



INSTITUTE OF STRATEGIC STUDIES OF THE CAUCASUS

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**BASIC PRINCIPLES FOR
THE REHABILITATION OF AZERBAIJAN'S
POST-CONFLICT TERRITORIES**

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Eldar Ismailov**

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Post-Conflict Territories**

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From the Authors

Writing this book was not an easy task. We had to address a wide range and baffling variety of questions that needed answers and study a vast amount of relatively new information, while numerous problems called for detailed investigation and analysis. However, this did not dampen our enthusiasm; we have been working every day for the past two years, driven primarily by our sense of civic duty, as well as by the purely academic challenge it poses.

We are fully aware of the fact that the government and the people of Azerbaijan, together with the leading states and international organizations, will have to work hard to liberate the Armenia-occupied territories. Strictly speaking, their post-conflict status will begin only when the Armenian occupation ends. Thus, the term “post-conflict territories” as applied today is premature, but will be used throughout the text to describe these territories. We are convinced that sooner or later, these territories will be liberated, and that post-conflict rehabilitation should be planned well in advance. It was this conviction that inspired us as we worked on the conceptual foundations of post-conflict rehabilitation.

The post-conflict rehabilitation conception on the whole, as well as its individual parts, gave rise to lengthy and ardent debates with our colleagues. Much of what was said was discussed at round tables, which greatly contributed to the formalization of the rehabilitation conception.

We would like to express our sincere gratitude to Doctor of Economics *Shakhin Sadykhov*, who heads the Economy and Financial and Crediting Policy Department of the Cabinet of Ministers of Azerbaijan, and PhD in architecture *Elmir Abdullaev*, who is a senior official at the Agency for Restoration and Reconstruction of the Territories of Azer-

baijan. During our discussions they showed a profound understanding of the problems and possible ways to address the specific tasks of rehabilitation of the liberated territories, the importance of which cannot be overestimated.

We would also like to thank *Mazakhir Sadykhov*, Deputy Director of the Institute of Strategic Studies of the Caucasus, *Nazim Ismailov*, the Azerbaijan National Agency for Mine Action (ANAMA) General Director, PhD in economics *Enver Abdullaev*, Department Head at Azerenergy JSC, *Vahid Husseyinov*, Senior Official of the Cabinet of Ministers of Azerbaijan, PhD in economics *Fuad Murshudli*, advisor to the President of the International Bank of Azerbaijan, and other colleagues who generously shared their suggestions and opinions. *Ruzi Mammadov*, who shouldered the burden of the auxiliary analytical efforts, deserves special mention and thanks.

Prof. *Frederick Starr*, prominent American scholar, Chairman of the Central Asia – Caucasus Institute at Johns Hopkins University, has been involved in the effort from the very beginning and has agreed to write the Introduction. The fact that its first rendering was written before we completed the main part of the book inspired us immensely. We take pleasure in expressing our deep gratitude to Prof. Starr and are looking forward to working together on other joint projects.

We were lucky to be able to refer to earlier projects by such as the Feasibility Study of the Program of Restoration and Reconstruction of the Territories of Azerbaijan Damaged by Foreign Aggression (1998) and the Program of Reconstruction of the Territories Liberated from Occupation – The Great Restoration (2005), both performed by Azeri and foreign experts.

Our book is mainly devoted to the conceptual foundation of post-conflict rehabilitation and does not claim a full discussion of the problems related to post-liberation reconstruction and development of the still occupied territories of Azerbaijan. We have done our best to achieve a comprehensive discussion by linking together the elements of post-conflict rehabilitation in the spatial, functional (sectoral), financial, and resource respects. We are fully aware of the fact that the result is far from ideal and that our efforts must continue.

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INTRODUCTION

On Karabakh and the Occupied Territories

In the year 1988 a war broke out between Azeris and Armenians over the province of Karabakh, which was part of Azerbaijan but claimed by Armenia. The Soviet Union still existed at the time and President Gorbachev, angry at Azerbaijan's powerful and protective leader, Haidar Aliiev, supported the Armenians with arms. By 1992, the USSR had collapsed but the conflict over Karabakh escalated to a new level.

Now an independent Republic of Armenia sought to separate all of Karabakh from Azerbaijan by force of arms and to link it to Armenia. In a one-sided war Armenian troops not only seized Karabakh but large areas of adjacent provinces of Azerbaijan as well – in total a sixth of the land area of the new Republic of Azerbaijan. In the process, some ten thousand Azeris died fighting while thousands of others perished in the ethnic cleansing that followed. By 1994, 900,000 citizens of Azerbaijan had fled, to begin difficult new lives as war refugees.

War eventually brings misery to everyone, and the Armenia-Azerbaijan conflict was no exception. Azerbaijan swallowed a bitter defeat and did what it could to resettle the nearly million of its citizens who were now homeless. Armenia, too, saw waves of internal migration, especially by mountain people seeking to flee the impoverished countryside. The standard of living fell, and the future looked grim.

Eventually the economies of both countries revived, with oil-rich Azerbaijan spurting far ahead as it teamed with international energy

companies to export its oil wealth to world markets. But the problem of Karabakh and the occupied territories remained unresolved. A fifteen-year effort by the Organization of Security and Cooperation in Europe to solve it proved utterly ineffective. Critics, of which this author is one, charged that the OSCE was the father of its own failure by allowing Russia to exercise a veto over the so-called "Minsk Process." How could Russia, which had sent a billion dollars worth of arms to Armenia, now mediate a conflict in which it was itself so intimately involved?

True enough, but history does not stand still. The United Nations has eight times affirmed that Karabakh falls under Azerbaijan's sovereignty. As to the other occupied territories, even Armenia acknowledges they are Azerbaijan's, and clings to them only in the hope of using them as bargaining chips. In due course, these occupied territories, and in all likelihood Karabakh itself, will return to the jurisdiction of the Republic of Azerbaijan. The process by which this occurs remains for now unknown, and under any circumstances is not the concern of this study.

Context and Aims of This Study

Whether Karabakh and the occupied territories return to Azerbaijan's jurisdiction suddenly or through a gradual process, the effect will be the same. Hundreds of thousands of citizens of Azerbaijan will immediately demand to return to the homes they were forced to abandon nearly a generation ago. Even though the government has spent nearly a billion dollars to settle them elsewhere, it is generally understood that these were provisional measures, and that the refugees will naturally wish to resettle in their native territories as soon as the opportunity presented itself.

But the entire region is in a state of utter chaos and desolation. The combination of war, occupation, depopulation, looting, and neglect have left all forms of infrastructure in a state of collapse. Most buildings are uninhabitable. Thousands were bombed or shelled into oblivion. Broken roofs and windows at those which survived have brought the elements indoors, destroying floors and ceilings. Electrical wires have been pulled down and plumbing ripped out, to be sold as metal scrap to China. Power plants and sewage disposal systems are beyond restoration, and the region's public records were burnt or stolen.

The purpose of this study is to gain some understanding of the parameters of the project as a whole, what such a project might cost, and how those costs might be financed.

Hence, it is beyond dispute that reconstruction will be extremely expensive. It will place a staggering claims on the national budget and on the resources of the country as a whole. Now, it may be argued that Azerbaijan, which had the highest rate of GDP growth in the world for the two years before this study, is uniquely positioned to handle this huge claim on its budget. This is not the case.

Like other formerly Soviet countries, Azerbaijan is still a land of deferred maintenance. Billions must be spent to bring the country to the lower levels of European development. Moreover, planning for a post-oil economy requires a large national investment in education, research, and other fields. And beyond this, the claims of national defense are bound to increase as Azerbaijan emerges as a stable and prosperous island in a geopolitically complex region. In short, Azerbaijan may be prospering but the claims on its resources and national budget are already enormous. To add a huge new item to pay for reconstruction in Karabakh and the occupied territories will pose a serious and difficult challenge.

The only way to meet this challenge is to begin planning *now*. Inevitably, such a task is bewilderingly complex, involving dozens of governmental agencies, thousands of experts, nearly a million citizens, new and sometimes untested decision-making processes, complex technological issues, and intricate questions of economics and finance. It is no exaggeration to say that the need is not only for *planning* but for *planning about planning*.

This study is neither the first nor the last word on the post-conflict redevelopment of Karabakh and the occupied territories. Rather, it is an attempt to identify some of main public policy choices that have to be made in such a process, and to specify some of the issues that may be pertinent in making those choices. It offers some tentative conclusions regarding the direction and cost of reconstruction, and on the potential role of the private sector in the work as a whole. In short, it is offered to the national public of Azerbaijan and to the international community as an aid to thinking about one of the most important issues facing the Central Caucasus in the coming years.

The Team That Carried Out This Study

This study is the work of independent scholars and analysts and not of the Government of Azerbaijan. Indeed, it takes the form of recommendations to the Government of Azerbaijan, which it may either accept, reject, or ignore.

The idea of such a study arose in the course of discussions at a conference in Baku in 2006, and organized by the Baku-based Institute of Strategic Studies of the Caucasus. The purpose of the meeting was for the Institute to announce its launching of the journal *The Caucasus & Globalization* and its assumption of responsibility for the journal *Central Asia and the Caucasus*. Present were a number of senior Azeri officials, independent Azeri analysts, international students of the region, and diplomats.

Many informal conversations on the sidelines of this meeting dwelt with peaceful measures that could be taken to nudge the Caucasus towards the kind of economic and social development which is essential if it is not to become an ethnic and political tinderbox. Following the conference, the Institute's founder and director, Dr. Eldar Ismailov, and I continued these discussions, focusing on the possible future redevelopment of the occupied territories and Karabakh. Also participating in these exchanges were several of Dr. Ismailov's colleagues, notably Nazim Imanov, editor of *The Caucasus & Globalization*, as well as my colleague, Dr. Svante Cornell of the Central Asia-Caucasus Institute in Washington and its affiliate institute at Stockholm's Institute of Development and Strategic Studies (called together the "Joint Center").

