PD-ABU-214
111465

# REPUBLIC OF ARMENIA

# TAX/FISCAL/CUSTOMS REFORM

# FINAL REPORT

JULY 1998 to JUNE 2001

BARENTS GROUP of KPMG CONSULTING

CONTRACT - EPE-I-05-95-00070-00

Barents Group of KPMG Consulting
KPMG Tower
1676 International Drive
McLean
Virginia 22102-4828
United States of America

## TABLE OF CONTENTS


**PREFACE** 4

**INTRODUCTION** 6

**I. TAX ADMINISTRATION**

Background

Organisation and Methods........................................ 7

Tax Declaration and Payment Processing........................ 8

Audit Operations................................................. 10

Collections...................................................... 10

Training and Public Education................................... 11

Computerisation.................................................. 11

Activities and Accomplishments

Organisation and Methods........................................ 12

Tax Declaration and Payment Processing........................ 14

Audit Operations................................................. 14

Collections...................................................... 14

Training and Public Education................................... 15

Computerisation.................................................. 16

Recommendations for the Future.................................. 17

**II. LAND AND PROPERTY TAX**

Background....................................................... 17

Activities and Accomplishments.................................. 18

Recommendations for the Future.................................. 22

**III. TAX POLICY**

Background....................................................... 22

Activities and Accomplishments.................................. 22

Recommendations for the Future.................................. 24

**IV. BUDGET**

Background....................................................... 25

Activities and Accomplishments.................................. 25

Recommendations for the Future.................................. 26

**V. MACROECONOMICS AND REVENUE FORECASTING**

Background....................................................... 27

Activities and Accomplishments.................................. 28

Recommendations for the Future.................................. 29

**VI. CUSTOMS ADMINISTRATION**

Background....................................................... 30

Activities and Accomplishments.................................. 30

Recommendations for the Future.......................................... 33

**Appendix 1 - List of Main Counterparts...................................... 34**

**Appendix 2 - Technical Memoranda .......................................... 35**

**Appendix 3 - Disposal of Equipment Procured by the Project............ 37**

# PREFACE

This report presents the final report on the institutional and operational reforms carried out by the Armenia Tax, Fiscal and Customs Reform Project. This Project was conducted by Barents Group of KPMG Consulting under a contract with the United States Agency for International Development (Contract No. EPE-1-05-95-00070-00).

The institutional and operational reforms carried out under this project have resulted in a significant modernisation within the Ministry of State Revenue (formally the State Tax Inspectorate and the State Customs Department) and the Ministry of Finance and Economy (formally the separate Ministries of Finance and Economy). The work commenced in the middle of July 1998 with the objective to assist in the establishment of a stable tax and fiscal climate for private sector development and with an intermediate result of assisting the Government of Armenia to equitably and effectively administer business laws and regulations.

Mr William Gardner, the resident Chief of Party, (latterly replaced by Terence Murdoch), directed the institutional and operational reforms. Mr Francis Greaney, served as Project Manager and coordinated the work of the long-term resident advisors and the intermittent short-term advisors from Barents Group.

In addition to his role as Chief of Party, Mr Gardner also served as the resident Tax Policy Advisor to the Ministry of Finance and Economy. He was assisted in the work on tax administration reform by Terence Murdoch, resident Indirect Tax Advisor, John Yates, resident Computerisation Advisor (previously William Hernandez) and Jerome Anderson, resident Land and Property Tax Advisor (previously Terry Hamlin). The Project activities in Customs Administration Reform were carried out by Alan Morley, the resident Customs Administration Advisor (previously Walter Hekala) who worked in close cooperation with the resident Customs Advisor provided by the UK DFID (Arthur Dunlop). Activities in the area of Budgeting were carried out by David Sainsbury, resident Budget Advisor (previously Paolo De Maria) and in the Macroeconomic area by Bryan Roberts, resident Macroeconomic Advisor. Our work with the Ministry of Finance and Economy was coordinated with David Gentry (formally Len Sweeney) of the US Treasury and Vijay Ramachandran, the IMF resident Treasury Advisor.

In addition to the work of the resident advisors, a number of other professionals contributed to the technical assistance in tax administration. They included Kate Irvine (training and public education), Norman Fox (taxpayer service), James Templeton (tax declaration forms) and Dr Joseph Eckert (property tax modelling). The Project also coordinated its activities closely with the resident (Gene Chilton) and intermittent advisors from the US Treasury Tax Assistance Programme.

In the computerisation area, the resident advisors were assisted by Anthony Baiad (Director of Barents International Information Technology Practice), Neli Baeva

(Systems Analyst), Dr Herbert Koudry (networking), Richard Twigg (networking), Alexei Brudno (System Assessment) and William Zuellig (IT Strategy).

In the area of Macroeconomics/revenue forecasting, assistance to the resident advisor was provided by John Thissen (revenue forecasting), Annette Brown (Social Accounting Matrix) and Dr Mack Ott (Structural Macroeconometric Model).

Narine Nersesyan assisted in the area of fiscal decentralisation through property tax reform and examined the budgeting process of Municipalities.

Short-term assistance in Customs Administration reform was also provided by Dale Torrance (goods nomenclature classification training), Aage Neilsen (Customs Code input-valuation), Irina Swift (Customs Code input-valuation), Manuel Henriques (Customs Diagnostic) and Michael Lane (Customs Diagnostic).

Throughout the course of the Project, the team received considerable support from the Ministry of State Revenue and Ministry of Finance and Economy. Deputy Minister Alaverdian was particularly instrumental in the implementation of the institutional and operational reforms within the Ministry of State Revenue and Deputy Minister Arzumanian provided excellent support in the area of tax policy reform.

This report is organised into six chapters covering all of the main areas of project activities, including both policy and administration. Each chapter is divided into two sections. The first section presents a brief background on the state of affairs as of the beginning of the Project. The second section of each chapter provides a summary of the activities and accomplishments of the Project in the area, based on the work of the Project Team with the host country counterparts.

The report is organised as follows: Chapter 1 provides an overview of the activities undertaken in the modernisation of the tax administration, including the development of new procedures and training necessary to implement the reforms and the major computerisation effort. Chapter II provides an overview of the Project's activities in the reform of land and property taxes. Chapter III provides an overview in support of the development of tax policy reform. Chapter IV discusses the Project's activities in the budgeting area and Chapter V provides an overview of the activities in the macroeconomic and revenue forecasting area in conjunction with the Ministry of Finance and Economy. The final chapter, Chapter VI, discusses the Project's activities in assisting Customs Administration reform.

Finally, the report contains several appendices: (A) a list of primary Armenian counterparts; (B) a list of the technical memoranda, or background papers, produced during the course of the Project; and (C) details on the disposal of equipment procured by the Project.

# INTRODUCTION

The task order under this contract represented the commencement of a comprehensive fiscal reform program in the Republic of Armenia funded by the United States of America and administered by the United States Agency for International Development (USAID). The overall goal of the activity was to establish and maintain a stable tax and fiscal climate for private sector development. Armenia had made some strides in reforming its fiscal framework. The work performed pursuant to the task order was intended to further assist the Armenians achieve the following four objectives:

A. To develop a tax system which is efficient, fair, and contributes to the growth of the economy;

B. To establish a more effective tax administration with a high level of taxpayer compliance;

C. To enhance the revenue performance of the Customs Department;

D. To strengthen the budgetary and accounting systems to meet the general needs of a market economy.

Armenia had been recovering slowly from very difficult circumstances. Before independence, a devastating earthquake in 1988 gravely damaged the country's infrastructure. The collapse of the former Soviet Union in 1991 left Armenia with a legal and economic structure ill suited for a market economy and with little experience to develop a new infrastructure. The regional conflict with Azerbaijan over Nagorno Karabakh caused Turkey and Azerbaijan to introduce an economic blockade.

These interconnected events resulted in an acute economic crisis during the early 1990s. Between 1991 and 1993, Armenia's GDP fell by 60 percent while the consumer price rose by over 800 percent. Inflation soared reaching over 1,880 percent at the end of 1994. Real wages plummeted to about US $15 per month in 1995. Poverty became pervasive, particularly in urban areas.

In the few years prior to the start of the Project, the Armenians achieved economic stability by easing regional tensions and implementing policies of fiscal and monetary restraint. With the help of the IMF and the World Bank, the Armenians took vigorous measures to bring inflation under control. In 1996, inflation fell to under 8 percent--one of the lowest rates in the former Soviet Union. Real GDP grew 6.9 percent in 1995, and 5.8 percent in 1996. Although Armenia had made remarkable progress toward stabilization and economic growth, the situation was still tenuous. Armenian income levels remained low by any standard. In this context, the strengthening of revenue collection and improvement in budget and accounting procedures were essential for fiscal sustainability.

