry any interest. Interest rates on loan borrowings are expected to average 5.13 percent in 1996, 5.02 percent in 1997, 5.14 percent in 1998, 5.21 percent in 1999, and 5.21 percent in 2000.

7. Withdrawals of deposits are envisaged as follows:

	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>
Yearly total withdrawals (\$ million)	1,215	1,421	1,673	1,982	2,362
Percent growth rate		16.95	17.73	18.47	19.17

Yearly movements of withdrawals is generally in line with the growth in deposits.

## C. Investments

8. The balances of investments at the end of the years during the forecast period are given below:

	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>
Balance, 31 December (\$ million)	15.2	29.7	60.6	130.1	293.8
Percent growth rate		124.43	94.87	104.17	114.63

The projected growth in investments is consistent with NBU's strong support to develop the capital market. NBU is playing a major role as an investment banker in leading the efforts to accelerate the conversion and privatization of State-owned enterprises through offering shares to the private sector.

9           The projections neither provide for dividend income on investments, divestment/disposal and the related capital gains/losses, nor provisions and/or write-offs for investment failures.

10           The marginal decline in the charter funds is due to decline in dollar value of the sum denominated charter fund, as a result of depreciation in the value of sum from Sum40 to one dollar in 1996 to Sum64.49 in the year 2000.

#### **D.     Operating Expenses**

11           The level of operating expenses is assumed to increase by about 7 percent yearly during the forecast period.

#### **E.     Exchange Rates**

12           The exchange rates used during the forecast period are assumed to be Sum40.00:\$1.00 in 1996; Sum45.08:\$1.00 in 1997; Sum50.79:\$1.00 in 1998; Sum57.23:\$1.00 in 1999; and Sum64.49:\$1.00 in 2000.

#### **F.     Tax Rate**

13           A tax provision equivalent to 35 percent of net income is projected as deduction to net operating income before taxation. Although the banks are exempt from payment of tax, they are subject to the condition that an equal amount is invested in infrastructure.

#### **G.     Dividend**

14           No dividends are assumed as it is expected that any dividend paid would be given back to NBU by the Government as additional capital.

## **OUTLINE TERMS OF REFERENCE FOR ADVISORY TECHNICAL ASSISTANCE**

### **A. Background**

1. The Government has requested advisory technical assistance (TA) from the Bank to enable NBU to further strengthen its institutional capacity. The proposed TA will cover two main areas: (i) strengthening the capacity of NBU's branch offices so as to upgrade banking skills necessary for limited recourse lending; and (ii) assisting NBU Headquarters in the design and implementation of benefit monitoring and evaluation systems for subprojects.

2. NBU recently established satisfactory subproject appraisal and credit approval procedures under technical assistance provided by EBRD. EBRD technical assistance concentrated on procedures at NBU's Headquarters. To deepen NBU's institutional capacity, there is now a need to strengthen procedures in its branch offices. NBU plans to increase its branch network during the next few years in order to capture more commercial banking business and private sector clients.

### **B. Rationale**

3. NBU's loan portfolio for lending to the private sector (including SMEs) is relatively young, having mainly commenced with EBRD's ongoing credit line. Under NBU's policies and procedures, all credits in foreign exchange have to be approved by Headquarters but with initial screening being undertaken by branch offices. At present, the main weakness is that a high proportion of credit proposals submitted to Headquarters from branches need to be significantly revised and refined before a bankable subproject can be considered in the form of a sound business plan. This creates delays and a high drop-out rate for credit proposals initiated at branch level. Thus, the TA will assist branch offices to develop skills for screening and processing credit applications from private sector clients. Another weakness is that systems for subproject benefit monitoring and evaluation are not in place. Accordingly, the TA will also address this area.

### **C. Objectives**

4. The objectives of the TA are to (i) strengthen the capacity of branch offices to screen credit proposals from clients and to assist clients improve subproject design and formulate business plans that match sound criteria including requirements for equity and collateral; (ii) strengthen credit processing procedures between branches and Headquarters in order to reduce delays and drop-out rates; and (iii) implement systems for subproject benefit monitoring and evaluation.

### **D. Terms of Reference**

#### **1. Diagnostic Review of NBU**

5. To set the scene for strengthening NBU's institutional capacity, the consultants will carry out a diagnostic review of NBU in order to update NBU's corporate strategy, lending policies, accountants and auditors policies, management framework, recent performance, training programs, and its plans to increase its branch network beyond the current 17 branch

offices. The results of the diagnostic review will be embodied in the form of succinct medium-term strategic plan.