In the course of these conversations, the two institutes agreed to collaborate on a redevelopment project for Karabakh and the occupied territories. Dr. Ismailov is the ideal person to lead such an effort. A PhD in economics, he is the author of three books and more than fifty articles on the Central Caucasus region. For thirteen years he taught at the Institute of Social Administration and Political Science in Baku where he was involved directly with many of this issues that are fundamental to the present project. Then in 1996 Dr. Ismailov moved from theory to practice, founding the Transcaucasus Development Bank, a private bank now functioning across the region. No less important than his technical skills is the fact that Eldar Ismailov is a true citizen of the Caucasus. Born in Tblisi

and speaking Georgian, Armenian, and Azeri, he dreams of a future of cordial interchange and prosperity.

His colleague, Prof. Nazim Imanov, himself an accomplished economist, brings also a detailed and personal knowledge of the regions in question and a deep respect for the people and cultures that comprise them.

Partnering with the Institute of Strategic Studies on this project is the Joint Center, mentioned above, with its offices in Washington and Stockholm. Under Research Director Svante Cornell, it has issued numerous papers on Azerbaijan and the Caucasus. It organized an international effort involving former officials from both Azerbaijan and Armenia to consider means of solving the Karabakh conflict, publishing its surprisingly positive results;¹ it also produced a definitive work on the Baku-Tbilisi-Ceyhan pipeline;² and Dr. Cornell is himself publishing a pioneering history of Azerbaijan since independence.³

As for myself, besides participating actively in the United Nations' first and second World Mountain Summits held in Bishkek, The Kyrgyz Republic, I had published a number of papers on the problems of development in the mountain regions of Central Asia and the Caucasus and had advised the World Bank and aid agencies in Canada, the US, and other countries on this issue.⁴

The cost of preparing this study has been borne mainly by the International Bank of Azerbaijan. The IBA's distinguished president, Mr. Jahangir Hajiyevev, appreciated at once that any project of the sort

¹ S. Frederick Starr, *Resolving Karabakh: Strategic Options for the U.S. Government*, Silk Road Paper, Washington, June 2004.

² S. Frederick Starr and Svante E. Cornell (ed.), *The Baku-Tbilisi-Ceyhan Pipeline: Oil Window to the West*, Silk Road Paper, Washington, 2005.

³ Svante E. Cornell, *Azerbaijan Since Independence*, M.E. Sharpe, Inc., New York, 2010, forthcoming.

⁴ S. Frederick Starr, *Economic and Social Development in Mountain Areas*, Conference on Mountain Regions of Central Asia: Sustainable Development Issues. Dushanbe, Tajikistan, 25-30 Sept. 1999; Report published by Ministry of Education and Academy of Sciences of the Republic of Tajikistan and the Tajik Technical University, 1999; S. Frederick Starr, *Conflict and Peace in Mountain Societies*, Thematic papers, Bishkek Global Mountain Summit 29 Oct. – 1 Nov. 2002: 108-114.

envisioned in this study would eventually become relevant to the Azerbaijan and international banking communities and to his own institution in particular. A true Azerbaijan patriot, Mr. Hajiyev holds a PhD in economics from the University of Texas and is the author of a recently published book on Azerbaijan's banking system. No narrow specialist, he has also authored a monograph on a heretofore little-known Sufi order that once flourished on the territory of Azerbaijan.

Learning from the experience of Others

Work began in earnest in the late spring of 2008. Dr. Ismailov and his colleagues held six workshops in May-June, 2008, with the initial focus solidly on conceptual aspects of the program.

They realized that Azerbaijan is not the first country to face the redevelopment of regions where virtually all infrastructure has been destroyed. Recent examples include Beirut, Afghanistan, parts of Iraq and Iran, Rwanda, Congo, and several regions in Vietnam, the Balkans, East Timor, etc. Much of Europe was in this state after World War II, as was Japan. Studies by the World Bank of post-conflict reconstruction proved particularly helpful.

In the end, each prior instance proved instructive, yet highly specific. In this respect, the comparison of Azerbaijan with East Germany after the fall of the Berlin Wall is typical. While the relative size of the territories to be assimilated is comparable, East Germany was never systematically stripped of assets and denuded of all objects of value, its population was not driven out, and it was not subjected to a decade and a half of complete depopulation and neglect. Azerbaijan's task is therefore far greater than that of Germany following the collapse of the German Democratic Republic, yet its resources are far more limited.

Two Key Issues: Sectors to be Covered, and the Developmental Level to be Attained

Among the earliest and also most difficult tasks was to determine what areas must be covered in the initial plan or prospectus. The authors understood that the development process inevitably embraces a wide variety of sectors. At the least, these include security (border control

points, policing); government (reconstruction of provincial and local administrative offices, hiring and training of new personnel, reestablishment of tax and payment systems); transport (roads, air, railroad); provisioning (food and clothing stores, stores selling construction materials, etc.); sewers and waste disposal; communications (radio, television, internet); banking and finance (short-term agricultural credit, home construction credit, business credit); industry (reconstruction of viable pre-existing factories, development of new industries); education (schools, vocational training, adult training facilities); and public health (hospitals, clinics, dispensaries).

After long debate, this daunting list of sectors was recast into four groups.

- First among them is government and security. This includes the removal of mines and addressing ecological disasters, the establishment of border posts and policing, and the reestablishment of civil administration, including courts, and the hiring and training of new personnel.
- Second comes infrastructure, including the reopening of transport (roads, railroads, airports), the generation and distribution of electrical energy, the reconstruction of sewers and renewal of waste removal, as well as opening of telephone and internet services.
- Third is the development of markets and a market economy, which requires rapid privatization, conformation of real property in buildings and land, and the establishment of banking and extension of credit to both urban and rural residents.
- Fourth, the authors pointed to social services, including the provision of basic health and medical services (clinics, hospitals), and the reopening of schools and training institutions.

By concentrating on key issues within these four sectors, the authors hope to create the essential conditions for the private economy to take off, and then for subsequent development to come about through normal processes of investment. By this degree of focus, the authors seek to bring into being an enabling environment for further economic and social development.

No matter how it is carried out, the sheer scale of the proposed effort is extremely daunting. Inevitably, it raises the question of the target level for the reconstruction effort. In reconstructing its long-separated territories, should Azerbaijan aspire to the level of a Zhiguli, a Kia, or a BMW?

The simplest answer to this question is to restore Karabakh and the occupied territories to the *status ante quem*, in other words, to the level that existed prior to the onslaught of fighting. But this answer will not work. Restoration to the level and standards of 1988 would do no more than bring the area back to the low level of development that existed at the time the Soviet system collapsed. State farms would still be ubiquitous, private ownership would be nonexistent, and the very idea of a vigorous sector of private entrepreneurs would be inconceivable.

But again, time has not stood still. Since gaining independence, Azerbaijan has privatized most property in land and buildings, encouraged the establishment of hundreds of independent businesses, and instituted new principles and norms in areas as diverse as law, transport, media, religion and education.

Hence, the goal of any renovation in Karabakh and the occupied territories cannot be merely to return to the level of 1989. It must go beyond that, and bring those areas up to the “standards of the twenty-first century.” But if this slogan is accurate and pleasantly evocative, it is far too vague to be of use for planning purposes. Here we encounter the second of the most important and at the same time complex tasks in the entire process of rebuilding, namely, to set a goal for the work that meets the public’s expectations and is practically attainable in terms of the money, materials, and skills required, and in terms of other claims on the nation’s resources.

To arrive at a provisional answer, the authors engaged in numerous conversations with officials, political leaders, representatives of non-governmental organizations, bankers and financiers, and international development experts. In the end, they settled on a simple working hypothesis: that the goal of the project should be to lift Karabakh and the occupied territories to the national non-Baku average for Azerbaijan.

This is only a working hypothesis, of course, and will inevitably be subject to much debate once the discussion moves from technical theory

to practical politics. However, it provides a useful basis for the overall analysis and the working group therefore accepted it as the basis of their initial studies.

What is beyond dispute is that to meet *either* of the two possible goals discussed above will be extremely expensive. To be sure, in accordance with the principles of Azerbaijan's largely privatized economy, much of the necessary investment money will come from the private sector, and some of that will doubtless come from abroad. Even assuming this, however, the moment Karabakh or the occupied territories are returned to Azerbaijan, the government in Baku will face a staggering and unavoidable expenditure, a sudden and urgent claim against the budget that cannot be postponed or spread over many years.

How the Research Was Carried Out

The process of reconstruction involves an infinite number of issues as diverse as the national and global economies, technology, human resources, evolving generational expectations, and national psychology. As we have seen, the authors chose (wisely, in my view) to focus its efforts in four key sectors, each of which presents its own sub-series of technical issues. Obviously, it would be impossible to explore any of these without at least some access to information and expertise that exists only in governmental agencies and ministries with responsibility in each area.

A further analysis of the four sectors determined that no fewer than thirty-seven ministries and agencies are directly involved in the issues at hand. Accordingly, in July, 2008, a letter was sent to the Government seeking the cooperation of official agencies with the project. Questions were prepared for each agency and ministry. Even though many questions are repeated in each questionnaire, the list of questions alone adds up to more than a hundred pages!

Parallel with this, the authors developed a standardized methodology for reporting budgetary data, and also cost and time parameters for the study as a whole. Tenders were drafted to seek private companies that could carry out key opinion surveys among displaced persons and also among entrepreneurs.

So vast was this undertaking that the organizers soon realized that they could not undertake all aspects of it at once. They therefore proposed

a phased project that would begin with a focus on the occupied territories and only then turn to Karabakh itself during a second phase.

They also appreciated the value of benefiting from the practical insights of experts at the international financial institutions and national development agencies, i.e. the World Bank, ADB, and EBRD, and also CIDA, SIDA, USAID, and many others. To tap such knowledge the organizers proposed to organize conferences of international experts, to be convened in Baku, for the purpose of providing detailed critiques of the draft reports, Phases I and II. At the same time, they recommended to hold public meetings in educational institutions across the country in order to elicit responses to their draft reports from the public at large.