# 1. TAX ADMINISTRATION

## BACKGROUND

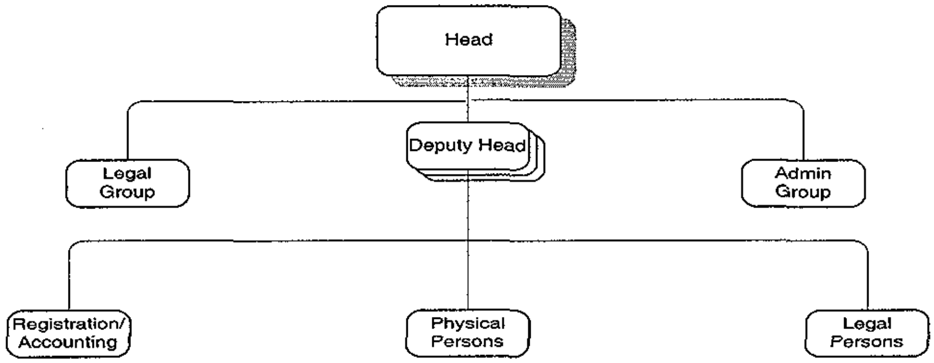
As of the beginning of the Project in 1988, administration of the Republic's tax administration was conducted by the State Tax Inspectorate, then a separate agency within and subordinate to the Ministry of Finance. The State Tax Inspectorate had established a fairly modern tax administration composed of 250 employees at headquarters and 1,300 in 45 local tax offices throughout the Republic. Computerisation was limited to a simple Taxpayer Identification Number allocation system, processing of the VAT and Profit Tax declarations, and a payment entry system.

New legislation for the major taxes had been adopted in 1997 with a further rash of amendments effective from the beginning of 1998. This frenetic pace of legislative changes led to calls from both taxpayers and the government for stability. Further, parliamentary elections planned for the beginning of 1999 meant that the political environment was not conducive to the consideration of major initiatives in tax policy. It was also clear that there was a growing recognition that inconsistent tax administration was a limiting factor on tax policy and that major changes were necessary to alleviate this.

During the course of the Project, work on the modernisation of the tax administration was hindered at times due to organisational and personnel changes within the Government. The Project saw five different Ministers and a major organisational change in May 1999 when the State Tax Inspectorate and the Customs Department were devolved from the Ministry of Finance and combined to form the Ministry of State Revenues (MSR), no longer subordinate to the Ministry of Finance. Despite these frequent hindrances to progress the Project maintained its goal of modernisation through a comprehensive Reform Programme which had been agreed at Project inception with the Minister of Finance and had been continued to be approved by new incumbents at Minister level.

### Organisation and Methods

Tax administration was organized by type of taxpayer (see exhibit 1). This was a structure common to many countries in the Former Soviet Union where taxpayer numbers where stable and a few large organisations were responsible for providing a considerable chunk of the total tax revenue. There were 45 Regional Tax Inspectorates (RTI) - 8 within Yerevan - which accounted for approximately 75% of the total revenue collected in the Republic. Staffing of the RTIs ranged from over 60 in the Yerevan offices to barely double figures at those offices in the more rural areas. The Registration section dealt with the allocation of identification numbers to taxpayers, declaration processing and any computer activity.




Taxpayers were separated by entity type (corporations or individuals) and allocated to an individual tax inspector for total control in that the inspector was required to educate his taxpayers in the law and regulations, audit his taxpayers when he felt necessary and subsequently collect any outstanding liabilities owed by his taxpayers.

*There were clearly several major problems associated with this structure -*

- The inspector's 'cradle to grave' handling of allocated taxpayers lent itself towards corrupt practices. Taxpayers were subject to the whims of their allotted inspector.
- The inspector's lack of specialisation meant he became a jack of all trades but master of none. Inspectors were unable to keep up with changes in the legislation and administrative practices leading to poor service to taxpayers.
- There was no overall prioritisation of work within the RTI which made things *particularly difficult with an increasing tax base. Equal attention was given to* small individual taxpayers and large business organisation alike.

Procedural guidance was limited in both content and volume with no structure in place to ensure inspectors were fully apprised of legislative and administrative changes in practice. Inconsistency of treatment was one of the more vocal complaints frequently heard from the business community.

**Tax Declaration and Payment Processing**

Although the legislation provided for self-assessment of taxes, operating procedures within the Regional Tax Inspectorates cancelled this benefit in practice. Due to the unreliable postal service in Armenia taxpayers were obliged to attend their local RTI to present their tax declaration in person. This permitted the tax inspectorate to, in effect, audit each declaration presented by a taxpayer. Long queues formed within each RTI around the due date for filing as inspectors completed a desk audit of presented declarations. This led, in many cases, to a taxpayer being unable to file his declaration on the first visit to the RTI and having to bring his accounting records at a later date for examination by the inspector. This practice clearly gave rise to a taxpayer's frustrations in that

- it placed a considerable added burden on the taxpayer in terms of time; and
- it gave the tax inspector the opportunity to amend the declaration before submission for a 'facilitation' fee.

Payments were processed through the bank. A taxpayer was obliged to submit the declaration at the local RTI, go to the bank and make the payment and subsequently provide the payment receipt to their inspector – a further unnecessary burden being placed on the taxpayer. The only exception to this rule was that the Heads of the RTIs did have discretion to accept small payments of the land and property taxes in cash at their office for which a receipt was provided to the taxpayer.

Although payments being made at the bank did ensure security of the tax due, both the lack and incompatibility of computerised systems within the commercial banking service, the Central Bank, the Treasury Department of the Ministry of Finance and the Tax Inspectorate led to a lack of control of tax declarations and payments. Taxes declared could not be reconciled with payments because of the excessive time lag between receipt of the declaration in the RTI and eventual receipt of the payment once it had been processed through the various parties involved. This backlog severely delayed declaration and payment processing, thereby effecting the payment statistics and stop-filer controls.

Lack of computerisation within the Tax Inspectorate meant a small army of administrative personnel were necessary to transcribe the accounting information for every taxpayer into a ledger. They also had to calculate any interest or penalties manually. This system was cumbersome, lengthy and with total reliance on the skill of the accountant, accuracy of what a taxpayer actually owed could not be regarded as 100% reliable. Further, because different taxes were subject to varied calculation methods, a separate ledger was necessary for each tax and it was impossible to verify the total indebtedness of a taxpayer without completing a further calculation.

This cumbersome accounting process hampered the Inspectorate's ability to detect and collect outstanding liabilities as:

- there was considerable delay in the processing of information;
- penalties and interest were calculated inconsistently;
- there was no priority given to debts;
- the lack of a consolidated ledger meant that a taxpayer may be pursued for a small debt on one tax but have a huge liability on another of which the inspector was unaware;
- there was no formal process to detect stop-filers (a taxpayer who had ceased to file declarations);
- there was no formal system to produce a consolidated debtors list on a periodic basis; and
- this permitted a 'favoured' taxpayer's debts to be hidden within the system by an unscrupulous inspector.

## Audit Operations

The previous organisational structure designated no separate audit department and audit was, therefore, one of a number of tasks allocated to an inspector. Although an annual audit plan was produced, this gave little or no thought to identifying which declarations must be audited, what criteria would be employed, what was the necessary audit time for each class of declaration or even how much auditor time was available.

The audit operational system was deficient in many aspects:

- Little prioritisation of overall workload – the organisational structure did not permit a global prioritising within the RTI. While one inspector might have a backlog of audit work dealing with a number of non-compliant taxpayers, his colleague could be spending considerable time auditing fully compliant taxpayers.
- Little objectivity in selection for audit – the decision on whether to audit a taxpayer or not was merely at the whim of his allocated inspector. This situation gave excessive opportunities for corrupt practice.
- Inefficient use of manpower – with little information available to guide managers, it was virtually impossible to use their inspectors in an efficient manner.
- Over coverage of audits – the statement was frequently heard that RTIs audited <u>all</u> taxpayers, irrespective of their size, complexity or compliance. This would have been an impossible task in reality and clearly reflected the poor quality of auditing.

Long-term planning was not given a high priority and was simply limited to generating numbers of audits without regard for whether the numbers were realistic and achievable. No data was captured regarding the utilisation of auditors' time nor the type or frequency of errors being discovered. Heavy reliance was placed on the 'office' audit of declarations at the time of submission.

Lack of specialised training meant that many comprehensive audits were of poor quality in that auditors merely examined in minute detail the business records being presented by the taxpayer with little attention being paid to the overall credibility of the declared tax. Errors discovered were mainly those of an administrative or clerical nature such as arithmetical errors, incorrect postings or insufficient detail on documents.

## Collections

No separate Collection function was evident in the former organisational structure of the Regional Tax Inspectorates. This deficiency caused several problems:

- Inability to prioritise debts within an office – any debts required identification by the allocated inspector who also did the collection function.

- Difficulty in the identification of debts – the collection function was done by the allocated inspector whereas the accounting/ledger function was carried out by a separate department.
- Inability to produce a stop-filer report – identification of those taxpayers who had ceased filing declarations was only done with great difficulty.
- Lack of specific procedures – the absence of uniform procedures led to inconsistent handling of collection cases by inspectors.

Clearly the lack of computerisation support was a major limiting factor in the Tax Inspectorate's ability to identify and collect outstanding liabilities in a timely manner.