## **2. Subproject Processing**

6. The terms of reference for consulting services for strengthening skills in subproject processing at branch level are as follows:

- (i) In consultation with NBU's Headquarters, the consultants will review the long list of subproject proposals and ascertain the status of the pipeline. Then, a sample of subprojects will be selected for detailed examination in consultation with the respective branch office and client. The selected subprojects will be those that have good bankable potential but where more work is needed to arrive at a sound business plan that fits the eligibility criteria. The selection will comprise ten or more subprojects covering a representative sample of the pipeline, including tomato paste, apple concentrate, fruit juices, meat, milk, mineral water and the manufacture of packaging materials.
- (ii) Following the above selection, the consultants will assist the respective branch office and client to convert the preliminary business information into a full business plan consistent with the formats, criteria and level of detail required by Headquarters. Then, the business plan will be submitted by the branch to Headquarters. Subsequently, the consultants will assist Headquarters as necessary to process the credit application through to submission to NBU's credit committee and to the Bank.
- (iii) In assisting the conversion of preliminary business information into full business plans, the consultants will provide advice on a wide range of matters, including marketing, technical design, food processing technology, production management and scheduling the flow of raw materials, working capital needs, subproject risks, financial and economic analysis, sensitivity analysis, and overall business plan preparation.
- (iv) In carrying out their business plan work, the consultants will review the existing credit processing procedures between branches and Headquarters and make any necessary recommendations for revisions and streamlining, including procedures to eliminate unbankable subprojects at an early stage in the credit cycle.
- (v) Once the ten or so business plans have been completed, the consultants will hold a seminar for all branches and SME's representatives to attend at Headquarters. The seminar will explain the business plan methodology and problems/issues encountered during business plan preparation (including actual case studies based on some of the ten or so business plans). As a practical guide and model, the ten or so finalized business plans will be circulated to all branch offices and SME's representatives.

### 3. Subproject Benefit Monitoring and Evaluation

7. The consultants will assist NBU Headquarters to design and implement computerized systems for subproject benefit monitoring and evaluation. Specific data collection and reporting formats will be developed and implemented using a computerized data base. Specific areas to be covered include: financial and operational performance of subprojects, direct employment creation and impact on the poor and other vulnerable groups, and indirect employment creation. In designing the new systems, the consultants will give due regard to the Bank's *Guidelines on Benefit Monitoring and Evaluation*.

#### E. Cost and Financing Plan

8. The total cost of the TA is estimated at \$880,000, comprising \$790,000 in foreign exchange and \$90,000 equivalent in local cost. The Government has requested Bank financing to meet the entire foreign exchange cost of \$790,000 and \$40,000 equivalent of the local cost. The Government will contribute the remaining \$50,000 of local cost in the form of counterpart services, domestic travel, interpreters, and office facilities.

#### F. Implementation Arrangements

9. The TA, which will be implemented over a period of about 12 months, will require a multidisciplinary team of international experts, with a total input of 25 person-months of consulting services. Counterpart staff inputs, equivalent to about 75 person-months, will be provided by NBU mainly drawn from its SME Unit and branch offices. The consultants will be recruited in accordance with the Bank's *Guidelines on the Use of Consultants*.

10. The international expertise will include the following:<sup>1</sup>

- (i) team leader/business plan specialist for agro-processing projects (ten person-months);
- (ii) marketing specialist for processed foods (four person-months);
- (iii) food processing engineer experienced in the processing of fruit/vegetables (three person-months);
- (iv) food processing engineer experienced in microprocessing of dairy products (three person-months);
- (v) food production management specialist experienced in the interface between suppliers of raw materials and processing plants (two person-months);

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<sup>1</sup> While the total number of person-months of consultant services will be 25, the numbers given in parenthesis are indicative for each specific expertise, which will be adjusted accordingly, on a need basis, through recommendation of the team leader in consultation with the Executing Agency, and subject to approval by the Bank.

- (vi) benefit monitoring and evaluation specialist experienced with SMEs (three person-months);

**G. Reporting**

11. The consultants will submit the following reports to NBU and the Bank:

- (i) an inception report after the first month;
- (ii) a mid-term report after month 5 including the medium-term strategic plan under the diagnostic review of NBU (see para. 5 above);
- (iii) a draft final report after month 10; and
- (iv) a final report within one month of receiving comments from NBU and the Bank.

**COST ESTIMATES AND FINANCING PLAN**  
(**\$**)

Item	Foreign Exchange	Local Currency	Total Cost
<b>A. Bank Financing</b>			
1. International Consultants			
a. Remuneration	500,000		500,000
b. Per Diem	150,000		150,000
c. International Travel	30,000		30,000
2. Computer and Office Equipment	10,000		10,000
3. Communications and Reports	25,000		25,000
4. Cost of Translators/Interpreters		25,000	25,000
5. Cost of Domestic Travel		10,000	10,000
6. Contract Negotiations	5,000		5,000
7. Contingencies	70,000	5,000	75,000
Subtotal (A)	790,000	40,000	830,000
<b>B. Government Financing</b>			
1. Counterpart Services		30,000	30,000
2. Office Expenses and Logistical Support		20,000	20,000
Subtotal (B)		50,000	50,000
<b>Total</b>	<b>790,000</b>	<b>90,000</b>	<b>880,000</b>



## **FINANCIAL AND ECONOMIC ANALYSIS**

### **A. Introduction**

1. Preliminary business plans were prepared by the Bank-funded small-scale TA No. 2624-UZB during September and October 1996 for eight of the potential subprojects, selected to represent the main types of subprojects likely to be financed under the Loan. Financial and economic analyses were undertaken to assess the viability of the potential pipeline of subprojects and their ability to meet the financial requirements of the Loan to become bankable subprojects. The business plans are preliminary in nature and do not represent any commitment to finance the individual projects, such commitment being dependent on the detailed analyses to be undertaken by the Executing Agency, the National Bank for Foreign Activity of the Republic of Uzbekistan (NBU).