To repeat a point made earlier, the purpose of these various meetings is not to preempt a political process so much as to inform it with accurate and accessible information on the key issues. These processes will refine and sharpen the final reports and render them better able to serve as the material for debate within the government, in the parliament and local bodies, and among the general public.

After these various comments have been received, studied and, where appropriate, incorporated into the text, the organizers will then further edit the draft as necessary, print it, and transmit it to the President of the Republic of Azerbaijan, to the Parliament, public, and media. It is expected that there will then follow a period of intense discussion and debate, in the course of which some of the points in this report will be rejected, others modified, and still others accepted. Then the Government of Azerbaijan will carry out its own further review and adopt the plan in whole or in part, modify it, or reject it, as it deems appropriate.

The Value of Carrying Out This Study and Dangers of Not Doing So

Inevitably, there will be those who will question the motives of those carrying out this study, and of those who have encouraged that it be done. After all, it dares look beyond what the international community has chosen to call a “frozen conflict” to a post-conflict world, and to practical and concrete plan for such a world. Change, they might argue, involves winners and losers and this is merely a thinly disguised means of shifting the balance of forces in this pivotal region of the Caucasus.

Anyone taking this view should consider the prospects if such analytic work were *not* undertaken. The occupied border area between Azerbaijan and Iran is already an international hazard, a lawless zone of crime and drug dealing and a potential base for terrorists. If there is a gap of half a decade between the return of territories and the start of serious development, such lawless zones will expand and grow ever more dangerous. Delay is unacceptable.

To those who would seek to politicize this study, our response is simple. Planning the redevelopment of sovereign territory is a normal responsibility of governments and not a political maneuver. Stated differently, if the government of the Republic of Azerbaijan were to wait until the occupied territories were returned before even starting to plan for their redevelopment, it would be manifestly failing in its responsibilities to its own citizens. Whenever nearly a million people are displaced from their homes there is bitterness and anger, which can easily become a force on the national and international stage. The best way to prevent this happening is to take those steps needed to assure a swift and efficient redevelopment policy. This is the best way to turn a certain negative into a likely positive, as Karabakh and the occupied territories become models for development the mountain zones of the Caucasus generally.

Models for developments elsewhere in the Caucasus? Yes, certainly. Notwithstanding oil in Azerbaijan and Chechnya, the population of the entire Caucasus region is still heavily dependent on agriculture in mountain areas for its livelihood. As of now there is not one model of successful mountain development anywhere in the Caucasus, whether those areas ruled by Azerbaijan, Armenia, Georgia, Iran, or Russia. The absence of such a model has already bred despair, and given rise to conflict. Development of the sort proposed here is the most promising means of heading off such conflict, which readily takes on an inter-ethnic and inter-religious character. The price of delay in formulating and introducing such a model is to push the region as a whole into an ever-deepening crisis, from which there is no visible exit route.

This study, then, is not “against” anyone. Its potential beneficiaries are, first, the inhabitants of Karabakh and the occupied territories, who finally will be able foresee returning to their homes and to a viable life there. These inhabitants include Azeris, but also Armenians, Muslims and also Christians. Beyond this, the study bears on the future of development

in the rest of Azerbaijan, as well as in analogous mountain zones of Armenia, Georgia and Russia.

Due to the fact that all these countries were formerly under Soviet rule, with its devastating and cynical neglect of rural and mountain peoples, virtually every issue raised herein has equal relevance in these other countries. The fact that active strife exists today in many regions of the Caucasus, and that that strife is concentrated mainly in mountain areas like those under study here, attests to the timeliness and urgent importance of this effort.

Prof. S. Frederick Starr

*Chairman, Central Asia-Caucasus Institute, SAIS
Washington, D.C. USA*

1. BASIC PREMISES

Nagorno-Karabakh and seven adjacent administrative units of Azerbaijan (Agdam, Qubadli, Jabrayil, Zangilan, Kalbajar, Lachin, and Fizuli) are still occupied by Armenia. They were damaged by the hostilities started by Armenia's aggression, which entailed gross violations of the fundamental principles of international law. This has been confirmed by numerous resolutions of the U.N., the European Union, OSCE and other international organizations, which also testify that it was in the interest of the world community to reincorporate Karabakh into the legal, political, and economic expanse of Azerbaijan. Indeed, sooner or later the territories will be freed and returned to Azerbaijan's jurisdiction.

So far, Azerbaijan remains devoted to a peaceful outcome of the conflict, even though the use of force is not excluded if and when peaceful means become exhausted. On 11 January, 2008 when speaking at a Cabinet sitting, President of Azerbaijan, Ilham Aliev, said that the year 2008 was a turning point: he was determined to clarify the possibility of a peaceful settlement of the conflict and issue a decision on its follow-up.

Late in 2008, the presidents of Azerbaijan, Armenia, and Russia signed the Moscow Declaration. It offered no specific measures of a peaceful settlement; the sides, however, confirmed that they remained devoted to political means. Later, in mid-2009 during his official visit to Azerbaijan, President of Russia, Dmitry Medvedev, appeared very optimistic about the prospects of a peaceful settlement. President Aliev, in turn, supported Russia's more active intermediary efforts. In November 2009, the presidents of Azerbaijan and Armenia met for the sixth time that year, this time in Munich, for the longest talk in the history of top-level

bilateral peace negotiations. Bernard Fassier, a cochairman of the OSCE Minsk Group from France, summed up the Munich meeting as more constructive than its predecessors. It touched upon all the aspects of peaceful settlement, and he added that some of them were discussed for the first time in great detail.

These processes stirred up expectations on both sides of the border for a peaceful settlement of the Nagorno-Karabakh conflict. At the first stage, the occupation forces were to be pulled out from the areas adjacent to Nagorno-Karabakh.

We all know that the principles, parameters, and regulations for remedying the effects of this conflict (or of any other conflict for that matter) depend on whether the conflict is settled peacefully or through the use of force. The forms of post-conflict regional cooperation will also depend on this. None of the involved parties wants a war, which will bring considerable losses and even worse conditions of post-conflict rehabilitation for Azerbaijan, as well as extensive loss of life and social and economic losses and irreparable damages for the peaceful Armenian population of the mountainous part of Karabakh, up to and including its exodus.

If revived, the hostilities (regardless of their political effect) will destroy the surroundings beyond all hope of repair. Regardless of the political results of the use of force, the damages it will incur will do nothing to improve the lives of the people – either the repatriated Azeris (previously driven away from the territory) or the local Armenians.

In our study we proceeded from the assumption of a peaceful settlement of the conflict, although we took into account the possibility of the use of force by one or the other of the sides to analyze the risks of post-conflict rehabilitation.

There is a public consensus of sorts about what should be done to settle the conflict and rehabilitate the (still occupied) territories. We relied on this and proceeded from the conviction that post-conflict rehabilitation should be carried out in the following phases:

- Withdrawal of the occupation forces and disarmament of the illegal armed groups;
- Implementation of measures to ensure security and observance of human rights for all people regardless of

their nationality and status (be they those living in the region, repatriated to the region, or residing temporarily in the region to participate in rehabilitation);

- Rehabilitation of infrastructure and re-implantation of local civil administrations;
- Restoration, rehabilitation, reconstruction, and reanimation (depending on the tasks at hand) of the life-supporting infrastructure and habitat;
- Voluntary repatriation of internally displaced persons (IDPs);
- Encouragement of the territory's independent development, social and economic cooperation among the communities, close ties among people living side by side, and the region's reintegration into the socioeconomic system of Azerbaijan.

As soon as IDPs are returned to their former homes and the safety of all the people (both Armenians and Azeris) is guaranteed, Nagorno-Karabakh will become an autonomy, with the scope of its autonomous powers primarily depending on the form of conflict settlement. In the event of a peaceful settlement (as assumed by the present work), Nagorno-Karabakh will acquire greater independence and wider powers of self-government.

The newly liberated territories will require a series of interconnected programs designed to completely rehabilitate and reintegrate them into the political, economic, and cultural life of Azerbaijan. Today, the country has all the necessary resources for this, but it hopes that the international community will become actively involved as well.

An integrated rehabilitation plan should, first, be free from ethnic prejudices – in Azerbaijan all citizens are equal before the law and should enjoy an equal opportunity to improve their living standards; and, second, be perfectly balanced in the technical, temporal, and financial aspects.

Most of the occupied territory (especially outside the administrative border of the former Nagorno-Karabakh Autonomous Region) is in a very bad state. The wartime destruction and occupation, the fact that neither

Armenia nor the Nagorno-Karabakh administration has money or other economic means to restore the economy, and the obvious unwillingness of foreign investors to be involved in illegal operations in the occupied territories have destroyed the region's infrastructure. Azerbaijan will have to launch large-scale rehabilitation projects in all the liberated territories, including within the administrative borders of the former autonomous districts. The government of the Azerbaijan Republic should plan these rehabilitation efforts as its natural prerogative.

Planning and legitimization of the rehabilitation programs and especially their implementation will morally support the Azeri forced migrants who returned to their homes, as well as the Armenians still living in Nagorno-Karabakh and those who left it for social and economic reasons. This will help remove the psychological barriers that still prevent members of the two groups from wanting to live side-by-side.

This plan will improve the image of Azerbaijan and its leaders throughout the world, particularly among the international organizations involved in the peaceful settlement of the conflict, and strengthen the country's negotiating position. This is a necessary condition for detailed discussions with donor countries and organizations, interstate structures, and international financial institutions (IFI) to convince them to join in the funding and organizational efforts. By doing this, Azerbaijan will demonstrate its free will and its constructive approach to settling the conflict.

The post-conflict rehabilitation program should be comprehensive, reliable, completely measurable, and maximally effective. It should be launched immediately after the withdrawal from the occupied territories; otherwise, the liberated territories might degenerate into areas of crime and illegal business.

The fact that Azerbaijan will restore its state sovereignty over the still occupied territories, on the one hand, and that it has adequate technical and economic potential, as well as experience in town-planning and territorial distribution of the population and life-supporting infrastructure, on the other, will make it possible for the country to launch preparations for post-conflict rehabilitation. The program should not look like a patchwork of local immediate tasks; it should be systemic and multi-vector.