**Training and Public Education**

There was no dedicated training department or unit within the central or regional offices but there was an annual training plan. Training centred on learning the tax legislation 'parrot fashion' with little emphasis being placed on application of the tax laws. This inevitably led to inconsistent treatment of taxpayers. There was also considerable reluctance on the part of inspectors to either act as trainers or even attend training as, under the system of bonus payments for additional tax discovered on audits, it was probable that time spent on training activities lessened their income.

A separate Education Centre had been formed at the central level. However, output was largely limited to publishing tax legislation, other decrees relating to tax, and any operational decrees applicable to the Tax Inspectorate. This might have been more helpful to taxpayers if it had been made available in a timely manner rather than many months after the legislation had been in effect. There had been some efforts to publish more useful information (e.g. 250 questions and answers on taxes and a brief guide for foreign investors), but these were inadequate and too infrequent. The other role of the Education Centre was to print and distribute tax declaration forms which were then sold to taxpayers for a small fee.

**Computerisation**

The Tax Inspectorate had a small amount of ageing hardware and some software for the processing of VAT and Profit Tax declarations, and payments had been developed using Paradox for stand alone databases. The results of this were extremely time-consuming data processing and poor quality data. Another problem, with the Paradox systems, is that there was a complete lack of security that allowed users to manipulate data, further decreasing data quality. Computers were mainly used as 'adding machines' with very few useful management reports being produced.

In 1996, some technical assistance was given by the IMF and a TIN allocation software system was created in ORACLE, later extended to the processing of VAT declarations.

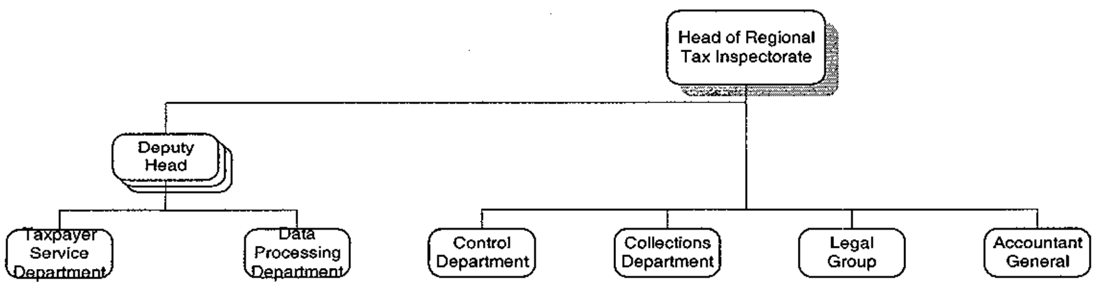
Having no Strategic Plan for IT, two distinct software development systems, a limited quantity of ageing hardware and a lack of trained IT staff meant that little progress was made in expanding the use of computerisation. Indeed, problems with hardware and software meant that IT staff spent the vast majority of their time 'fire fighting' problems in the regions.

## ACTIVITIES and ACCOMPLISHMENTS

### Organisation and Methods

During the last three years the Project, jointly with the State Tax Inspectorate and then with the Ministry for State Revenues, implemented a tax modernization plan that fundamentally altered the Tax Inspectorate by reducing and combining offices, reorganizing the Regional Tax Inspectorates (RTIs) along functional lines (registration, declaration processing, collections, audit), and computerizing the tax administration. The number of RTIs was reduced from 45 to 18 and the staffing was reduced by approximately 20 percent. These changes resulted from the efficiencies and increased effectiveness achieved through computerization. At the same time revenue performance has increased significantly (ranging from 35% to 90% increases in revenue collection), particularly in the RTIs that were first to embrace the organizational and procedural reforms. These reforms have established the foundation for a more transparent, efficient and effective tax administration, and have minimized the opportunity for corruption.

The new functional organisation structure is exhibited below and is now in operation in all 18 RTIs (8 within Yerevan and 10 in the Marz), with a further 25 small offices being retained to offer taxpayer service facilities and land and property tax administration at the local level.




This organisational structure by function was developed to take maximum advantage of automation and to create a solid platform for further, more concentrated, administration reform. It revolves round work function rather than taxpayer type. Leaving aside the obvious function of data processing there are 3 new departments - taxpayer service, control and collections.

The Taxpayer Service Department has three separate but connected units dealing specifically with taxpayer service/education, taxpayer registration and declaration receipt. The first deals purely with assisting the taxpayer on any tax matter and has been greatly supported by having direct access to a local intranet containing all tax legislation, instructions and forms. The second unit is dedicated to registering a taxpayer and the allocation of a TIN (Taxpayer Identification Number), a process now completed within 20 minutes rather than a marathon 3 days previously. The third unit receives all tax declarations from taxpayers. Providing the declaration is acceptable in that it has been completed and signed by the taxpayer, no further checks are performed at this stage and the taxpayer can depart.

The Control (or audit) Department now has a fully computerised audit selection and control program.

The Collections Department has an automated enforcement system producing a prioritised monthly collections list where cases are allocated to individual collectors.
Two separate subordinate units within the department are dedicated to identify stop-filers quickly and trace non-filers.

New operating procedures for each of the functional areas were drafted and implemented, and in each case make the best use of the automated system. This modern system, if used to its full extent, will bring significant benefit to taxpayers and the administration:

- Dedicated service/education department for taxpayers
- Allocation of TIN plus printed certificate while you wait
- Single contact point for submission of declarations
- No wait for desk audit of declarations on submission
- Ledger query on demand
- Compliant taxpayers subject to reduction in audit
- No longer subject to whims of allocated inspector
- Greater consistency of application of legislation
- Increase in tax base through the discovery and registration of non-filers
- Increase in tax revenue by enhanced audit selection of non-compliant taxpayers
- More effective use of staff resources by directing resources to the most productive work areas - audit and non-filer
- Substantially enhanced ability to prioritise resources in audit and collection activity
- Substantial decrease in paper/double handling
- Greater accountability for results

A further important benefit of the new system is its ability to reduce the scope for corrupt practice. No longer is one inspector in complete control of an individual taxpayer. Automation of the systems has brought further safeguards and enhanced management reporting.

### Taxpayer Declaration and Payment Processing

This entire process was streamlined and fully automated. New procedures were introduced which permitted taxpayers to file their declarations without being subjected to a desk audit – a true self-assessment system.

Arithmetical and validation checks on declarations are now done by the computer with only those rejected being subject to further inspection. All declarations and payments are input to the system and the software permits the creation of a full ledger for each taxpayer covering all his tax business, including the calculation of penalties and interest.

### Audit Operations

The Project has developed what may well be regarded as the most sophisticated audit control system in the Former Soviet Union and certainly up to western standards. At the conclusion of the Project, the system had just been installed in all RTIs and at the Large Taxpayer Unit within the Ministry.

The department now has a fully computerised audit selection and control program. This includes bringing together the various sources of audit (1) self-selection using pre-programmed algorithms based on data from declarations, Customs import/export data and third party transaction data; (2) audits referred from the Collections Department; and (3) audit requests from outside bodies. The software program produces a monthly workplan for the department, prioritising work to concentrate on those taxpayers who are determined to be the most non-compliant.

Auditors are now required to complete a weekly timesheet on which direct and indirect audit time is allocated, along with the result of each audit case. This information is then fed back into the audit control system to further inform the selection process. Procedures have been adopted to extract transaction details on audits which can then be used for comparison with other taxpayers.

This enhanced availability of data, together with the audit program, will substantially increase the Inspectorate's ability for forward planning and ensure audit activity is directed only against those taxpayers that are determined to be non-compliant.

### Collections

The Collections Department has an automated enforcement system producing a prioritised monthly collections list. Cases are allocated to individual collectors with the operating procedures being standardised and computerised. Standard forms, reports and timings have been developed which will ensure that debts are not only identified as soon as possible but enforcement action is taken in a timely manner. Safeguards built in to the system do not permit collectors to amend data in the system and the Department manager can track progress on an individual case, by individual collector or by his department.

As well as a monthly enforcement run, the system allows for a stop-filer report to be generated with the process again producing standard forms, letters and procedures to be used by the staff.

**Training and Public Education**

Armenia has also made great strides in improving taxpayer information. We assisted the Ministry in delivering public information through media campaigns (chiefly TV, radio and newspapers) designed to highlight specific issues. For example, we provided funding to assist in the dissemination of information concerning the new Simplified Tax and the new Customs Code, as well as other spots designed to foster an improved understanding of taxpayer rights and responsibilities including explaining the penalty regime, filing responsibilities and anti-smuggling. A separate program was developed to publicise the new Taxpayer Service Departments in the RTIs.