### **B. Assumptions**

#### **1. Evaluation Period**

2. The Project will promote enterprises which will provide long-term sustainable development and evaluation of the sample of potential enterprises has been on a "going concern" basis rather than the basis of subprojects with a finite life. Thus, the evaluation has been based on a ten-year period so that, at the expected rates of return, later benefits will not have a significant impact on the overall rates of return. Equally, to avoid distortions the evaluations do not allow for residual asset values but depend solely on the ongoing revenues and costs of the enterprises.

#### **2. Investment Costs**

3. Investment cost data have been based on estimates of foreign and local costs provided by subproject sponsors and equipment suppliers and includes equipment, buildings, initial stocks of packaging materials and spare parts and initial working capital requirements. Existing assets have been valued at market prices, when available, and estimates made of market values where these have not formally been revalued. In extending credit to subprojects, the Executing Agency will be required to update costs for new investments and review market values of existing assets to ensure compliance with, particularly, the debt/equity and collateral requirements of subproject loans.

#### **3. Output and Input Prices**

4. Most of the subprojects target export markets for traded goods, principally tomato paste and apple juice concentrate. Ex-factory prices for such goods have been calculated on the basis of delivered prices in Europe less transport costs and adjusted for product quality.

5. Current European prices for tomato paste are in the range \$900-950/ton for 36 Brix concentration delivered in 200kg aseptic packaging and rail transport costs of \$200/ton have been deducted. The resulting \$700-750/ton ex-factory price is applied only to product of high concentration and acceptable color - not possible with the Former Soviet Union (FSU) technology due to excessive temperatures and processing time - and quality adjustments have

been based on discussions of presently realized prices for exports to Europe of \$600-650/ton. For sales to FSU countries in 9kg packaging, the present realized contract prices of \$550-600/ton have been used.

6. European prices for clear, aromatic apple concentrate range between \$1,400-1,500/ton, thus the ex-factory price used for new production lines using Western technology, net of \$200/ton transport, is \$1,250/ton. The quality discounted prices of the darker, non-aromatic concentrate produced by FSU methods was reported by producers to range from \$700-1,100/ton. A similar method was applied in calculation of prices for other exported outputs, such as dried apples. For domestic sales, the local prices specific to the enterprise location were used.

7. The horticultural raw materials were traded goods under the FSU system but the end of that system has denied effective access to export markets due to higher transport costs, dislocation and inadequacy of distribution systems for fresh produce, delayed payments and bureaucratic procedures.<sup>1</sup> Horticultural products are no longer traded goods and prices specific to individual production locations have been adopted. At present, these prices are influenced by substantial local surpluses and the evaluation has assumed that these surpluses will gradually be corrected, by increased processing demand and/or reduced harvests, and real increases of 2.5 percent per year have been accounted for. A similar methodology has been adopted for the pricing of other non-traded inputs, such as milk.

#### **4. Revenues and Production Costs**

8. Conservative assumptions have been made as to the ultimate level of capacity utilization and, particularly, the time taken to reach those levels of production; this reduces both revenues and variable operating costs against unchanged fixed costs and debt service requirements. Revenues and costs of activities undertaken by the enterprise which do not specifically form a part of the activity directly supported by the credit line have been excluded from the projection of cashflows and debt/equity requirements.

9. Operating costs have been based on actual 1996 costs, where available, and on estimated 1996 values for costs in new operations. In the proposals considered the agricultural raw material input costs are between 70 percent and 75 percent of the total production costs, excluding financing charges and depreciation. The only other substantial cost item in any of the proposals is the packaging material cost, 15 percent of the cost of paste in 200kg aseptic packs and 20 percent in 9kg cans, and packaging costs have been accounted for in local or foreign currency specific to the identified source of supply. Conservatively, allowance has been made for real increases in all local currency production costs.

#### **5. Currency and Inflation**

10. All values have been expressed in US dollar appropriate to the largely foreign currency incremental investment costs and export revenues; no allowance has been made for lower Sum costs due to possible continued devaluations. No allowance has been made for

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<sup>1</sup> Cabinet of Ministers Decree of 16th August 1996 acknowledges and seeks to address these problems in order to increase the marketed and exported proportion of the 1996 harvest.

increases in sales prices but allowance has been made for real increases in the prices of local raw materials, labor and other inputs.

## 6. Loan and Financing Requirements

11. Financial plans for each subproject are based on specific plans for debt and equity and identified sources of both in terms of both foreign and local currency finance. Subproject loans, repayment and interest are denominated in US dollar set to meet the proposed terms and conditions of finance in the context of the projected cashflows of each enterprise. Repayment and grace periods on loan repayment are set at the minimum period consistent with cashflows and debt-service coverage requirements.