More often than not, substantiation of the original tenets of the restoration and development of the post-conflict territories comes down to whether they can be realized under the most favorable conditions, while their content depends on a number of factors.

Of primary importance are the specific features of the conflict and settlement measures mentioned above. It is extremely important to be ready with answers to the questions about the time limits of the final settlement and about the involvement of third parties (states, international organizations, peacekeepers, etc.). These factors are important to the extent that they could be treated as initial provisions in their own right.

The rehabilitation program calls for a realistic assessment of Azerbaijan's economic potential – the amount of resources the state can channel into post-conflict rehabilitation and development – keeping in mind both the state's own resources and potential international aid. The program's time limits are determined by the financial and resource potential (all other things being equal, vast resources will speed up rehabilitation). This potential will also determine the target toward which the program should be oriented.

The domestic situation constitutes the third all-important factor. We cannot ignore the extent to which the nation trusts the government; a higher level of trust will allow the government to resort to unpopular measures without fearing an outburst of public indignation. Another important thing to keep in mind is that large-scale programs inevitably require much more intensive movement of material and financial resources and people. This means that the government, particularly its security structures, must be able to control the flows and regulate them. The refugees and IDPs also pose a problem: the more there are of them and the lower their temporary living conditions, the higher will be the social pressure on the administrative structures engaged in post-conflict rehabilitation.

Whenever post-conflict rehabilitation is planned before political settlement has been achieved, the initial provisions should take the form of simple assumptions. Reconstruction and development of the post-conflict territories adjacent to Nagorno-Karabakh, for example, call for the following assumptions:

- As soon as a political agreement on stage-by-stage settlement is reached, the seven districts along the administrative border of the former autonomous region (Aghdam, Fizuli, Jabrayil, Qubadli, Zangilan, Kalbajar, and Lachin) will be liberated.
- The occupational armed forces will be pulled out of the conflict zone and the illegal armed units disarmed.
- Urgent measures designed to ensure the safety of the local population, as well as of the production and infrastructural facilities will be taken.
- A new system of border security will be set up.
- IDPs will return to their former homes on a voluntary basis. It is expected that at the first stage, some 60-80 thousand will come back, followed, at the second and third stages, by 90-100 thousand each. The figures for the fourth and fifth stages are 100-110 and 110-130 thousand, respectively. It is expected that a total of 450-520 thousand people will return to their abandoned homes.
- The share of the urban population will remain at 20 percent throughout the entire initial rehabilitation period.

For the purposes of post-conflict planning, it is absolutely necessary to assess the number of those who will return to the area; restoration of the vital service systems and infrastructural, production, social, and cultural facilities will all depend on the numbers to be serviced. The prearranged time (depending on the specific conditions) might be one or two years, or it could be any other period of time. We should keep in mind, however, that the length of the rehabilitation and restoration post-conflict period is very important, particularly from the financial point of view.¹

The financial aspects of post-conflict rehabilitation call for an assessment of the level of inflation as one of the initial economic provi-

¹ To avoid unnecessary complications, we are assuming that the prearranged time for each stage will be one year.

sions. It should rest not so much on the current macroeconomic parameters, as on inflation forecasts.

For our purposes, we proceeded from an annual inflation level of 18-20 percent – the Central Bank’s highest inflation forecast for 2009. In late 2008, the global financial and economic crisis brought down aggregate demand, which slowed down inflation to some extent. There is every reason to expect that the pre-crisis inflation level will be restored in the majority of states after the crisis, and Azerbaijan is no exception in this respect. To achieve the best and most reliable results, the rehabilitation costs should be calculated with and without inflation and we did this in our study.

Some of the initial provisions are of a political and economic nature and concern mainly the developmental level to be attained. It is never inexpedient to restore territories to their pre-conflict level in cases where the conflict remains frozen for a long time. However, it is also unrealistic for post-conflict planning to set its sights on reaching the highest world standards for vital service systems and infrastructural, production, and social facilities. The target for the rehabilitation effort should correspond to the country’s financial, material, technical, and personnel capabilities.

As applied to Azerbaijan, the above can be specified as rehabilitation at a level slightly above the country’s average in regions outside the capital by the time post-conflict rehabilitation begins. The state’s economic possibilities will specify how high the level can and should be.

The standards of post-conflict planning depend on the degree of destruction in the area to be restored, which means that we need as exact information about this as possible. This is one of the central factors of post-conflict planning. Less destruction makes rehabilitation cheaper. On the other hand, it also makes it harder to aim at higher standards because there is always the temptation to remain at the pre-conflict level.

So far, we have no reliable information about the degree of damage in the territories that will require post-conflict rehabilitation. The trickle of information, as well as the state of previously liberated settlements, suggests that all vital service systems and the economic, social, and cultural infrastructure in the areas outside the administrative borders of Nagorno-Karabakh are nonexistent. This means that everything will have to be built from scratch rather than restored.

This will call for much more money, though in some cases it is economically more expedient to build rather than to restore because of the lower exploitation costs. “Total destruction” creates another “advantage”: the options outside the old systems are much more numerous.

It appears that during the course of post-conflict rehabilitation proper, new factors and circumstances (unseen today) might come to light. They might be technical, social, economic, or legal and be caused, among other things, by the inertia of decision-making. We set ourselves the task of identifying their potential emergence. In other words: if they appear, the plan will call for corresponding adjustments.

2. METHODOLOGICAL PRINCIPLES

2.1. Taking Account of International Experience

Many states before us have been confronted with the task of restoring territories that lost all or parts of their economies and infrastructure during armed conflicts. In the 20th century, nearly all the European countries, the Russian Empire and the Soviet Union, as well as Japan found themselves facing these problems after World Wars I and II. The same applies to Lebanon (which had to restore Beirut), Vietnam, and Iran. Today, this applies to the Russian Federation (which is restoring Chechnya), Georgia, and the Balkan states, while Afghanistan and Iraq are in a more or less similar situation.

Georgia, Azerbaijan's closest neighbor in the Central Caucasus, will have to cope with the paramount task of restoring the areas completely destroyed by armed conflicts in the early 1990s and in the summer of 2008. After the Russia-Georgia War, a large part of Georgian territory (including the life-supporting infrastructure) was completely destroyed. Today, the world community is working to settle the conflict between Russia and Georgia over South Ossetia and Abkhazia. If and when a settlement is reached, Georgia will have to cope with the same kind of reconstruction and rehabilitation problems Azerbaijan will face in its post-conflict territories.

Natural disasters such as earthquakes and floods cause more or less similar destruction. There should be more specific information on this point. It currently feels out of place.

When working on a realistic and effective program for rehabilitating the liberated parts of Azerbaijan, we took into account the experience accumulated by states which, at one time or another, have had to restore and rehabilitate infrastructures destroyed by hostilities or natural disasters.

At the same time, the situation in Azerbaijan will be much more challenging than in any of the countries mentioned above. To return to normal daily existence, Azerbaijan will have to address tasks that go far beyond the limits of restoring infrastructure and reviving legal economic activity in the liberated territories. It will have to implement an integrated program designed to return the occupied territories and their population (mainly Armenian) to the political, economic, and cultural life of Azerbaijan, and this will be a much harder task to accomplish than the first.

2.2. Reasonable Minimization of Costs

The full-scale rehabilitation of post-conflict territories is an expensive endeavor that may cost a relatively small state like Azerbaijan a sum equal to the country's entire economy. This means that minimization of costs is an absolute must in post-conflict planning.

At the same time, minimization of costs should not be the primary concern of post-conflict rehabilitation, dominating over all other aims and principles. Indeed, the lower quality resulting from the minimization of costs could pose a safety hazard and is thus unacceptable. Today and in the near future, Azerbaijan earns, and will earn enough to aim at fairly high standards of post-conflict rehabilitation.

2.3. Restoring the Old and Building the New – The Two Approaches Combined

Much has changed in nearly all the infrastructural branches during the almost twenty years of occupation of Nagorno-Karabakh and its adjacent territories. This means that it is not always advisable – both technically and economically – to restore the old physical infrastructure.

Post-conflict rehabilitation should combine the construction of new facilities with the restoration of old ones. The correlation between the two

is determined by several factors, such as the state of the infrastructure, production facilities, and social and cultural structures in the post-conflict territory, as well as the target to be attained, the state's financial and other capabilities, and the time that has elapsed between destruction and rehabilitation.

There are cases when it will be much wiser to build new facilities using progressive technology than to restore the old ones, even if they can be restored. This is true not only of the information and communication systems, the restoration of which on the basis of old technology is obviously unadvisable, but also of traditional elements such as roads.

We are using the term “restoration” to mean both rehabilitation of old, and construction of new facilities (except when specifically defined).

2.4. Flexible Territorial Planning

This is a particular case of the principle outlined above, yet its importance should not be underestimated. A preliminary analysis of the demographic potential and resettlement structure in Karabakh allows us to discuss two possible rehabilitation options:

1. Restoration of the network of pre-conflict settlements (*status quo*) based on the unconditional return of IDPs to their places of permanent residence.

2. Reconstruction of the settlement network based on the possibility of changing its previous town-planning structure (both in the qualitative and quantitative respect in terms of its components, size, and status).

The first option, which can be easily implemented, is much more advantageous. It calls for no additional urban and landscape development, although it largely limits the opportunity to use the latest progressive approaches to planning the settlement network and its structure. The second option, on the other hand, calls for much more detailed preliminary efforts, as well as design plans and specifications related to R&D of the proposed alternatives of the new urban settlement structure.

This suggests the following intermediary conclusions:

- Restoration of the *status quo* or simple rehabilitation of the previous settlement structures will not make it

possible to re-integrate the post-conflict territories into the rest of the country within the specified period, nor will they be able to achieve an acceptable level of social and economic development.

- Rehabilitation and reconstruction of the region's resettlement system should be based on a new urban structure which will ensure close interaction between its components during the re-animation of the entire life-support complex and the creation of a sustainable habitat in the region.
- If restored to their previous state, none of the relatively large settlements in the Karabakh region will have enough potential to become a core for either stimulating systematic renewal processes in the region, or for regenerating and developing the adjacent territories.