A major contribution of the Project was the recent publication of the Simplified Taxpayer Guide, produced in association with the Association of Accountants and Auditors of Armenia. The Guide has five distinct but connected volumes –

- The process of registration and liquidation of a business
- Guide to major taxes and social insurance payments
- Guide to Customs legislation
- Guide to tax calculation, reporting and payment
- Guide to Tax legislation

With a printing run of 6000 copies, half were expected to be given free-of-charge to Ministries (including 1500 specifically for Tax Inspectorate and Customs personnel), Marz centres, NGOs, accountants and libraries and the remainder to be sold through the AAAA at nominal cost. Feedback from the public was excellent and the publication is now regarded as the standard to follow for the future.

In addition, the procurement of a new printing machine and supplies provides the MSR with the capability to further expand the publishing of taxpayer education material, providing more transparency and consistency in the treatment of taxpayers. This procurement was under shipment in transit to Armenia at the conclusion of the Project.

This same procurement will equip the MSR's training centre to a modern standard and the Ministry have agreed to a Training Programme for the next 18 months which includes further specialised training in each of the new functional work areas. Further, a training function has now been included within the Reforms Department at the Ministry level.

During the course of the Project, in excess of 1000 Ministry personnel were given training by the Project. This training not only covered all aspects of the new organisational structure and associated procedural changes including the automated tax system, but further specialised training for IT development staff in ORACLE and training in the provisions of the new Customs Code.

## Computerisation

Automation played a major role in the modernisation of the Tax Administration. Every work process was examined and a fully integrated tax administration system based on a secure client-server model was produced. The main aspects of the functional work areas have been discussed above. Examples of further areas which were automated were:

- Invoice cross-check system
- Separate subsystems for the administration of the land and property taxes
- Control of alcoholic beverages
- Control of cash registers
- Legal Department information system
- Processing of administrative penalties
- Control of accounting ledgers
- Administration of Sate Duties
- Data transfer mail program

The main goals of the computerisation of the Ministry of State Revenue were to:

1. Develop a complete integrated system covering all major taxes,
2. Trainer users on the system,
3. Implement the system in all regional tax offices,
4. Develop key add-on programs including the collections, audit, and invoice tracking modules,
5. Create a central database for headquarters, and
6. Transfer the technical support requirements for the system to the MSR,

The benefits of most computerisation efforts can be summarized in terms of improved accuracy and efficiency. Specific benefits of the Armenian Tax Information System (ATIS) include:

1. Drastic improvements in system security (the old Paradox system had none),
2. Increased data quality (due to better system checks and improved security),
3. Greater access to information (since all tax data is in one database).

Sufficient hardware and proprietary software was procured to equip all Regional Tax Inspectorates as well as the installation of a local area network within the Central Ministry. Work was underway to complete a wide area network which will eventually connect all RTIs and Customs Houses with the Central Ministry and permit real time access to data.

### RECOMMENDATIONS FOR THE FUTURE

Despite the progress that has been made with reforms to date, tax administration in Armenia can go even further to promote transparency and efficiency in the system. Desired changes to promote more transparency and to facilitate voluntary compliance include: 1) clarification of the laws and regulations; 2) further efforts to promote the consistent application of the law through development of procedure manuals, training and taxpayer education; and; 3) clarifying the appeals function and conducting training to judges in tax matters in order to resolve taxpayer disputes in a timely and fair manner. In addition, further efforts need to be made to improve the effectiveness and efficiency of the tax administration by instituting: 1) further enhancements and refinements to the computer system; 2) an improved approach to audit selection and the actual conduct of taxpayer audits; 3) the integration of the social tax collections into the Tax Inspectorate; and 4) building the institutional capacity to develop and conduct periodic training in tax administration to introduce new concepts and procedures and to strengthen the staff's technical skills. In addition, a specific set of reforms will be implemented in the property tax system.

## II. LAND and PROPERTY TAX REFORM

### BACKGROUND

The Property Tax Law in Armenia was enacted in 1995 and re-enacted in 1997. The Land Tax Law was enacted in 1994. As originally enacted, the communities received 95% of the revenues of these taxes but this was later increased to 100% in the 2000 Budget.

The land tax is, as the name indicates, a tax on land. Agricultural land is valued based on its "calculated net income determined by the cadastral evaluation of the land." Agricultural lands bear a tax at the rate of 15% of this "imputed cadastral income." Industrial and other land are taxed at either 1% or 0.5% of the cadastral value of the land, depending on whether the land in question is located within or outside of settlements.

The property tax is imposed on buildings and apartments, motor vehicles and water craft. The State Cadastre Committee values residential real estate objects according to a formula which gives what is known as "cadastre value" on which the tax is imposed. Industrial and other non-residential properties owned by legal entities are valued at their depreciated book value, down to a minimum of 20%. Tax rates vary depending on the type of use. Non-residential properties of physical persons pay a flat tax depending on the type of construction.

The two taxes have always been administered at the national level, first by the Tax Inspectorate and later, after the formation of the Ministry of State Revenue, by the Ministry of State Revenue. Communities have no legal authority to identify taxable properties, value real estate objects, prepare tax bills or maintain an official tax roll. The communities are at the mercy of the local offices of the State Cadastre Committee with respect to the identification and valuation of taxable properties, and are dependent on the local offices of the Ministry of State Revenue for preparation of tax bills and a significant portion of the effort involved in the collection of taxes.

The tax on motor vehicles is better enforced than the tax on buildings and apartments. Vehicles must be registered with the traffic police (GAI) on an annual basis, and the GAI will not permit registration without proof of payment of the property tax on the vehicles.

## ACTIVITIES and ACCOMPLISHMENTS

Over the life of the Project extensive work has been accomplished with respect to property and land tax reform. The following is a synopsis of that effort. The work may be divided into three parts, as follows:

- Significant improvement in administration of the taxes;
- Development of Local Government capacity for tax administration; and
- Development of a proposal for an alternative Land and Property Tax structure.

Each of these topics will be discussed below.

There are in excess of one million taxpayers subject to the land and/or property tax yet none of the administration process of the taxes conducted by the Tax Inspectorate was computerised and involved an enormous amount of paper, including a considerable amount of double handling. An often heard quotation was that it was estimated that 20% of manpower resources were used to administer the taxes which produced less than 2% of total State revenue. This area was, therefore, identified by the Project as a priority for significant improvement in that it would permit Inspectorate resources to be released for the greater priority of collection of the main State taxes.

Evaluation of the structure enabled the Project to identify and introduce a streamlined processing system making significant use of automation. Differences in the accounting methodology for land and property taxes between individuals and companies meant that we had to develop, in effect, four separate automated subsystems – one for each tax for each of the two types of entity. The property tax system was further sub-divided to administer properties, vehicles and watercraft. A complete registration database was compiled for all taxpayers. Following input of valuation data from the Cadastre Department the system was able to compute the tax due for each taxpayer and print the necessary tax bills accordingly. Payments were entered into the system permitting a separate ledger, purely for the land and property taxes, to be produced.

The system permits timely and accurate identification of taxpayers subject to the tax, an automated billing system and the identification of debtors. The system has drastically reduced the Tax Authority's allocation of manpower in administering the taxes and has significantly assisted the taxpayers in obtaining accurate and up-to-date information on their tax obligations. The system is installed in all Regional Tax Inspectorates and has also been retained in the small Bajeen offices to assist the communities and taxpayers alike.

The Project also expended considerable effort assisting nine pilot cities to develop their own capability to administer property and land tax. Working with the Local Government Project managed by the Urban Institute, we supported the nine pilot cities of Kapan, Sisian, Eghegnadzor, Jermuk, Sevan, Idjevan, Vanadzor, Alaverdi and Giumry by providing computers (up to four per city, depending on size) and also provided funding to allow the cities to create rudimentary fiscal cadastre from either city housing department data or privatisation data.

In follow-up interviews conducted by the Project, city officials indicated that the databases allowed them to collect more taxes than they had done previously. For example, Eghegnadzor reported a doubling of its property tax collection, simply because it has a current listing of property owners and can now track who has paid and who has not. Giumry was able to use the data in its database to determine its recommendations for changes in the property tax. Because of the pilot city program, there is now a core of trained city personnel who know how to develop fiscal cadastres and use them to increase tax collections.

In our evaluation of the administration of the land and property taxes we found that there are five major problem areas, as follows:

- identification of taxable objects;
- valuation of taxable objects;
- rate of taxation;
- property tax exemptions; and
- collections

Identification: The identification of taxable real estate objects is done by the State Cadastre Committee (SCC). Real estate objects are registered with the local offices of the SCC, and the data from the registration process are forwarded to the local offices of the Ministry of State Revenues (MSR). From the data provided to the local offices of the MSR, the local offices prepare the property and land tax bills. The registration data also includes data on the cadastral valuation of the properties.

There are a number of problems with this process, including failure of properties to be registered and failure of the SCC to provide valuation data. This results in tax bills being prepared for only a portion of the total number of taxable real estate objects. Using statistics on property tax for physical persons generated from the computer system designed and implemented under this project, we identified the magnitude of the problem with respect to data flow on taxable objects from the SCC. The Property Tax Department of the MSR has opened correspondence with the SCC on resolving this problem. In addition, work with the pilot cities shows that the cities are capable of building adequate fiscal cadastres quickly using data readily available to them.