## 7. Taxation

12. Value added tax (VAT) is charged at a rate of 17 percent but the major agricultural inputs to the processing projects are exempt from VAT and all exports are also exempt. Domestic sales will be subject to VAT but to provide a consistent evaluation of the import-substitution subprojects with the export subprojects VAT has not been included in the analysis, which is based on ex-factory prices before VAT.<sup>2</sup>

13. The standard rate of corporate income tax is currently 37 percent but a wide range of privileges are available depending on the enterprise form and destination of sales. Those directly related to potential projects include:

- (i) any joint venture with 30 percent or more foreign ownership enjoys a rate of 18.5 percent;
- (ii) any new joint venture with over 30 percent foreign ownership is exempt from income tax for five years and subsequently pays at 50 percent of the standard rate, i.e., 18.5 percent;
- (iii) any new enterprise will pay income at only 25 percent of the standard rate (9.25 percent) in the first year and 50 percent (18.5 percent) in the second year before paying the full rate in subsequent years; and
- (iv) enterprises which export enjoy reduced rates of income tax related to the proportion of exports to their total sales: (i) if exports are 5 percent to 9.99 percent of sales, a 20 percent reduction to 29.6 percent; (ii) if 10 percent to 19.99 percent, a 30 percent reduction to 25.9 percent; (iii) if 20 percent to 29.99 percent, a 40 percent reduction to 22.2 percent; and (iv) if 30 percent or more, a 50 percent reduction to 18.5 percent.

14. These incentives encourage investment in export-oriented joint ventures with substantial foreign share holdings whilst giving less incentive to modernization of existing export enterprises and little incentive to the establishment of new, domestically owned enterprises

<sup>2</sup> In the financial cashflows, the VAT inflows and outflows would balance but FIRR's would be increased through the temporary use of VAT payable to fund current assets and reduce the initial investment cost.

targeting import substitution. The wide differences in FIRR of evaluated projects is largely on account of these differences in tax incentives and the evaluation has analyzed the financial returns to the subprojects if no tax incentives were given and all enterprises paid the full 37 percent income tax every year.

## **8. Economic Assumptions**

15. Economic values have been calculated using a shadow exchange rate of \$1 = Sum50. The exchange rate during the appraisal mission was Sum40:\$1 at the official market rate, as against Sum36:\$1 at the end of 1995. However, in Uzbekistan from mid-October 1995 a spread has emerged between the cash exchange rates charged by exchange bureaus and the official determined exchange rates as a result of an effort by commercial banks to reduce the influence and extent of an illegal parallel exchange market. Initially, this spread was as much as 40 percent but from April 1996 it narrowed as the Central Bank of Uzbekistan used its influence on commercial banks to eliminate the abnormally high spread by commercial banks that had limited competition among them and at the same time it increased the volume of foreign exchange offered at the foreign exchange auction. Subsequently, the spread reappeared from July 1996 as the parallel exchange market rate recurred. The cash exchange rate between July and October 1996 has fluctuated between Sum42 and Sum52 to the dollar depending on the extent of intervention and influence exercised by the Central Bank. During the same period, the parallel exchange rate apparently fluctuated in the range of Sum50-70 to the dollar.

16. Such a significant difference in these exchange rates does not necessarily indicate that the local currency is likely to depreciate dramatically in the near term. The large difference has arisen partly from restrictions on access in the foreign exchange market through bureaucratic interventions rather than legal prescription. It also reflects the Government's cautious approach to handling the management of its foreign exchange reserves, which stand at six months' import equivalent at \$1.6 billion (net) compared with estimated excess demand for foreign exchange in September 1996 of about \$300-400 million. A more stable nominal exchange market could be potentially attainable at the expense of a moderate depletion in the level of foreign exchange reserves. Continued bureaucratic restrictions to foreign exchange, however, could exert more pressure on a further depreciated exchange rate in the parallel exchange market. In October 1996, the Government introduced two restrictive measures apparently aimed at curtailing the parallel exchange market and at containing the extent of domestic cash transactions undertaken in dollars. These measures may also reflect its short-term concern at external sector developments in 1996. These measures were, firstly, to restrict trading in foreign exchange to two banks and, secondly, the introduction of more stringent controls on the movement of foreign currency cash in and out of the country.

17. In view of these uncertainties and given that the economic fundamentals of the country remain relatively sound in the medium term (see Table 3, Appendix 1), a shadow exchange rate of \$1 = Sum50 has been considered as appropriate for the calculation of economic returns, a premium of 25 percent over the official market exchange rate. However, given the uncertainties prevailing, the evaluation has also calculated economic returns at shadow rates of Sum45 and Sum60, 12 percent and 50 percent premiums, respectively.

18. The direct foreign component of investment costs has been identified as far as possible and the indirect foreign costs included in local investment costs for civil works and the like has been assumed to be 33.3 percent. The foreign and local exchange sales are clearly identified in the evaluation of each subproject and foreign exchange only allowed in operating costs for identified material inputs, principally packaging materials, spare parts and process chemicals.

19. Consideration has been given in the economic analysis to allowance for shadow wage rates and subsidies applied to some production costs but no specific allowance has been made given the scale of such costs. Widespread unemployment and underemployment in rural areas suggests that the opportunity cost of labor, including seasonal labor, is low and that a shadow wage rate may be appropriate. However, processing labor costs are typically 2-3 percent of total processing costs. Utilities may also be subject to distorted prices but electricity accounts for 2-4 percent of processing costs and total utilities, including electricity, to only 4-6 percent. It is unclear whether an element of subsidy on farm inputs has a significant impact on raw material input costs: in the context of excess supplies prices are determined by local demand rather than production costs and low prices and delayed payments for produce are reported by European Union Technical Assistance for Commonwealth of Independent States (EU-TACIS) farm surveys to result in very low use of purchased farm inputs regardless of the input price.