2.5. New Structure of the Resettlement System

The resettlement system within their town-planning structure of the liberated territories will play the key role when it comes to identifying principles, methodologies, and means of rehabilitation.

To achieve the most effective restoration of the post-conflict territories, it is critically important to correctly identify the order in which the areas will be restored. Conceptual approaches depend, among other things, on the scale of the damage and on the time and financial limits. Any approach, however, should treat the rehabilitation target as an entity of self-organization: that is, as an integrated territory which will be capable in the future of relatively independent development. This is not easily applied, since the territories of the local administrations, as well as the social and economic ties, do not coincide, and therefore they cannot be structured in the rehabilitation process in terms of branches, administrations, or individual settlements.

Here we shall look at the resettlement system as a territorial sum-total of interconnected natural and anthropogenic elements. The system should offer adequate life-support and foster sustainable development. This approach looks at the resettlement system as a complex and developing organism tuned to the changes of the habitat, on the one hand,

and the metamorphoses that affect it, on the other. The resettlement system should become the cornerstone of the rehabilitation effort.

A group of settlements able to launch and promote the entire region's revival should be selected for systemic restoration. For obvious reasons, this suggests a critical approach to the process: first, not all settlements can be restored to their former town-planning pattern. Second, some of the previous settlements can be merged to form larger entities, and new settlements might appear.

The following criteria are applied:

- The repatriation scale as identified by sociological polls,
- Technological and economic requirements,
- The estimated demographic capacity of the post-conflict areas.

The latter should be identified to achieve the best possible functional and spatial resettlement system. The demographic potential of the priority settlements will make it possible to identify the requirements for other components of the resettlement system.

At the same time, a new resettlement structure should not be chosen arbitrarily since it should take into account certain permanent and unavoidable factors. In particular, the pre-conflict settlement pattern directly affects the choice of settlements to be restored. Voluntary repatriation presupposes that each of the IDPs has the right to return to his or her home or, at least, their former settlement. This means that the refugees' right of ownership to real property is one of the conservative factors of the resettlement system.

New settlements will be rare; they will appear in newly built production complexes and facilities or in cases when old settlements are moved to other places for objective reasons such as state needs and security considerations. Each case should be discussed and investigated separately and undergo an adequate feasibility study.

Settlement sizes should take into account forecasted repatriation as well as long-term demographic factors. Taken together, they will help to identify the scale of restoration of housing, social, communal, and medical

services, and administrative, production, technical, and other infrastructures at the initial (urgent) and later rehabilitation stages.

The restoration of settlements, urban settlements in particular, will require master plans to confirm the basic principles of functional and planning zoning, street layout, etc. The previous shortcomings caused by spontaneous house construction should be taken into account so that they can be remedied.

Strange as it may seem, it is much more expensive and difficult to remove these shortcomings in the better-preserved urban units. It is a fallacy that better-preserved houses are much cheaper to restore. Master plans should take into account and respect people's property rights to real estate. This is as indispensable as ensuring social, administrative, and communal services of adequate quality, or providing infrastructural support to production and economic activity in these territories.

It is extremely important to look far beyond primary rehabilitation when identifying the new structure of any of the settlements. This is not easy since it calls for wider interpretation of the planning target. In the final analysis, a new resettlement structure should be identified in the context of the fundamental unity (socioeconomic and spatial) of the entire Karabakh region. It should not be limited to the districts outside the administrative borders of the former Nagorno-Karabakh Autonomous Region (the rehabilitation of which is discussed here).

An analysis of the still standing settlements revealed that only 20-22 percent of them can still be used even as small urban centers. Before the conflict, none of the urban settlements of Karabakh could potentially develop into the region's strategic core; the same can be said of their future potential, even taking into account likely demographic processes. The centers with low potential, such as Khankendi and Agdam, were treated as small towns. At the same time, simulation of their future development points to their high agglomeration potential. This may dramatically increase the aggregate potential of the small towns (after rehabilitation and reconstruction and enforced demographic growth).

The above suggests the following approaches to the new resettlement structure:

- Concentration on the most urgent rehabilitation of the future system's skeleton based on the agglomerated development of its core along the Shusha-Khankendi-Agdam axis
- Encouragement of the regeneration of local centers on the periphery with "growth poles" potential to create development centers in the adjacent territories, and of the revival of the settlements and life-supporting infrastructure along the supply lines between such centers
- Creation of a functional planning structure of the urban system of the Karabakh area based on a radial-circular pattern of the skeleton's spatial organization
- Restoration of the two main interstate roads (Agdam-Khankendi-Lachin and Goradiz-Megri-Nakhchivan) and building a tunnel under the Smaller Caucasian range to connect the Kalbajar district with the rest of the country, particularly with Ganja as the center of the adjacent micro-regional system. These main lines will join the Karabakh urban complex with the regional resettlement system

The above suggests that people should be actively encouraged to settle in the system's core (the triple Shusha-Khankendi-Agdam agglomeration). The settlements along the system's perimeter will also require proportionally larger populations. This will call for enforced enlargement of the urban centers (which will outstrip natural population growth there) and their economic potential, as well as stimulated development of the neighboring territories.

An analysis of the materials for town-planning development of the settlements in the area under study shows that there are enough resources (particularly territorial and socioeconomic) to ensure the planned development. The layouts of the region's growth poles, which date to the previous period, make it possible to concentrate economic capabilities within their boundaries and settle 390,000 people there, which is more than the original 186,000, and the statistically registered size of the population.

In the past, the region was predominantly agrarian. As a result, at the early stages when mass repatriation begins, the agrarian-industrial complex and other activities oriented toward end products should serve as the basis of economic growth in the consolidating territories.

This is a hypothetical model. Specific decisions will depend on the post-conflict reality, as well as on the time and the content of the political decisions relating to their liberation.

2.6. Stage-by-Stage Progress

The restoration and reconstruction priorities that are common for all the relevant areas will change at each stage of post-conflict rehabilitation.

At the initial (preparatory) stage a State Program of Reconstruction and Development of Post-Conflict Territories will be elaborated. This stage includes an analysis of planning and design infrastructural, production, social, and cultural facilities, recommendations on how to attract local and foreign investors, especially with respect to economic revival, and the government's consultations with international financial institutions (IFI) and other potential donors. The scope of rehabilitation and reintegration needed on this large territory calls for a special structure such as a ministry or an agency to supervise the developments.¹

At the second (pre-basic) stage, the post-conflict territories will be carefully inspected and the results of direct inspections will be used to adjust the State Program before it is endorsed by the country's political leaders. At this stage, a border security system will be set up, initial measures to protect the population introduced, and the priority territories decontaminated (including the areas of pioneering development). Local administrations will be restored as one of the priority measures. Wide propaganda campaigns among potential repatriates is another urgent task.

At the third (basic) stage, the vital service systems will be restored in most of the post-conflict territory, which implies large-scale efforts to restore the water and power supply, telecommunication and other types of communication, housing, transport, and other infrastructures.

¹ For more detail about its mission, tasks, and powers, see below.

At the fourth (repatriation) stage, the IDPs will return to their previous homes. This will call for new jobs and a friendly climate for small businesses as a *sine qua non* of the gradual transformation of the post-conflict territory into a regional entity of self-organization and independent social development.

At the fifth (adaptation) period, the repatriates will finally settle in the places of their previous residence and active communities and productive forces will appear. This will be the time to restore the social, cultural, and sports facilities, and the local administration structures will be set up at a faster pace.

The above is a conceptualization. This does not mean that the efforts at each of the stages should be postponed to coincide with set dates; the types of rehabilitation work within each of the periods are nothing more than guidelines. This categorization merely indicates the initial period of the main stage of wide-scale specific efforts assessed by tangible results on the basis of preliminary (including preparatory) work in each of the sectors. It should start simultaneously on a priority basis and continue through each of the periods.

2.7. Cooperation between Independent and Government Experts

Cooperation between these two expert groups is indispensable at each of the stages of post-conflict rehabilitation for at least three reasons.

First, government experts are better informed about the processes going on in the occupied territories, and know more about the infrastructure to be restored. Those independent experts who contributed to the State Program should likewise acquire access to this information to make their contribution valuable and well-substantiated. From this point of view, it is important:

- To assess the state of the liberated territories and damage there,
- To study the available information relating to life-support infrastructures within the regions to be liberated, as well as the results of surveys and design projects dating to the pre-conflict period,

- To interpret the data supplied by space photography of the post-conflict territory.

Second, cooperation between independent local and foreign experts and government experts will create several approaches, each with advantages and disadvantages of its own. This will be useful at the stage of analysis and assessment of:

- Suggestions on the restoration of life-support infrastructures from various state organs,
- Resource potential of the territories, forecasts of demographic, social, and economic development of the region, and structuring the resettlement system,
- Legal frameworks of rehabilitation and repatriation,
- The degree of effectiveness of the standards expected to guarantee sustainability.

The results of similar, earlier, inspections carried out by state agencies may also be useful. The Agency for the Reconstruction of the Territories of Azerbaijan, in particular, has already provided a differentiated assessment of the cost of the rehabilitation effort, which is indispensable and adequate for independent activities and functioning of the vital service systems. Their unit indices were likewise calculated.

Third, these and similar analytical efforts, especially those related to large-scale measures undertaken by the state, are intended for use by the government. All efforts realized as part of post-conflict rehabilitation will yield much better results if carried out with the direct involvement of government experts. This is especially obvious with respect to

- Modeling the resettlement system and creating structures conducive to the best cooperation among the settlements and with the neighboring resource territories,
- Suggesting different alternatives for setting up production and agrarian-industrial complexes, as well as the organizational principles of the life-supporting infrastructures,

- Functional planning and regulation (collateral subordination, coordination, and rationalization) of coordination of social interests.