Motor vehicles are identified from registration records held by the automobile police, GAI. Research indicates that generally all vehicles are registered and thus identified; however, when ownership of a vehicle is transferred, often the original record is not cancelled when the new record is created. Thus, the same vehicle may be registered in more than one office, resulting in inflated data regarding the number of objects and total billings, while showing a lower collection percentage than actually exists.

Valuation : Real estate objects subject to the property and land taxes are valued according to formulae which, at least at present, do not provide values which approximate market values. Buildings and apartments are valued using a method which begins with an assumed value per square meter for the type of construction involved, and then is adjusted (up or down) according to various criteria such as age, floor number, ceiling height, condition, etc. The formula is fixed and determining the cadastral value is simply a matter of plugging in the numbers and performing the calculations. In Yerevan, the cadastral value is usually lower than market value; outside of Yerevan, the cadastral values are usually higher than market value.

Based on an analysis of data in various cities outside of Yerevan and on a database of 2,982 records in Yerevan, we are able to recommend a two-part valuation strategy for residential buildings and apartments. First, for communities outside of Yerevan, the valuation should be based on the number of rooms or the number of square meters of area in the building or apartment with this criteria being multiplied by a fixed number of drams per unit to arrive at the tax. Using area or number of rooms instead of valuation reduces the cost of tax administration, speeds the administrative process and makes the tax system easier for taxpayers to understand.

With respect to Yerevan, the real estate market is sufficiently developed that it is possible to gather data to construct a model of the market for use in computer-assisted mass appraisal (CAMA). The database compiled for Yerevan was analysed and the factors most important for determination of value were isolated. Those seven factors – the floor number of the apartment, the number of rooms, the total area, the condition of the apartment, the presence of a balcony, the presence of a garage and the location – represent a manageable number of data items to gather for CAMA purposes. Even if all of those data items cannot be gathered reasonably inexpensively, number of rooms, location and total area can be, and an adequate model may be constructed from those data.

With regard to land we would recommend that when a land market is established, values for agricultural land should be based on the market. Until that time, land should not be valued as such, but rather a flat rate per hectare should be imposed, with perhaps some adjustments for location or type of crop. In any event the structure should be kept as simple as possible.

Tax Rate: Tax rates under the property and land taxes vary as discussed above. Initially, we would propose that rates for taxation of motor vehicles not be changed. Except for the problem with duplicate registrations, the property tax for vehicles works rather well. For buildings and apartments valued at market value in Yerevan, a progressive rate structure should be imposed to mitigate the affect of the tax changes on the properties of lesser value, and to capture the value of the properties at the high end of the market. For residential buildings and apartments in cities outside of Yerevan, the tax should be imposed at a flat rate of perhaps 500 drams per room. Regardless of the choice (and any legislation should give communities the choice to use either rooms or square meters, and should also provide some flexibility in setting the rate), the tax should be simple, easy to compute and understand, should be inexpensive to administer. This proposed tax structure meets those goals.

Exemptions: There are currently no exemptions under the land tax. There are two kinds of exemptions for property tax. One is an exemption if the value of the residential building or apartment is less than 3,000,000 drams. The other exemption may be granted on an ad hoc basis by the community council. No more than 5% of the value of the projected property tax revenue for the year may be granted in exemptions by the community council.

In an effort to broaden the tax base and encourage all citizens to make payment toward the provision of municipal services, we suggest elimination of the 3,000,000 dram tax exemption. It is also suggested that specific criteria be developed for the granting of exemptions by the community council.

Collections: The rate of collection of the land and property tax is abysmal. In reality, the 50% collection rate for vehicles is actually higher than that because of the duplicate registrations of motor vehicles. With respect to the tax on land and buildings, one reason the collection rate is low is because there is no enforcement mechanism. Other than a suit by the MSR against a taxpayer who doesn't pay, there is no way to enforce payment of the tax. Furthermore, the culture of Armenia, as well as that of other former Soviet countries, is that housing is a right to which citizens are entitled and of which they should not be deprived. In addition, even if housing were seized for non-payment of tax, there is little or no market for these properties (especially outside of Yerevan), and so the government would probably not be able realize any revenue from these properties even if it seized them for non-payment of tax. Another reason for low collections is that in many places, especially in the rural areas, people simply have little or no cash. Much of the economy of rural areas is based on barter. What cash is available is used for more pressing needs than payment of a tax which essentially bears no penalty if it is not paid.

One remedy for the low collection rate is to place more of the burden of tax collection on the communities, which have a direct financial interest in the collection of the tax. The communities have a joint responsibility with the local offices of the MSR to collect the tax now, but because of the division of authority and the lack of clear directives, the communities face difficulty in collecting the tax. Furthermore, the communities currently have no administrative tools to help them. We believe that devolution of collection authority will help to improve tax collection, and the MSR has already begun drafting proposed rules for the communities to follow in this regard.

### RECOMMENDATIONS FOR THE FUTURE

Future work on the reform of the land and property taxes should build on this earlier analysis and extend it beyond Yerevan and the nine pilot cities in the current Project in a broader study involving a wider array of communities. As with the earlier analysis, the work should be carried out jointly with the Local Government Reform project and the Community Finance Officers Association to collect the required data. The objective should be to establish a simple and transparent system of property tax assessment that will enable local governments to more efficiently and effectively administer the property tax in their communities. Initial discussions have been held with the MFE and the MSR as well as with representatives from local governments. There appears to be general agreement that a simpler system, based mainly on a property's type, size and location would be desirable.

## III. TAX POLICY

### BACKGROUND

The government of Armenia has an exceptional track record in improving its tax laws. In 1997, Armenia enacted a new enterprise profits tax, a new personal income tax and a new Value Added Tax. These laws bring together a range of provisions previously scattered through a variety of legislative provisions and executive decrees and also reformed some aspects of the previous substantive laws. In addition, a fixed tax payment system ("presumptive tax")was introduced for small enterprises in which the tax is calculated on the basis of the size of the enterprise. All of these changes reflected necessary steps toward a modern and effective tax system but there was still room for improvement.

At the outset of the Project in mid 1998, the frenetic pace of legislative changes led to calls from both taxpayers and the government for stability. Further, parliamentary elections planned for the beginning of 1999 meant that the political environment was not conducive to the consideration of major initiatives in tax policy.

### ACTIVITIES and ACCOMPLISHMENTS

There were few changes to the tax legislation in 1998/9 and in the summer of 1999 the Ministry of Finance and Economy (MFE) unveiled their Tax Policy Programme – a forward look in the medium term to where they proposed tax policy should move. The proposed modifications of the first draft, though already extensive in scope, needed to be further expanded to correct other deficiencies in the tax laws. The Project had extensive discussions with Deputy Minister Arzumanian and his tax policy personnel on the draft and provided significant written input. Our main recommendations included:

- To retain the VAT rate at 20% rather than reduce it to 12%
- To eliminate the exemption from import VAT on goods subject to zero Customs Duty
- To implement a VAT invoice checking system to reduce fraudulent refunds
- To increase the VAT threshold
- To reduce the number of exemptions from VAT
- To eliminate the provision for having to account for VAT on the full value of goods sold below cost price
- To strengthen the provisions for access to VAT refunds
- To include a provision to permit relief from VAT on bad debts
- To eliminate the use of cash accounting for VAT
- To clarify the definition of an Excise Tax payer
- To clarify the filing and payment provisions for Excise Tax payers
- To establish a single rate for Profit Tax
- To reduce exemptions from the Profit Tax
- To eliminate the use of cash accounting for Profit Tax
- To reduce exemptions in the Income Tax
- To reduce the rates of Income Tax
- To reduce the number of exemptions from Income Tax
- To eliminate the use of cash accounting for Income Tax
- To include interest income in the tax base for income
- To harmonise the Income Tax and Social Tax

In late 1999, the MFE published a revised version of their Tax Policy Programme which contained most of the amendments put forward by the Project. Changes in the policy statement were largely in line with USAID objectives, as well as those put forth by the IMF. Specifically, there was a call for the elimination of most major remaining tax preferences in income and profits taxes, a uniform rate of profit tax, harmonization of income tax and obligatory social insurance contributions, and reforms in VAT including the gradual increase of the threshold, elimination of privileges, extension of VAT collection on the border for more imported goods and a clarification of the refund mechanism. The statement also looks for a review of the penalty and interest provisions with a view to strengthening enforcement on late payments but at the same time permitting self-declared errors to be adjusted without penalty.

Mid-2000 saw the introduction of a new tax – Simplified Tax – which was proposed as an acceptable stepping stone for taxpayers moving from the Presumptive Tax to the full taxation system following the compulsory introduction of cash registers. On the whole the Project saw this as a very cautious move by the Government and an initial review of the legislation revealed a likely decrease in tax revenues if large numbers of retailers were to move to the new tax which contained a high threshold, a relatively low rate and a very generous allowance for purchases made. In effect, take-up of the tax was extremely low and, despite Government hopes for over 25,000 taxpayers, less than 1,500 currently operate under the tax.