20. In this context, the general provision for 2.5 percent real increases in local costs and sensitivity tests for a 10 percent increase in total production costs are considered sufficient to test the economic viability of the proposals for the purposes of evaluation the pipeline of potential subprojects.

### C. Evaluation Results

21. The results of the financial and economic analyses are summarized in Table 1. The subprojects are financially and economically viable. The FIRR ranges from 17.3 percent to 28.8 percent, to give an overall 23.6 percent, influenced by the effect of enterprise structure and sales destination on income tax rates. The EIRR ranges from 25.8 percent to 43.7 percent with an overall 35.3 percent.

**Table 1: Results of Financial and Economic Evaluation**

<b>Borrowing Enterprise</b>	<b>FIRR</b>	<b>EIRR</b>
Mask JV (Concentrated Apple Juice)	19.3%	33.1%
Namangan Cannery (Tomato Paste Packaging)	19.6%	43.7%
Ypack Yuli JV (Tomato Paste Production & Packaging)	28.8%	40.1%
Uzfood JV (Concentrated Apple Juice)	27.8%	34.7%
Bulungur Dried Fruit JV (Fruit Drying and Packing)	26.2%	27.8%
Hodjiabad Cannery (Paste Packaging and Concentrate)	21.6%	37.7%
Novbahor Collective Farm Dairy	19.4%	26.5%
Gappar Dairy	17.3%	25.8%
<b>Total of the Enterprises</b>	<b>23.6%</b>	<b>35.3%</b>

22. The high EIRRs for export-oriented subprojects, such as tomato paste packages and apple juice concentrate, are because of: (i) the rehabilitation and modernization nature of most of the projects; and (ii) the lack of impact of the shadow exchange rate on the high proportion of foreign exchange sales in cash inflows and the high impact on the mostly Sum cash outflows.

23. Examples of the impact of rehabilitation on EIRRs include: (i) in Hodjiabad Cannery a new apple dejuicing line yields 85 percent juice compared with 55 percent with the technology replaced, giving an EIRR, purely on Sum input cost saving, of 70 percent, this is combined with a 27 percent EIRR on tomato paste packaging to give the overall 37.7 percent; and (ii) in Ypack Yuli a small investment in working capital allows production to be doubled by removing a packaging materials constraint, giving an EIRR of 257 percent, combined with a 15 percent EIRR from upgrading the paste production line for an overall 40.1 percent.

24. In view of the approximation in estimating the shadow exchange rate the EIRRs have been recalculated at rates of Sum60 and Sum45 as well as the base case of Sum50. With the higher shadow exchange rate, the EIRRs of those subprojects with high export sales increase whilst those with higher domestic sales and/or imported packaging materials decrease, the groups of subprojects moving in the opposite directions with lower shadow exchange rates. In no case do the changes in shadow exchange rate result in EIRRs of 20 percent or less. At Sum60, the overall EIRR rises to 38.4 percent and at Sum45 the EIRR falls to 37.2 percent.

25. The FIRR of all of the subprojects are influenced to some degree by the tax incentives discussed above. The lowest level of incentives are for the two dairy subprojects, which gain none of the benefits of being either joint ventures with foreign partners or having significant export sales. The dairies do, however, have reduced rates of income taxes during the first two years of production. The joint ventures gain benefits from both foreign participation and high levels of exports, giving 5-year tax holidays followed by a 50 percent reduction in income tax rate. The overall FIRR has been calculated without any tax incentives and with all subprojects paying the full rate of 37 percent income tax from the first year, in this case the overall FIRR is 13 percent.

26. In the sensitivity analysis, the projects are marginally sensitive to changes in investment costs and are sensitive to changes in operating costs and, particularly revenue (see Table 2). The subprojects remain viable under most adverse changes but some would become financially marginal if there were large adverse changes in both input and output prices. Such a combination of 10 percent adverse changes in output price and input costs would eliminate a 22 percent gross profit margin. Agro-processing enterprises are input/raw material intensive without the high margins over direct production costs associated with more capital-intensive activities. This is particularly the case in the micro-dairies in which one objective of both the collective farm sponsors and the subproject is to give higher incomes for farmers by increasing input prices 50 percent over present, monopsonistic levels.

27. The enterprises appear to be more vulnerable to such adverse combinations of price changes but it is also in their nature that output and input prices tend to follow parallel rather than opposing trends as the raw material input demand is derived from the demand for the processed output, as evidenced by the large quantities of raw material which are currently unmarketed due to low processing capacity utilization. It is, thus, likely that any fall in the price

of tomato paste, apple concentrate or dairy products would be accompanied by a fall in tomato, apple or raw milk prices.