2.8. Cooperation with Foreign Experts

It was mentioned above that the world has accumulated vast experience in the restoration of destroyed territories, which means that to be successful, post-conflict rehabilitation efforts should draw on the theory and practical knowledge of those recognized as the top experts in this field. At the stage at which the State Programs is preliminarily approved, as well as in the course of its improvement and adjustment, it is advisable to cooperate with experts from the leading world agencies. This will also attract IFI and private companies to the rehabilitation process.

2.9. Permanent Improvement and Adjustment of the Program

It is vitally important to identify the best possible moment for the program to begin; too much depends on the political, economic, and social conditions to ignore the time factor. The fact that we do not know the best time to begin makes the results indefinite.

All the aspects of post-conflict planning will be affected by the time factor. Communication media and telecommunications are changing at such a fast pace that even their short-term potential can hardly be forecasted. This fully applies to the materials and technologies widely used in civil engineering and the restoration and reconstruction of transport infrastructure and energy and gas supply.

The political and economic conditions in which the occupied territories will be liberated will affect the sequence and nature of post-conflict rehabilitation. Indeed, the entire rehabilitation plan should be coordinated with the repatriation of IDPs. It is hard, however, to draw up a repatriation schedule before the political decisions on the forms and times of liberation have been made. Therefore, the repatriation plans must be highly adjustable.

On the whole, planning should go on unabated until rehabilitation of the liberated territories is fully realized. A flexible approach to each of the tasks and due account of the changing conditions should be preserved at each stage. This will allow the experts to, among other things, exchange opinions with IFI and foreign donors on new approaches to rehabilitation and to rely to a much greater extent on public opinion.

2.10. Other Methodological Principles

The general principles outlined above should be combined with special methodological principles when analyzing certain segments of post-conflict rehabilitation. Some of them are related to the more or less clear delimitation of the responsibilities of the central and local authorities. We have in mind the functions directly related to post-conflict rehabilitation, which include additional, mainly security-related, powers to be invested in the local administrations.

We will take a look at the general questions relating to improving the state's management of the process in a special section. These include specific recommendations on setting up a state structure responsible for coordinating the rehabilitation effort as well as contacts with IFI, foreign donors and investors, and promotional activities.

The final version of the State Program calls for sociological polls among the IDPs and businessmen to identify the expectations and demands of those who will return to the liberated territory, and to find out what is needed to encourage the private sector to become involved in post-conflict rehabilitation.

3. PROGRAM TARGET

3.1. Spatial-Territorial Boundaries of the Program Target

The aggression-inflicted territory of Azerbaijan stretches along its entire border with Armenia, including the Nakhchivan Autonomous Republic. It consists of 1,765 settlements, 45 of which are urban. There are 917 population settlements that have suffered directly from the aggression. At present, 772 of the directly and indirectly affected population settlements are under Azerbaijan's control, while 993 remain in occupied territory. There are 1,268 settlements located in the resettlement area of Karabakh, 34 of which are urban. There are 764 settlements in the occupied territory of Karabakh, most of which have essentially been completely destroyed.

After the final decisions are made about political settlement, the Agdam, Fizuli, Jabrayil, Zangilan, Qubadli, Lachin, and Kalbajar districts, in addition to another four districts (Agdere, Khojali, Khojavend, and Shusha) and one town (Khankendi) of the former Nagorno-Karabakh Autonomous Region will be considered post-conflict, as well as the Qazakh district and three enclaves of the Sadarak and Qazakh districts currently in the territory of Armenia.

The specifics of the geographical location of the mountainous part of Karabakh, the territorial status of which is the main point of dispute in the conflict, are such that any further delay in its reintegration into Azerbaijan's socioeconomic system will have a harmful effect, primarily on Nagorno-Karabakh itself. Its long political and economic isolation makes the possibility of creating infrastructures equivalent to the country's

neighboring territories extremely difficult. Moreover the tendency toward self-isolation from full-fledged regional cooperation is gaining momentum.

From the socioeconomic viewpoint, Karabakh has always been a single area, and its division into highland and lowland parts is extremely provisional. As a component of Azerbaijan's town-planning system, Karabakh is also intrinsically a single entity.

The restoration and reconstruction of the post-conflict territories can only progress efficiently if Karabakh is not artificially divided into two separate parts. Additionally, post-conflict rehabilitation should be based on the principle of the integrity of Nagorno-Karabakh and the other occupied regions adjacent to it. If this requirement is not met, any rehabilitation plan can be comprehensive only in its functional component, but not in the spatial respect.

Nevertheless, due to the scope and difficulties presented by the restoration and rehabilitation, this project has been divided into two phases. It includes rehabilitation of the territories around the highland part of Karabakh, while at the second stage, Nagorno-Karabakh itself will become the focus of analysis. The final report compiled at the second stage will be comprehensive, both in the functional and the territorial respect.

This study focuses on seven of the districts of Azerbaijan adjacent to Nagorno-Karabakh that are to be liberated from occupation—Agdam, Fizuli, Jabrayil, Zangilan, Qubadli, Lachin, and Kalbajar. These districts cover an area of 8,874 sq. km and have a population of 615,000 people.

3.1.1. Program Area in Terms of the Country's Economic Zoning

In addition to administrative-territorial division, there is also economic zoning, which is extremely important for raising administration efficiency. At present, Azerbaijan is divided into ten economic regions in compliance with the State Program of Socioeconomic Development of the Districts of the Azerbaijan Republic, which was established in 2004-2008. The program area is represented in two of these economic regions.

The Yukhari-Karabakh (Upper Karabakh) economic region includes seven administrative districts—Agdam, Terter, Khojavend, Khojali, Shusha, Jabrayil, Fizuli, and the town of Khankendi. The following districts

are currently under full occupation: Khojavend, Khojali, Shusha, and Jabrayil, and the town of Khankendi, while the Agdam and Fizuli districts are partially occupied. The Jabrayil, Agdam, and Fizuli districts are outside the administrative borders of the former Nagorno-Karabakh Autonomous Region.

The Kalbajar-Lachin economic region includes four administrative districts—Kalbajar, Lachin, Zangilan, and Qubadli. The entire region is currently still under occupation by Armenian armed forces.

3.2. Program Area Prior to Occupation

3.2.1. The Agdam District

Geography

The Agdam district is situated in the southeastern foothills of the Karabakh Mountain Range, in the west of the Kura-Araz lowland and consists mainly of plains with some highland areas. The climate is moderately warm, arid, and subtropical. It is bordered on the north by the Terter and Bardi districts, on the south by the Khojavend district, on the east by the Agjabedi district, and on the west by the Kalbajar district and the town of Khojali. The Evlakh-Lachin-Nakhchivan and Agdere-Fizuli highways pass through the territory.

General Information

The territory is 1,094 sq. km with a population of 168,500 people (the population in 1990 was 143,400).

It includes 119 settlements and villages and its large population settlements are Marzili, Seidli, Gasli, Khidirli, Malikli, Gulabli, and Khindiristan.

Its occupation began on 23 July, 1993. During the hostilities, 538 people were killed and 587 were injured, while 122 settlements and villages, 598 cultural and general facilities, and 27 historical monuments were destroyed, burned, and/or plundered.

Economy

It was a district of developed agriculture, in which cotton-growing, wine-production, grain-growing, livestock farming, and sericulture predominated.

Industry was represented by enterprises of the heavy, light, and food industries. There were meat processing, dairy product, canned food, and wine factories, a rock quarry, and several other enterprises.

Social infrastructure

There were 34 preschool institutions (kindergartens and nurseries), 89 general education schools, 4 schools for the working youth, 1 extramural school, 2 schools for the rural youth, 4 training colleges (focusing on agricultural, mechanization and electrification of agriculture, music, and medical training), a drama theater, a local history museum, 71 libraries, 13 community centers, and 27 clubs.

The main historic architectural monuments under state protection include the Mausoleum of Gutlu Musa oglu (1314) and tombs in the villages of Kangarli (14th century) and Papravend (18th century).

3.2.2. The Fizuli District

Geography

The terrain in the Fizuli district mainly consists of sloping planes with low-mountain areas in the west. The climate is semi-desert and arid steppe with a dry, moderately warm summer. Its rivers – the Kondalanchay, Guruchay, and Gozluchay – belong to the basin of the Araz river that runs through the territory bordering on the Iranian Islamic Republic. It is located on the Baku-Shirvan-Nakhchivan highway and is bordered on the north by the Agjabedi district, on the south by the Jabrayil district and Iran, on the east by the Beilagan district, and on the west by the Khojavend district.

General information

The Fizuli district is 1,386 sq. km with a population of 147,800 people (the population in 1990 was 98,600).

The district includes one urban-type settlement (Goradiz) and 71 settlements and villages. The center is the town of Fizuli and its large population settlements are Boyuk Bahmanli, Gajar, Garakollu, Karimbeyli, and Akhmedbeyli.

Occupation began on 23 August, 1993. During the hostilities, 528 people were killed and another 1,309 people were injured. Fifty-four settlements and villages, 145 cultural and general facilities, and 15 historical monuments were destroyed, burned, and/or plundered.

Economy

The main sector of the economy was agriculture, which enjoyed a well-developed irrigation system. The main branches were grain-growing, wine-production, livestock farming, poultry keeping, and sericulture.

Processing agricultural products occupied an important place in industry. There were cotton-gin, dairy, and reinforced concrete plants, along with several grape-processing enterprises, a textile factory, rock quarries, etc.

Social infrastructure

Before the occupation, there were 38 preschools, 75 general education schools, 1 training college, 2 vocational schools, and 9 music schools. In addition, there were 69 libraries, 20 community centers, 45 clubs, both an amateur and a national drama theater, 2 museums, a stadium, 13 hospitals, and 40 first-aid posts.

The main historic architectural monuments under state protection included the Akhmedalilar, Babi, and Mirali mausoleums. The Haji Alekper mosque (19th century) was located in the town of Fizuli, and the Haji Giyasaddin mosque (1682), a caravanserai (1684), and 18th century mausoleum were in the village of Gargabazar.

In 1969, Azerbaijani archaeologists discovered the remains of a pre-Neanderthal man belonging to the Paleolithic Age in the Azykh cave 15 km from the district center. The Azykh cave acquired world renown as an important scientific source of knowledge about the ancient people of the region.