The 2001 Budget Law saw a large number of amendments to the tax legislation. The package of amendments to the tax legislation showed little surprise from those noted in the previously published Tax Policy Programme and none could be regarded as controversial.

## RECOMMENDATIONS FOR THE FUTURE

Although Armenia has not yet adopted a comprehensive Tax Code, as have many of its neighbouring countries in the region, its tax system is basically sound. Armenia has introduced reform into its tax system through revisions to separate laws governing each of the major taxes. Not only has Armenia made reasonable progress in moving its tax system towards conformity with international standards, it has also been very conscious of the desirability of establishing a degree of stability in the system. Such stability is very important for businesses that are trying to plan their operations and investments for the future. Unlike in Georgia where dozens of amendments to the tax code are proposed and adopted almost continuously throughout the year, Armenia has established a process whereby changes to the tax laws occur at only one time during the year. This process has three benefits: proposed changes can be more carefully considered, proposals can be put together in consistent packages, and the revenue effects of these proposed changes can be taken into account as the annual budget is being planned and prepared.

Despite the changes to the taxes, a number of deficiencies still exist in the system. Some of these involve specific policy issues, and others result from inconsistencies among the various tax laws, a problem that can be solved through a codification of the separate laws into a single comprehensive Tax Code. Other problems relate to the practical application of the law, and the resulting undesirable and unintended compliance burdens imposed on businesses. Examples of some of these issues are the following.

- The VAT lacks a provision for credits for bad debts, the system of refunds is flawed both in law and in practice, the system of VAT invoices needs to be rationalized, and the number of exemption needs to be further reduced.
- The Personal Income Tax still contains a number of poorly targeted and ineffective preferences, and the collection system for payroll taxes needs to be streamlined.
- The Profits Tax contains numerous restrictions on the deduction of legitimate business expenses, the documentation requirements for such expenses are excessively onerous, and the depreciation system is unnecessarily complex, all contributing to unduly high compliance burdens on business enterprises.
- The Presumptive/Simplified Tax should be revised to provide for a smoother transition path for small businesses into the regular tax system, thereby reducing or eliminating the high marginal tax rates that, under current law, inhibit firms from making the transition.

- The Law on Taxes, dealing with tax administration, needs to be completely rewritten, ideally in the context of a comprehensive Tax Code, to remove inconsistencies, provide missing definitions, and to articulate clearly the rights and responsibilities of both taxpayers and the MSR.

We would, therefore recommend further policy reforms to address these lingering issues as well as codification of the laws into a single comprehensive Tax Code.

In addition to the basic laws themselves, their effective implementation is inhibited by the lack of suitable regulations to clarify the legal language and provide guidance in the application of the law to both taxpayers and tax inspectors. The system is currently implemented through a series of ministerial decrees or "instructions" that lack clarity and offer little more guidance than the restatement of the underlying law itself. To a considerable extent, the newly published Simplified Taxpayer Guide has improved the situation, but a more formal process for adopting and publishing regulatory guidance would still be desirable.

# IV. BUDGET

## BACKGROUND

The two essential features for an effective budget system in a market economy are transparency and accountability for results. The former ensures that funds are applied for the purposes approved by the legislature. The latter ensures the delivery of goods and services in an economic, efficient, and effective manner.

Armenia has adopted a Law on Budgetary Systems which outlines transparent budget processes and procedures. Considerable progress had to be made, however, before the procedures adopted could become fully operational. For example, although the 1998 budget submission instructions required justifications to be submitted by the spending Ministries and local governments, virtually no justifications were provided. In addition, the Budget Department at the Ministry of Finance was required to process each of the submissions manually, including the requests from some 930 local governments. With the help of a US Treasury advisor, the Budget Department had also begun to enhance its organizational and technical capacity.

## ACTIVITIES and ACCOMPLISHMENTS

The Project has achieved reasonable results in the budget field during the course of the contract despite having to deal with the institutional controls within the budget department which make obtaining information a difficult procedure.

Despite these difficulties the Project was able to initiate the first Medium Term Expenditure Framework in 1999 and indeed spent considerable effort drafting this initial document. A sign of some progress was that the MFE took over responsibility for its publication in 2000 with the Project assisting in drafting and editing some of the content. The Project was also responsible for producing a Citizen's Guide to the Budget in 1999 which was widely distributed and formed the first public outreach programme in this area. Later that year the Project assisted in the publication of the Budget Briefing Guide for 2000, the annual Budget Bulletin for year ending 2000, and has now established within the Ministry a team which has begun producing quarterly Bulletins for 2001.

Due in large part to the assistance provided by USAID and the US Treasury, the budget process in Armenia has improved over the past few years. The MFE has placed a high priority on developing a clear budgetary process, using a chart of accounts consistent with international standards (i.e. consistent with the IMFs Government Finance Statistics, or GFS). In many respects the budget preparation process in Armenia might be considered as reasonably efficient in that it is centralized and detailed with seemingly significant power within the MFE to determine the recommended flows of expenditures that would fit within projected resource constraints. On the other hand, there are a number of drawbacks to a system as highly centralized and control-oriented as is Armenia's. The system is still heavily reliant on centralized budget norms and provides little incentive or flexibility for line ministries to propose specific spending initiatives or defend their basic spending proposals. Because of the overly structured nature of the budget, Ministries also have limited discretion in using budgeted funds to best achieve desired outcomes. A move toward a program budgeting approach is clearly needed.

In addition, despite improvement in the organization of the budget process, there has been an increasing tendency to overestimate potential revenues. While tax and total revenue have both increased in real terms over time, they have nonetheless fallen short of budgeted amounts by more than 10%, resulting in the need for expenditure cuts to achieve a reasonable fiscal outcome. The process involved in "restraining" expenditures in the most recent years has included cuts determined by the MFE (not always with full information provided to the National Assembly), formal sequestration (with some protected items such as public debt servicing), allowing the development of arrears (including in some cases wages and pensions), and slowing or ceasing capital projects. The actual implementation process has usually been through progressively reduced release of funds from Treasury based on monthly estimates of cash receipts. The decision-making process on expenditure cuts is not transparent nor is it clear as to whether final decisions are made collectively within government or unilaterally by the Minister of Finance and Economy and his officials.

## RECOMMENDATIONS FOR THE FUTURE

Recent efforts to improve the macroeconomic and revenue forecasting capability within the MFE are expected to help address the problems on the revenue side of the budget. Additionally, the institutionalisation of the Medium Term Expenditure Framework begun by the Project will also advance this objective by clearly articulating the resource constraints based on consistent macroeconomic and revenue forecasts.

In addition to the improvements in forecasting, the most critical need in the area of budget reform is a more careful prioritisation of spending and a closer examination of specific programs. Both of these efforts would follow logically from the MTEF and the World Bank's proposed Public Expenditure Review. Earlier work by the USAID Tax and Fiscal Reform project to examine health and education programs needs to be rekindled by reconvening the Working Groups established in these spheres to carry out a thorough examination of these large and important spending programs.

## V. MACROECONOMICS and REVENUE FORECASTING

### BACKGROUND

The above discussion highlighted the inadequacy of historic macroeconomic and revenue forecasting capacity within the Ministry of Finance and Economy. Simply put, macroeconomic forecasts have historically not been based on true forecasting models, but rather the results obtained once an agreed upon set of assumptions about the performance of selected macroeconomic indicators were used as inputs in the Government's principle tool – a Financial Programming Model. Rather that constituting a true forecasting model, it is more akin to a spreadsheet which shows a set of forecasts (outputs) which are consistent with a given set of inputs. The reliability of the forecasts is thus highly dependent upon the reliability of the set of assumptions which were used and the stability of the relationships explicit in the model. If any of these assumptions are not based on a transparent, statistically reliable methodology, then there can be little confidence in the resulting forecasts. These limitations were widely understood by those responsible for producing revenue forecasts, which served to diminish their appetite for statistically based revenue forecasting methodologies.

Revenue forecasting is always an inexact science, and the uncertainty which naturally surrounds any estimate was increased in Armenia by observed vagaries of the tax collection process. Like many other transition countries faced by severe budget expenditure pressures and limited revenues, the Government of Armenia has frequently resorted to strong-armed collection strategies at critical points. The resulting periodic and unpredictable distortions of the linkage between macroeconomic conditions, which influence true underlying tax liability, and observed collections has made it difficult to implement transparent, statistically based revenue forecasting methodologies. Such efforts have also been hampered in the past by shortcomings in availability of the types of detailed tax data needed to construct modern revenue forecasting models.

In this environment, the Government relied upon a variety of simplistic, ad hoc forecasting approaches. Targets were generated by tax type, but these targets did not truly represent forecasts in any meaningful sense. Indeed, the role of the budget projections as targets was highlighted by the observed tax collection pressure which occurred whenever those targets were not met. These difficulties were made more severe by the at times inappropriate methodologies used to allocate annual projections into monthly targets. Problems can arise from poor monthly allocations of an annual target, even when the annual target is "close" to what would occur without intervention. We believe that this proved to be the case in 1999, when the Government over-reacted to a shortfall of actual revenues through the first half of the year – relative to their projected monthly allocation of that target – by enacting a tax increase that was perhaps not required. Our conclusion, based on independent analysis, is that the Government's monthly allocation of the annual target called for far too much of the revenue to be collected in the first half of the year than was justified, and that the tax increase was therefore an inappropriate response.