**Table 2: Summary of Sensitivity Analysis**

Case	Subprojects									
	Mask		Namangan		Ypack Yuli		Uzfood		Bulungur	
	(%)	SI	(%)	SI	(%)	SI	(%)	SI	(%)	SI
<b>Financial Sensitivity</b>										
A. Base Case	19.3		19.6		28.8		27.8		26.2	
B. Investment cost up 10%	16.5	1.46	17.3	1.16	26.2	0.90	24.8	1.06	23.4	1.06
C. Operating cost up 10%	13.9	2.80	17.3	1.15	16.5	4.27	24.4	1.21	22.7	1.31
D. Revenue down 10%	10.3	4.65	13.8	2.94	11.7	5.93	20.7	2.55	19.2	2.66
E. Combination of B and C	11.4		15.2		14.6		21.7		20.2	
F. Combination of B and D	8.1		11.9		10.0		18.2		16.8	
G. Combination of C and D	4.2		11.4		-3.3		17.1		15.6	
<b>Economic Sensitivity</b>										
A. Base Case	33.1		43.7		40.1		34.7		27.8	
B. Investment cost up 10%	29.2	1.17	38.8	1.12	35.3	1.20	31.1	1.02	25.3	0.91
C. Operating cost up 10%	28.8	1.35	43.8	-0.02 <sup>(a)</sup>	34.7	1.36	32.0	0.77	25.0	0.99
D. Revenue down 10%	24.3	2.66	38.4	1.22	29.4	2.68	28.0	1.92	25.3	0.90
E. Combination of B and C	25.3		38.9		30.4		28.7		22.4	
F. Combination of B and D	21.1		34.0		25.5		24.9		22.8	
G. Combination of C and D	19.5		38.5		23.8		25.2		22.0	

Case	Subprojects					
	Hodjiabad		Novbahor		Gappar	
	(%)	SI	(%)	SI	(%)	SI
<b>Financial Sensitivity</b>						
A. Base Case	21.6		19.4		17.3	
B. Investment cost up 10%	19.1	1.06	16.4	1.56	14.4	1.71
C. Operating cost up 10%	14.7	1.31	13.1	3.26	12.3	2.90
D. Revenue down 10%	10.8	2.66	9.5	5.13	8.8	4.91
E. Combination of B and C	12.6		10.5		9.7	
F. Combination of B and D	8.8		7.1		6.4	
G. Combination of C and D	2.3		2.1		3.2	
<b>Economic Sensitivity</b>						
A. Base Case	37.7		26.6		25.8	
B. Investment cost up 10%	33.5	1.11	23.2	1.28	22.4	1.33
C. Operating cost up 10%	31.4	1.66	19.6	2.60	20.1	2.20
D. Revenue down 10%	33.4	1.14	15.7	4.10	16.2	3.73
E. Combination of B and C	27.5		16.7		17.1	
F. Combination of B and D	29.4		13.0		13.5	
G. Combination of C and D	31.9		7.7		9.9	

SI Sensitivity index.

(a) The insensitivity of Namangan to cost changes is due to the impact of such changes on the without project case, in which the high packaging cost of 9kg cans offsets the impact of cost changes in the with project case.

28. Based on the sample of subprojects evaluated, the present pipeline of potential subprojects appear to be financially and economically viable.

#### **D. Subproject Summaries**

##### **1. Mask Joint Venture**

29. Mask is a wholly private joint venture with Uzbekistan, British, Russian and Saudi Arabian shareholders in the joint-stock company. Mask has established a modern factory in Andijan region of eastern Uzbekistan to produce tomato paste, tomato ketchup and bottled mineral water. The present factory has 250 permanent employees and employs some 150 seasonal workers during the harvest period. The proposed subproject will be located on the same site but in new buildings and with independent services, so is evaluated completely separately from the existing business.

30. Mask proposes to install a modern apple juice and concentrate processing line, using Western technology, to produce an international standard concentrate for export to Western Europe with a total investment cost of \$5.68 million, including a loan of \$3.7 million. Exports will be transported in bulk by rail from a rail yard next to the factory. Marketing will be assisted by joint-venture partners using similar wholesale channels used for the existing tomato paste production. Seasonal production will be 3,048 tons of apple concentrate and 130 tons of apple aroma to produce annual export sales of \$3.8 million and net foreign exchange earnings for Uzbekistan of \$3.76 million. The subproject will purchase 23,000 tons of fresh apples per year, providing some \$1.85 million per year in income for farmers. The subproject is financially and economically viable, with a 19.3 percent FIRR and 33.1 percent EIRR.

##### **2. Namangan Cannery**

31. Namangan Cannery was established as a State enterprise in 1934 and became a joint-stock company in 1994 with 51 percent of the shares held by the employees collective. The cannery is located in Namangan district of eastern Uzbekistan and annually processes 40,000 tons of fruits and vegetables to produce: 4,000 tons of tomato paste; 1,500 tons of apple juice and concentrate; 1,000 tons of natural fruit juices (apple, peach, plum, apricot); and 3,500 tons of jams and pickles. The equipment is old and of COMECON origin with low efficiency and quality of product. Despite these constraints, the cannery exports apple concentrate to Germany and tomato paste to Italy and the United Arab Emirates, with a quality discount of prices, as well as to traditional FSU markets.