3.2.3. The Jabrayil District

Geography

Terrain in the Jabrayil district mainly consists of sloping planes with low-mountain areas in the north. The climate is semi-desert and arid steppe with a dry, moderately warm summer. Its small rivers belong to the the Araz river basin. The flora is semi-desert. It is bordered on the north by the Khojavend district, on the south by Iran, on the east by the Fizuli, and on the west by the Qubadli and Zangilan districts. It is situated on the Baku-Shirvan-Nakhchivan highway.

General information

The territory is 1,050 sq. km, with a population of 67,100 people (50,100 in 1990).

It included 77 settlements and villages with Jabrayil serving as the central town.

Its occupation began on 23 August, 1993. During the hostilities, 347 people were killed and another 172 people were injured. Seventy-seven settlements and villages, 197 cultural and general facilities, and 27 historical monuments were destroyed, burned, and/or plundered.

Economy

The main branch of the economy is agriculture (wine-production, tobacco-growing, livestock farming, and grain-growing). There was a livestock feed lot, as well as poultry farms and sericulture enterprises.

Carpet weaving occupied an important place in local industry. There was also a grape-processing factory and a bakery, as well as enterprises for repairing agricultural machinery, etc.

Social infrastructure

There were 17 preschools, 66 general education schools, 58 libraries, 10 community centers, and 49 clubs.

The district was rich in historic monuments. The Khudaferin bridges (7th-8th centuries) that joined North and South Azerbaijan are among the most grandiose architectural monuments of the Middle East. The architectural monuments that have survived include the bathhouse of Sultan Mejid (19th century), the Dairevi mausoleum in the village of

Shikhlar (14th century), the eight-pointed mausoleum in the Khudayarly village, the Maiden tower on Diridag Mountain, among others.

3.2.4. The Zangilan District

Geography

Located in the Arazboyu area of the Lesser Caucasus mountains, the Zangilan district's terrain is difficult and rocky, with areas of medium and low hills. Rapid mountain rivers run throughout the district – the Hakari, Okhchu, Basit, and Araz. In the mountainous part of the territory (at an altitude of 1,800-2,000 meters above sea level) are broadleaf forests that turn into sub-alpine and alpine meadows. A moderately warm climate with dry winter prevails. The territory is rich in vulnerable plants and springs. Armenia borders the district in the west and northwest and Iran borders it in the south and southeast. In the north, it is bordered by the Qubadli district, and in the east by the Jabrayil district. It is situated on the Baku-Shirvan-Nakhchivan highway. The Baku-Erevan railroad (with a branch to Minjivan-Kafan) and the Imishli-Lachin highway passed through the district's territory.

General information

The territory is 707 sq. km, with a population of 37,700 people (the population was 31,900 in 1990).

It includes 84 settlements and villages and its large population settlements are the urban-type settlement of Minjivan and the villages of Yemazli, Birinji Agaj, Shayifly, and Vejneli.

Occupation of the district began on 29 October, 1993. During the hostilities, 191 people were killed and another 110 people were injured. Eighty settlements and villages, 138 cultural and general facilities, and 13 historical monuments were destroyed, burned, and/or plundered.

Economy

The economy relies mostly on agriculture (livestock farming, wine-production, tobacco-growing, and grain-growing), but it has immense tourism potential.

Social infrastructure

There are 9 preschools, 46 general education schools, vocational, and music schools, 35 libraries, 8 community centers, 23 clubs, a local history museum, and museum of stone monuments.

Tombs dating back to the 2nd century BC, as well as armor worn by Alexander the Great's soldiers from the 4th-2nd centuries BC have been discovered in the area.

Monuments of ancient architecture include the Round Tower in the village of Hajalli (14th century), an octagonal tomb in the village of Mamedbeyli (1305), a tomb in the village of Sharifan (12th century), a mosque in the town of Zangilan that was built during the Safevid period (17th-18th centuries), as well as Albanian churches in the villages of Yemazli and Bertaz.

3.2.5. The Qubadli District

Geography

Situated in the southwest of Azerbaijan on the southwest slopes of the Karabakh Mountain Range 401 km from Baku, the Qubadli district has mountainous and piedmont terrain. The highest point is the peak of Topagaj (2,003 meters above sea level) and the rivers Hakari and Bergushad flow through the district. The climate is moderately continental. It borders Armenia (120 km) and the currently disbanded Hadrut district of Nagorno-Karabakh (42 km), as well as on the Lachin, Jabrayil, and Zangilan districts.

General information

The Qubadli district is 826 sq. km and has a population of 36,000 people (the population of the district was 29,500 in 1990).

It includes 94 settlements and villages and its large population settlements are Khanlig, Makhmudlu, Dendarly, and Muradkhanli.

Occupation of the Qubadli district began on 31 August, 1993. During the hostilities, 232 people were killed and another 146 people were injured. Ninety-four settlements and villages, 205 cultural and general facilities, and 12 historical monuments were destroyed, burned, and/or plundered.

Economy

The economy was primarily based on agriculture (grain-growing, livestock farming, tobacco-growing, sericulture, and wine-production). There were 31 dairy farms, including 27 mechanized facilities.

Prior to occupation, local industry here was undergoing intensive development. There were two factories for the primary processing of grapes, butter and dairy products, and asphalt mixing plants, a poultry farm, a rock quarry, and a marble workshop. In addition, construction of a branch of the Neftgazavtomat experimental design plant was being completed.

Social infrastructure

There were 125 commercial facilities, 96 catering establishments, 25 consumer service enterprises, 21 communications enterprises, seven preschools, 63 general education schools, onsite and offsite school, one vocational school, two music schools, 60 libraries, 10 community centers, 28 clubs, and a local history museum. Public health was represented by 33 enterprises, including four hospitals and five outpatient clinics.

Monuments of ancient architecture included a temple in the borough of Gavur deresi (4th century), the fortresses of Geygala and Galaly (5th century), the Javanshir mausoleum (14th century), the Haji Badal and Lalezar bridges (19th century), and many more.

3.2.6. The Lachin District

Geography

The Lachin district is situated in the southwest part of Azerbaijan, 450 km from Baku (by road) and 60 km from the rail station of Khankendi. The terrain is mountainous and the highest point is the peak of Gyzylbogaz which is 3,594 meters above sea level. The climate is moderately continental. The main river is the Hakari. The district borders Armenia on the west, the towns of Shusha, Khankendi, and Khojali on the east, the Kalbajar district on the north, and the Qubadli district on the south. It is situated on the Evlakh-Nakhchivan highway.

General information

The territory is 1,875 sq. km with a population of 69,500 (the population in 1990 was 54,000).

It includes 120 settlements and villages. The territory's center is the town of Lachin and its large population settlements are Hajykhanli, Minkand, Akhmedli, Garygyshlag, and Tezekend.

Occupation of the Lachin district began on 18 May, 1992. During the hostilities, 259 people were killed and another 225 people were injured. Thirty-six settlements and villages, 575 cultural and general facilities, and 12 protected historical monuments were destroyed, burned, and/or plundered.

Economy

The main economic focus is livestock farming. Grain-growing and fodder production dominated in agriculture of the district. The processing of raw agricultural material was represented by a livestock feed lot, butter and cheese and bakery combines, and a dairy factory.

The district's industry and infrastructure began developing in the 1970s. There were rock quarries, an asphalt and concrete factory, textile workshops, enterprises for processing natural marble, branches of aluminum and machine-building plants, and a consumer service combine – 23 construction and 16 industrial enterprises in all, as well as a well-developed forestry.

The district has significant potential for developing mountain sports, health resorts, and hunting.

Social infrastructure

Lachin significantly lagged behind most of the other program districts in terms of development of infrastructure. Nevertheless, there were 17 primary, 36 eight-grade, and 36 secondary schools, a medical polytechnic, 54 clubs, 67 libraries, 13 hospitals, and a sanitary-and-epidemiological service. All the villages had radios, televisions, and electricity. The town of Lachin and 53 other villages had supplies of gas. There were roads totaling 2,130 km, 92 bridges, a water supply line 1,187 km in length, 33 reservoirs, a central sewage system 15 km in length, a heating system 20 km in length, overhead transmission lines 2,636 km in

length, a gas pipe 498 km in length, radio-television communication lines 10,200 km in length, and three television-transmission stations.

Monuments of ancient architecture included a bridges over the Hakari river (18th century), the palace of Sultan Ahmed (1761), the Agoglan tower in the village of Kosalar (9th century), a mosque in the village of Garagyshlag (11th century), the Ushag fortress in the village of Gushchu (15th century), a fortress in the village of Mirik (15th century), a two-tier bridge over the river Minkend (15th century), a cave temple in the village of Hojaz (5th century), and many more, most of which were destroyed during the war or period of occupation.

3.2.7. The Kalbajar District

Geography

The Kalbajar district is situated in the western part of Azerbaijan in the valley of the Terter river, in the Greater Caucasian Mountains at an altitude of 1,500-3,800 meters above sea level. The first settlements in its territory date back to the Bronze Age (the 3rd millennium BC). The terrain is mountainous; the highest point is the peak of Jamyshdag on Murovdag mountain (3,724 meters above sea level). The rivers Terter and Bazarchay and their tributaries flow through the district. A cold and mountainous-tundra climate with a dry winter prevails.

Due to its extremely rich flora and fauna, the district is considered a natural reserve. Its flora mainly consists of broadleaf forests and alpine and subalpine meadows. It borders Armenia on the west, the Agdam and Terter districts on the east, the Dashkesan, Geygel, and Goranboy districts on the north, and the Lachin district and the town of Khojali on the south.

General information

The territory is 1,936 sq. km, with a population of 74,200 people (the population in 1990 was 57,500 people).

It includes one urban-type settlement (Istisu) and 122 other settlements and villages. The territory center is the town of Kalbajar, and its large population settlements are Istisu, Bashlybel, Zaylik, Takhtabashy, Dovshanli, Goslu, and Almali.