## ACTIVITIES and ACCOMPLISHMENTS

Key deficiencies in the revenue forecasting process were noted by counterparts and discussed with the Project team shortly after its arrival in Armenia. At the request of the Ministry of Finance, a report was delivered in September, 1998 presenting an alternative set of revenue projections for 1999. The forecast methodology provided a clear alternative to the existing methodologies, and while not adopted at that time did serve to initiate a dialogue between the Project team and Ministry of Finance forecasting personnel.

The Project's most significant contributions in this area began coincident with the Ministry's movement towards the implementation of the Medium Term Expenditure Framework. The MTEF approach requires a clear conceptual linkage between macroeconomic forecasts and revenue projections. The Ministry recognized their need for assistance in satisfying this requirement, which led to a defined program of technical assistance encompassing both areas.

Project personnel determined that neither the Ministry of Finance nor the Ministry of Economy had an organized database with consistent monthly or quarterly time series on key macroeconomic variables. We assembled time series dating back to early 1994 on indicators in the areas of national income, industrial production, agriculture, construction, transport and communications, retail trade, balance of payments, exchange rates, stock market, labour market, enterprise registration, privatisation and humanitarian aid.

Project evaluated the existing macroeconomic forecasting capabilities of the MFE and discovered that they relied upon a model known as the "financial programming model" (FPM). The FPM covers the monetary, balance of payments, external financing and debt, government, national income, and domestic price sectors. It also includes partially complete or incomplete modules for the internal government debt, gross investment, humanitarian aid and grants, privatisation, and public sector salary sectors. The FPM is primarily a medium-term annual forecasting/simulation model. Although many sectors also generate data at a quarterly frequency for 1999, because national income is evaluated only at an annual frequency, it is not truly a quarterly model of the Armenian economy. The FPM required a large amount of exogenous data to be inputted by the user in order to produce forecasts or simulations. These exogenous data include the stock of broad money and the money multiplier, government revenues and expenditures, all current and capital account flows, external debt stock and associated flow financing, real growth rates of national income sectors and total GDP, and all price indices and the dram-US dollar exchange rate. These data cover almost all macroeconomic variables of interest to macroeconomic analysts. It is thus somewhat misleading to call the FPM a model, as it contains no behavioural equations and is not organized around statistical evaluation of the behaviour of time series data on economic indicators. It is actually an accounting framework that permits analysts to make exogenously-predicted macroeconomic variables consistent with each other. The quality of the results of FPM forecasts or simulations thus depends entirely on the quality of the predictions of the values of the exogenous variables. Even if an analyst using the FPM carefully documents and explains how these predictions are made, because the FPM is not a statistically-estimated model, it is not possible to say anything about the accuracy of the FPM's forecasts.

A key deliverable has been the creation of a structural macroeconomic model for the Armenian economy. Given the limited period of time that has passed since Armenia achieved macroeconomic stability, the model was of necessity based on a restricted number of observations for available time series. Nonetheless, it does provide a valid basis for evaluating the consistency of forecasts from other methodologies, supplies a consistent set of forecasts which can be used to derive revenue forecasts, itself contains a block of equations for the principle tax revenue accounts, and can be used to simulate the effects of a variety of alternative macroeconomic policies. The development of this model has been an on-going collaborative effort of Project and Ministry of Finance personnel, and has thus been the catalyst for a significant transference of knowledge to counterparts. Statistical and economic knowledge of Ministry personnel were supplemented throughout this period by the delivery of a series of training classes by the Resident Macroeconomic Advisor.

In an effort to build a constituency for the model, as well as to advocate for the use of more appropriate and advanced research methods in all Government macroeconomic analysis, the Project initiated a series of Economic Roundtables. Meeting twice a month, each session focused on the presentation of a technical paper by an economist drawn from regular participants from either the Project, the Ministry of Finance, the Ministry of Statistics, or the Central Bank. Of particular interest to Roundtable participants were Project presentations of revenue forecasts generated by the model, as well as the use of the model in the evaluation of the potential effects on Armenia of a variety of alternative shocks associated with potential levels of tourism associated with the celebration of 1700 years of Christianity in Armenia.

## RECOMMENDATIONS FOR THE FUTURE

In the macroeconomic analysis work area we recommend that any future programme be made up of four separate activities. They are:

- Develop a broad capability to perform sound economic analysis within the MFE and continue to publish on a monthly basis an Economic Bulletin containing relevant analyses and economic statistics.
- Improve the macroeconomic models currently used by the MFE for economic forecasting and strengthen the databases used in these models.
- Develop the capability for accurate forecasting of budget revenues and for monitoring these revenues over time.
- Train the staff of the MFE on general macroeconomic analysis and specifically in econometrics; the design, construction and use of macroeconomic modelling; and revenue forecasting. (Note that workshops on many of these topics could also include staff of local NGOs, thus strengthening the quality of economic analysis within Armenia broadly.)

# VI. CUSTOMS ADMINISTRATION REFORM

## BACKGROUND

Armenia had made some effort to strengthen and modernize its customs policies and procedures. A customs code was enacted in 1994, the harmonized system for classification of goods had been adopted in part, and the tariff rates were set at 0 and 10 percent. The responsibility for collecting the VAT on imports had been transferred to the Customs Department. The customs clearance process had also been partly computerized using the ASYCUDA ("Automated System for Customs Data Administration") system developed by UNCTAD. In addition, Armenia was in the final stages of admission negotiations to the World Trade Organization (WTO). Further substantial revisions to the legal and regulatory framework would have been required after a successful application. EU TACIS had committed assistance to the Ministry of Industry and Trade in drafting the legislation and regulations needed to accede to the WTO.

## ACTIVITIES and ACCOMPLISHMENTS

On commencement of the Project the Customs Department was a separate agency subordinate to and reporting to the Ministry of Finance. Negotiations on WTO accession were moving very slowly and our initial task was to prepare a draft of a new Customs Code. The drafting of the new code was largely subdivided between the project advisors, Ministry of Finance and the Customs Department for the preparation of sections that had not been drafted or in need of specific technical review. The project advisors took primary responsibility for the sections of the new code that pertained to specific WTO and WCO (World Customs Organization) requirements.

Draft sections written by Project advisors included:
- Customs Value
- Country of Origin
- Marking Requirements
- Binding rulings
- Appeals
- Anti-dumping duties
- Countervailing duties
- Information to traders
- Security definition/requirements
- Intellectual Property
- Refund provisions for goods damaged, lost or short-shipped
- Definitions of terms in compliance with WTO and WCO standards.

The project advisors also assisted in an ongoing review of other sections of the Code written by the Ministry of Finance and the Customs Department. Despite the urgency, drafts prepared by counterparts were delayed and there remained a fundamental lack of agreement between WTO requirements and what were regarded by Armenian Customs and Ministry of Finance officials as politically acceptable provisions. Ultimately, the shape of the future Code depended quite heavily upon the direction the Government chose to pursue in regards to WTO membership. The final draft was completed early in 1999 at which time Project activities in the area of assistance to Customs were suspended. This suspension was called for by USAID due to the refusal of anyone in the higher echelons of the Customs Department to pursue any discussions on reform.

May 1999 saw the amalgamation of the Customs Department and the State Tax Inspectorate to form the Ministry of State Revenues (MSR). It soon became apparent to high-level Ministry officials that USAID assistance to the reform of the tax administration was already reaping benefits, and the Ministry formally requested USAID to recommence technical assistance by the Project to the reform of the Customs administration. The first stage in this process was a Customs Diagnostic workshop conducted by the Project in March 2000. The Workshop was organized along principles consistent with those used by the WCO in similar undertakings held under their sanction. The Workshop had several immediate benefits. First, as part of the process, the participants in the workshop (some 35 Armenian Customs managers and officers drawn from headquarters, regional offices and border offices throughout the country) produced the first comprehensive set of flow charts outlining existing work processes and procedures, together with flow charts identifying opportunities for the improvement and simplification of those processes. Second, the Diagnostic Report emanating from the Workshop listed the elements of an action plan for Customs improvement, including the articulation of those elements for which Customs would require no assistance from donor agencies and those for which assistance would be required. Third, the findings presented in the Diagnostic Report formed the basis of a Customs Improvement Action Plan drafted by the Ministry which would provide a rational basis for an expanded program of coordinated donor assistance to Customs.

The Customs Diagnostic Report was issued in April 2000, the recommendations of which were formally accepted by the MSR in the summer of 2000, and a Customs Improvement Action Plan was approved by the Minister and Deputy Ministers of State Revenues on October 30, 2000.

As a further development, a new Customs Code incorporating most WTO and WCO requirements was passed by the Legislative Assembly in June 2000 for implementation on January 1, 2001.