32. The cannery aims to increase the marketability of exports to Europe by investment in international standard 200kg aseptic packaging and to add value to paste production through smaller investments in modernized retail packaging and ketchup production for domestic and export sales. Exports would be transported by rail from the goods yard within the cannery site. Based on existing paste production volumes the project would achieve total annual sales of \$3.76 million, of which \$2.67 million would be exports and net foreign exchange earnings for Uzbekistan would be \$2.0 million. On the conservative assumption that production volumes would not increase there would be no increase in employment but present employment in the cannery and on supplying farms would be maintained and cannery labor productivity would be increased.



33. The evaluation treats the new packaging operations as completely separate from the paste production, adopting a transfer price for paste based on full cost plus a 30 percent markup, and compares the with project packaging activity with the present 9kg can packaging. The proposal is financially and economically viable with an FIRR of 19.6 percent and EIRR of 43.7 percent. As a packaging activity it would not be sensitive to changes in input and output paste prices independently from the whole cannery, which has not been evaluated as a complete unit, and is insensitive to cost variances due to the impact on the "without" project case of the high cost of cans.

### **3. Ypack Yuli Joint Venture**

34. The Ypack Yuli tomato processing factory was established as a State enterprise in 1989 but in 1996 was sold to become a private family business, which will be the main Uzbekistan shareholder in the new Uzbekistan/British joint venture. The other Uzbekistan shareholder will be a consortium of small, private entrepreneurs. The subproject will modernize the factory by: (i) upgrading the present production line to produce higher quality product; (ii) adding a packaging facility for 200kg aseptic drums to allow exports to Europe; and (iii) increased financing of working capital to remove financial constraints on production.

35. The factory is capable of processing 40,000 tons of fresh tomato per season but only 15,000 tons are processed due to a lack of working capital for stocks of packaging materials. Removing this constraint, the subproject will increase demand for tomatoes by 20,000 tons per year to a conservatively estimated 35,000 tons utilization. Tomatoes are available in the district and currently wasted in high harvest and post-harvest losses from total production of 50,000-70,000 tons. Tomato purchases will provide \$2 million per year to farms. In addition to the 200kg packaging line and stocks the subproject will also finance new stocks of 9kg cans to allow existing exports to FSU markets to be maintained whilst the increased production (50 percent of total output with project) is exported to Europe. A marketing agreement to sell the whole 200kg pack production has been concluded with an Italian company with support from the EU-TACIS program. Annual exports will be \$3.67 million with net foreign exchange earnings of \$3.27 million for Uzbekistan. Total subproject cost will be \$2.93 million with \$1.87 million provided in loans: a project loan of \$1.34 million and a loan from Berliner Bank of \$0.526 million arranged under the EU-TACIS program.

36. The subproject is strongly viable with an FIRR of 28.8 percent and EIRR of 40.1 percent. These high rates result from the "without" project case of 50 percent capacity utilization due to a shortage of packaging materials. An investment of \$215,000 in packaging stocks will allow full (90 percent) capacity utilization and increase net revenues by \$550,000 per year to give an EIRR of 257 percent to this investment in working capital. When the benefits of this working capital investment are netted from the project benefits then the remaining incremental EIRR falls from 40.1 percent to a still viable 15 percent.

### **4. Uzfood Joint Venture**

37. The Uzfood joint venture is a new, wholly private Uzbekistan/ German/British enterprise in Samarkand oblast supported by technical assistance from the EU-TACIS program. The joint venture will take over an unused 4,000 square meters factory building, contributed as equity by the main Uzbekistan shareholder, and establish an apple concentrate production line to produce 3,200 tons of concentrate and 130 tons of apple aroma each year from 26,000 tons

of fresh apples. Using modern equipment, the output will be completely to international standards for clarity, aroma, lightness of color and level of concentration.

38. All production will be exported in bulk to Europe under an agreement concluded with a trading subsidiary of Berliner Bank, Finance By Trade AG (FBT), which will also provide loan finance of \$1.03 million in parallel with the project loan of \$3.05 million. Total cost will be \$5.59 million. Annual export earnings will be \$3.6 million and the net foreign exchange earnings for Uzbekistan will be \$3.5 million after completion of loan repayments. The project is financially and economically viable with an FIRR of 27.8 percent and EIRR of 34.7 percent.

## **5. Bulungur Dried Fruit Joint Venture**

39. The proposed Bulungur Dried Fruit joint venture will be a new Uzbekistan/ British enterprise which will take over the existing dried fruit factory in Bulungur raion, Samarkand oblast. The factory contains an Italian fruit drying line purchased, shortly before the breakup of the FSU, which was intended to dry grapes but is technically unable to do so. The equipment has been used to dry other fruits and vegetables but lacks needed equipment for preparation of the fruits and, thus, produces a low quality product exported to FSU but not exportable to Western countries. The proposal will provide additional equipment, upgrade the present line and provide marketing and management expertise. The existing equipment provides substantial fixed assets for collateral and equity purposes.