Given the positive actions taken by the Government and the Ministry, USAID decided to make Customs reform a major component of its proposed follow-on Tax and Fiscal Reform Project, and Barents installed a full-time Customs advisor in September 2000, whose focus over the final ten months of the project was two-fold:

1. Provision of support to the MSR with respect to the implementation of the new Armenian Customs Code on January 1, 2001

    a. Preparation and delivery of training on the WTO Customs Valuation Agreement provisions set out in section 4 of the new Code (two 2-week sessions) to all valuation officers of the Customs branch of the Ministry;

    b. Preparation and delivery of training on Harmonized System nomenclature classification: the basis for the "foreign economic activity goods nomenclature" established by Chapter 32 of the new Code as the basis for Customs import and export classification (one 2-week session);

    c. Provision of draft input to administrative decrees required to implement provisions of the new Code;

    d. Provision of ongoing advice and guidance to address interpretive and operational issues arising from the implementation of the new Code;

    e. Preparation and delivery to business organizations of information seminars on the provisions of the new Code.

2. Laying the ground-work to prepare for further reform of Customs legislation and administration, as set out in the Customs Diagnostic Report of April 2000 and in the RFP issued by USAID in March 2001 for the follow-on Armenian Tax and Fiscal Reform project:

    a. Provision of input and advice in the drafting of the list of Customs reform actions for which the Government of Armenia should be held accountable, which was incorporated into a Government Decree (#310) "On Measures on Customs Administration Reform" passed 16 April 2001." This was an important development, as the action plan approved by the MSR Minister and Deputy Ministers on Oct. 30, 2000 did not impose any accountability upon government ministries other than the MSR whose border procedures or requirements could impact upon the development and implementation of improved Customs clearance processes. On May 4, 2001, an Order of the Minister of State Revenues was issued to assign the tasks set out in Decree #310 to designated officials with required timeframes for completion.

b. Provision of input and advice in the drafting of a Customs Service Law (scheduled for presentation to the Legislative Assembly for consideration in the Fall of 2001). This includes provisions setting out standards of conduct, professionalism and honesty in the discharge of the official responsibilities of a Customs officer, and penalties for non-compliance.

## RECOMMENDATIONS FOR THE FUTURE

Recommendations for future work on the reform of the Customs Administration must centre around the results of the Customs Diagnostic Workshop. It should begin with a review of the recommendations developed during the Workshop and must consolidate and prioritise the 61 separate recommendations emerging from that exercise. Work has already proceeded on some fronts, but much remains to be done. In conjunction with the Customs Advisory Steering Committee (CASC), which is just now being put in place, a detailed workplan should be developed to address each of the priority issues. There is considerable scope for several major activities in the area of customs reform, subject to the concurrence of the CASC, the MSR and the Customs Department. These activities include: (1) assistance in establishing the Customs Advisory Steering Committee; (2) review of the laws and regulations in light of WTO requirements and customs reform initiatives; (3) organizational and procedural reforms, including streamlining of customs procedures and increased use of automation, and (4) expansion and extension of the customs information system.

**Appendix 1**

# List of Main Counterparts

| Name | Position | Ministry | Subject |
|---|---|---|---|
| Armen Alaverdian | Deputy Minister | State Revenue | Tax Admin |
| Gagik Arzumanian | Deputy Minister | Finance & Economy | Tax Policy |
| Samvel Petrossian | Deputy Minister | State Revenue | Tax Audit |
| Manvel Yeganian | Deputy Minister | State Revenue | Customs |
| Gagik Vartanian | Principal Deputy to the Deputy Minister | State Revenue | Customs |
| Pavel Safarian | Deputy Minister | Finance & Economy | Budget |
| Sasun Hayrapetian | Department Head | State Revenue | Tax Admin |
| Sergei Paturian | Department Head | State Revenue | IT |
| Armen Medglumian | Lead Programmer | State Revenue | IT – Customs |
| Armen Tamazian | Department Head | State Revenue | Tax Procedures |
| Kolya Maragarian | Director | Tax Education Centre | Public Outreach |
| Sisak Sargsyan | Department Head | Finance & Economy | Macro |
| Tigran Khachatryan | Department Head | Finance & Economy | Tax Policy |
| David Humbartsunian | Department Head | Finance & Economy | Budget |
| Zhora Asatrian | Department Head | Finance & Economy | Budget |
| Yervand Taverdian | Department Head | State Revenue | Customs (new initiatives; regulations) |
| Tigran Sargissian | Department Head | State Revenue | Customs (operations) |
| Hasmik Kamalian | Department Head | State Revenue | Customs (warehousing and licensing) |
| Albert Haroutunian | Department Head | State Revenue | Customs (valuation and classification) |
| Gevorg Saghoyan | Assistant Department Head | State Revenue | Customs (valuation and classification) |
| Martoun Minassian | Department Head | State Revenue | Training |

**Appendix 2**

## Technical Memoranda

| Memo # | Subject |
|---|---|
| 1 | Citizen's Guide to the State Budget |
| 2 | Budget in Brief 1999 |
| 3 | Medium Term Expenditure Framework 1999 |
| 4 | Annual Budget Bulletin 2000 |
| 5 | Quarterly Budget Bulletin – from 03/2001 |
| 6 | Improving the Budget Process of the RA: A Guide for Reform, Discussion and Planning |
| 7 | Revenue Targets 2000 |
| 8 | Revenue Targets 2001 |
| 9 | Monthly Revenue Update – from 01/2001 |
| 10 | Tax Expenditures |
| 11 | How to calculate Tax Expenditures |
| 12 | Econometric Model Documentation |
| 13 | Financial Programming and Structural Econometric Modelling |
| 14 | Analysis of Armenian Migration Flows |
| 15 | Evaluation of Monetary and Exchange Rate Policies |
| 16 | Exchange Rate Targeting as Monetary Policy |
| 17 | Monthly Economic Updates – from 09/1998 |
| 18 | A Social Accounting Matrix for Armenia |
| 19 | Toward Strategy Policy Development, Implementation and Evaluation for the RA |
| 20 | A Quantitative Measure of the Size of the Tourism Sector and its Contribution to the Armenian Economy |
| 21 | Comments of the Tax Policy Programme for Armenia 1999/2000 |
| 22 | The use of Tax Incentives to attract Investments |
| 23 | Imported Equipment and Tax Policy |
| 24 | Comments on the Simplified Tax 2000 |
| 25 | Farmers and the VAT |
| 26 | VAT liability on Land and Property |
| 27 | Reform of Land and Property Tax (Eckert) |
| 28 | Reform of Land and Property Tax (Anderson) |
| 29 | Compliance Audit of VAT |
| 30 | Simplified Guide for Taxpayers |
| 31 | Automated Tax Administration System – User's Guide |
| 32 | ATIS Technical Specifications |
| 33 | Data Communications Assessment |
| 34 | Functional Specifications for Alcoholic Beverage Controls |
| 35 | Functional Specifications for Third Party Database |

| | |
|---|---|
| 36 | Functional Specifications for Audit Control System |
| 37 | Functional Specifications for Legal Department Automation |
| 38 | Functional Specifications for Land and Property Tax Automation |
| 39 | Functional Specifications for Cash Register Control |
| 40 | Information Technology Strategy for the MFE |
| 41 | Presentation to Economic Speaker Series on tax administration |
| 42 | Presentation to Economic Speaker Series on tax policy |
| 43 | Presentation to US Ambassador on tax, customs and fiscal reforms |
| 44 | Presentation to AMCHAM on new Customs Code |
| 45 | Presentation to AMCHAM on tax, customs and fiscal reforms |
| 46 | Presentation to AMCHAM on Harmonized System Customs nomenclature goods classification |
| 47 | Presentation to senior Customs managers on WTO Customs valuation provisions |
| 48 | Presentation to AMCHAM on WTO Customs valuation provisions |
| 49 | Presentation to USAID on tax, customs and fiscal reforms |

**Appendix 3**

# Disposal of Equipment Procured by the Project

During the course of this contract there were four major procurements of equipment for use within the Project and for onward donation to counterparts. A final disposition plan was approved by Michael Wyzan, Cognizant Technical Officer, USAID on 22 May 2001.

Equipment donated to counterpart institutions was formally handed over at the conclusion of the Project and signed/sealed documents of receipt were taken up as follows:

1. Ministry of State Revenue
2. Ministry of Finance and Economy
3. Association of Accountants and Auditors of Armenia
4. Community Finance Officers Association
5. Giumry City Finance Office
6. Alaverdi City Finance Office
7. Idjevan City Finance Office
8. Sevan City Finance Office
9. Kapan City Finance Office
10. Sisian City Finance Office
11. Eghegnadzor City Finance Office
12. Jermuk City Finance Office

All equipment procured for specific use by expatriate and local Project staff has been retained for use by the new follow-on project. Equipment has been inventoried and stored in Barents office at #20 Koghbatsu Street, Yerevan and at the offices retained within both the Ministry of State Revenue and the Ministry of Finance and Economy.