40. The wide variety of apples in the raion provides a long, continuous harvest period so that the factory will operate for 140 days per season. Some 3,050 tons of fresh apples will be processed into 262 tons of peeled, cored sliced and dried apples each year to be exported to Europe in wholesale packaging. The total project cost will be \$2 million, including existing fixed assets of \$0.7 million. Loan finance for new equipment will total \$0.972 million to be provided by a proposed project loan of \$0.812 million and a commercial loan from Berliner Bank for \$0.16 million. As with Uzfood, FBT of Germany will market the product. Annual sales will be \$1.3 million of which \$1.2 million will be exports. The subproject will be financially and economically viable with a 26.2 percent FIRR and 27.8 percent EIRR.

## **6. Hodjibad Cannery**

41. Hodjibad Cannery was established as a State enterprise in 1983 and was corporatized as a joint-stock company in 1995. The employees collective currently owns 49 percent and the State retains 51 percent. The State holding is planned to be reduced to 26 percent and such reduction is a precondition of support. The cannery is located in Hodjibad raion of Andijan oblast and produces tomato paste, apple juice concentrate, natural fruit juices, soft drinks, jams and canned vegetables. The cannery wishes to upgrade its production activities and has proposed two small projects for support.

42. The first proposal is for a 200kg aseptic packaging line for tomato paste. The paste production line is modern compared with other such canneries and produces reasonable quality product. At present, packaging is in FSU standard 9kg cans that restricts exports to FSU countries. Shortages in supplies of cans also limit paste production to some 2,000 tons a year compared with a realizable capacity of 3,285 tons. The 200kg packaging line will allow exports to Europe at higher prices (\$650/ton compared with \$600/ton), reduce packaging costs and allow increased production through removal of the packaging constraint.

43. The apple juice concentrate equipment produces a dark, non-aromatic product typical of FSU technology. The cannery ultimately wishes to replace the entire line at a cost of \$5-8 million but is currently unable to provide the counterpart funds and collateral for such an investment. The proposal seeks to replace the least efficient component of the line, the screw press, with a Western belt press for juice extraction. This would increase juice yield from 55 percent to 85 percent and reduce raw material costs by 35 percent for an annual saving of \$0.3 million from an investment of \$0.5 million. At present, it appears that the low efficiency of the screw press results in concentrate being sold at a gross loss.

44. The combined subproject cost is \$2.4 million in which the loan would finance \$1.72 million for equipment, spare parts and initial packaging material stocks, of which \$0.5 million would be for the apple concentrate line and \$1.22 million for the paste packaging. Paste exports would provide annual export earnings of \$2.1 million. The benefits from increased efficiency in apple juice production has been conservatively estimated on the basis of the reduced Sum input costs for the same volume and value of concentrate sales rather than an assumed increase in concentrate production and exports. On this basis the combined FIRR for the two proposals is 21.6 percent and EIRR is 37.7 percent.

45. Of the two proposals, the apple juice proposal is lower cost and produces higher returns; EIRR of 70.1 percent compared with the paste packagings 27.4 percent. In detailed evaluation of loan proposals collateral or equity constraints may require a choice between the proposals and that for the apple juice would be preferred on economic grounds.

## **7. Novbahor Collective Farm Dairy**

46. Novbahor Collective Farm, in Fergana oblast, was restructured as a joint-stock company, fully owned by its 2,100 members, in 1995. The farm is actively investing in downstream processing of its primary products, including a juice making and canning line and a proposed cotton ginnery. The farm has a dairy herd of 645 cattle, including 239 milking cows, based on Dutch Friesian cattle imported by the farm. In addition, members individually own 2,269 cattle so that total on-farm raw milk production is 1,500-2,500 liters from the collective herd and some 4,000 liters from the individually owned cattle. Milk is currently sold to the privatized, but still largely monopsonistic, milk processing factory at a price of Sum7/liter delivered. The farm proposes to increase the raw milk price paid to farmers to Sum10.5/liter without increasing sales prices for dairy produce above existing local levels. Thus, direct benefits of increased farm incomes will be substantial, though they are not included in the evaluation.

47. The subproject will develop a microdairy to process 1,500 liters of milk per 8-hour shift into butter, cheese and curds. In practice the farm has adequate milk supply to operate three shifts and proposes to do so, but evaluation has been conservatively based on a single shift. All production will be sold locally, though the farm will have foreign currency earnings from its planned cotton ginnery. Total subproject cost is estimated at \$328,000 of which the loan would finance \$220,000 of imported equipment and spare parts. The dairy will be imported complete in as a module housed in a 40-foot container. Based on a single shift, annual sales will be \$292,000 to give an FIRR of 19.4 percent and EIRR of 26.6 percent.

## 8. Gappar Dairy

48. Gappar is a privately owned joint-stock company in Surkhandarya oblast that aims to enter the dairy business in competition with the privatized former State milk processing factory. As with Novbahor, above, Gappar will pay Sum10.5/liter for milk rather than the Sum7/liter paid by the factory. The proposed dairy will have capacity to process 1,500 liters of milk per 8-hour shift to produce butter, cheese and curds. The proposal differs from that in Novbahor as it will use conventional dairy buildings rather than the container based module in Novbahor.

49. The subproject cost is estimated at \$430,000 including imported equipment valued at \$240,000 to be financed by a subproject loan. Annual sales will be \$320,000 to give and FIRR of 17.3 percent and EIRR of 25.8 percent.