Occupation began on 2 April, 1993. During the hostilities, 217 people were killed and another 49 people were injured. One hundred and twenty-two settlements and villages, 29 production and 134 cultural and general facilities, and 87 historical monuments were destroyed, burned, and/or plundered.

Economy

Livestock farming and tobacco-growing prevailed in agriculture, mineral water production in industry, and the resort industry in the service sphere. There was also a well-developed lumber industry.

The district has significant potential for developing mountain sports, health resorts, and hunting.

Social infrastructure

There were two preschools, eight primary, 43 eight-grade, and 26 secondary schools, a music school, 55 libraries, nine community centers, 27 clubs, 17 cinemas, seven hospitals, and a sanitary-and-epidemiological service.

Cave paintings, the Khulavend complex at the mouth of the Terter river (6th-13th-16th centuries), and other historic monuments were all under state protection.

3.2.8. Natural Resources of the Program Area

During the geological survey carried out in 1960-1964, signs of deposits of chromium ore were discovered in the Kalbajar and Lachin districts (at the Geydere and Ipek fields, respectively). Geydere is situated on the watershed of the river Istibulagsu, 21 km northwest of Kalbajar. The lens thickness is between 0.5 and 15 meters, the chromic oxide content of the ore is 43.5%-52.6%, and its ratio to iron oxide fully correlates to industrial requirements. Manifestations of chromium ore at the Ipek fields were discovered close to the village of Ipek in the Lachin district. The chromic oxide content in these deposits is less than 25-39.5%, but they are spread over a large area.

Copper deposits have good prospects. Copper porphyry and gold and copper pyrite formations are widespread and a geological survey of several pyrite fields located in the districts adjacent to the program area has

already been completed. They include, in particular, the Gyzybulag field of gold and copper pyrites in the Agdere district (where the average copper content is 1.38%), the industrial reserves of which have been placed on the State Reserves Register.

Lead and zinc deposits are of the veined type, are presumably small, and have not been surveyed in sufficient depth.

The program area is rich in mercury reserves, and some deposits underwent thorough survey and exploitation as early as Soviet times. In particular, the reserves of the Agyatag mercury deposit in the Kalbajar district (12-15 km northwest of Kalbajar) were exploited until 1984 and are now becoming exhausted. There are, however, a few more promising mercury deposits in the same district. The industrial reserves of the Levchay mercury deposit 15-20 km northwest of the village of Lev have been placed on the State Reserves Register (the ore deposits are 20-70 meters in length and 2.5-6.5 meters in width with mercury content of 0.261-0.497%). The reserves of such mercury deposits of the Kalbajar district as Sarybulag, Gamyshli, and Shorbulag have also been estimated. Reserves of mercury have also been discovered in the Lachin district; the Chilgazchay deposit is not far from the village of Alakchi and the Narzanli deposit is close to the village of Kalafalyg.

There are also several deposits of precious metals in the program area. The Zod deposit is on the border of the Kalbajar district and the Vardeniss district of Armenia (Basarkechar in Azeri toponymy), the exploitation of which began in 1976. Of the 23 gold-bearing ore veins, 16 are in the territory of Azerbaijan, while only seven are in Armenian territory. At present, Armenia is developing the part of the deposit in its territory with the assistance of foreign investors, while claiming that the Kalbajar section of the gold deposit belongs to the jurisdiction of the unrecognized Nagorno-Karabakh Region. The Vejnali gold deposit is in the Zangilan district, 4-5 km from the rail station of Agband. It includes 25 gold-bearing veins, six of which are of economic value. Along with gold (the main beneficial component), the ore of this deposit also contains an extractable amount of silver, copper, tellurium, and bismuth. The deposit is ready for industrial use.

In addition, the districts to be liberated are rich in natural raw construction materials such as marble, limestone, raw cement, gravel, and

mortar sand. The mountainous districts (Zangilan, Kalbajar, Qubadli, and Lachin) are known for their precious and semiprecious stones (particularly the agate deposits in the Qubadli district) and mineral waters (particularly Lachin and Kalbajar, where the well-known Istisu mineral water was manufactured).

3.2.9. Protected Natural Zones

The Gara-Gel State Reserve

The Gara-Gel State Reserve was established in 1987 by a joint decision of Azerbaijan and Armenia as an inter-republican state reserve. It is 240 hectares in area and is situated on the slopes of Ishygly mountain (3,552 meters) in the southern part of the Karabakh volcano plateau at an altitude of 2,650-2,700 meters above sea level. The territory of the reserve belongs to the alpine landscape group.

A highland lake, Ishygly Gara-Gel, is located on the border between the Lachin district and Armenia, with this border status it is one of the reserve's rare natural features. Before occupation, the lake performed important hydrological and economic functions; it was used to irrigate cultivated areas and develop fishing and sheep farming.

A cold climate with a dry winter prevails, with 700 mm of precipitation a year. The flora consists mainly of alpine plants. The low diversity of the vegetation cover is explained by the fact that the reserve covers a small area and the main endemic species of plants remain beyond its borders. The fauna of the reserve includes 68 breeds and 27 species of animals and fish. Mammals in the reserve include foxes, wolves, hares, etc., and fish include whitefish, trout, salmon, etc.

Due to the irregular use of the reserve both before, and particularly during, occupation, it is currently in a degraded state.

The Basit-Chay State Reserve

Established in 1974 by a government decision, the Basit-Chay State Reserve is situated in the territory of the Zangilan district in the valley of the Basit-Chay river. It is 107 hectares in area – the country's smallest reserve. The terrain is mainly mountainous at an altitude of 600-800 meters above sea level. The climate is moderately warm with a dry winter and hot summer and the district receives 600 mm of precipitation a year.

The reserve's main purpose is to protect the landscape complex. The forests (100 hectares) are mainly comprised of Oriental plane tree, which has been entered in the Red Book. The average age of the plane trees in the reserve is 165 years, their average height is 35 meters, and average diameter is one meter. There are also nut and mulberry trees, willows, poplars, as well as hawthorn, brier, and other bushes. There are wolves, wild boars, badgers, roe deer, hares, rodents, and other mammals, while bird species include partridge, francolin, doves, etc.

The Lachin State Reserve

Established in 1961 in the territory of the Lachin district, the reserve is 21,400 hectares in area.

Its main purpose is to preserve and increase the population of mammals (roe deer, Persian wild goat, wild boar, bears, wolves, badgers, squirrels, etc.) and birds (francolin, partridge, quail, ring dove, etc.). The flora consists of white beech, lime, oak, birch, etc.

After occupation, the Lachin State Reserve lost its status as a protected natural zone.

The Qubadli State Reserve

Established in 1969 in the highland-steppe territory of the northern part of the Qubadli district and southern part of the Lachin district, the Qubadli State Reserve is 20,000 hectares in area.

Its main purpose is to protect the fauna, in particular the mammals (roe deer, wild boar, brown bear, wolves, jackals, foxes, hares, badgers, etc.) and birds (pheasant, partridge, francolin, quail, etc.) that inhabit the reserve. The flora consists of oak, white beech, juniper, hawthorn, brier, blackberry, etc.

After occupation, it lost its status as a protected natural zone.

The Arazboyu State Reserve

Established in 1993 for the purpose of preserving and restoring the riparian woodlands, the Arazboyu State Reserve covers an area of 2,200 hectares. Its flora consists of riparian forest, tamarisk, oak, white beech, Oriental plane trees, elm, cherry plum, silverberry, willow, blackberry, malt, etc. The fauna is represented by mammals such as brown bear, roe

deer, fox, wild boar, wolves, jackals, etc., and birds such as francolin, pheasants, partridges, etc.

After occupation, it lost its status as a protected natural zone.

3.3. The Program Area Today: Classification of the Degrees of Destruction

As previously noted, the occupied territories beyond the administrative borders of Nagorno-Karabakh are completely destroyed. This is confirmed not only by direct and indirect information obtained from various sources (including from eyewitnesses), but also by the experience gained during the restoration of several population settlements in districts previously liberated from occupation (primarily in the Fizuli and Agdam districts). Nevertheless, there is reason to believe that different areas in the occupied regions, each of which could be regarded as an integral habitat, have been subjected to different degrees of destruction. In order to ensure a systemic approach to the restoration of the liberated districts, they can, and should, be classified by the nature and degree of the destruction they suffered.

The classification presented below is based on an approach that was used earlier when compiling rehabilitation programs. Taking into account the town-planning diagnosis of the state of the area with respect to post-conflict rehabilitation of the resettlement systems, the program area can be divided into five provisional zones:

- 1. Accumulation zones* – territory that was not directly affected (~1%), but where a large number of forced migrants have moved into the previously existing settlements and into spontaneously established temporary camps.

It should be kept in mind that the number of residents in some of these zones is three times higher than the natural demographic limits. The extemporary and instantaneous settlement of such territories is causing higher anthropogenic loads on the life-support infrastructure, as well as on the landscape, than is permissible, thus stimulating their degradation. It is enough to mention the

felling of forests and woodlands for heating temporary housing and service facilities, or the using industrial and other sites unsuitable for living to build housing, including unsanctioned connection to energy and water supply systems, which leads to their overloading.

Accumulation zones are areas of indirect, rather than direct damage inflicted on the habitat both in the previously existing system and in the new settlements. These zones require additional capital investments in order to provide acceptable living conditions.

2. *Zones of direct fragmentary damage* – territory subjected to episodic bombing from the air. These territories are characterized by widespread damage to the habitat, ranging from 10% to 50% of the buildings, with their median amount being 24%. This means that no more than 1/3 of all the buildings have experienced intense destruction (according to our methodology, the 4th and 5th categories). Clearly, this was why large numbers of the residents of these settlements did not leave them for a long time. Moreover, a certain number of forced migrants accumulated in these settlements, which gave rise to a situation that was paradoxical at first glance: the rates of natural population growth there were higher than the country's average indices. This made the need for developing life-support infrastructures for the migrant contingent even more urgent.

3. *Zones of main infrastructure damage* – territory subjected to significant damage (on average, two thirds of all the buildings) with a high level of heavy damage (in the range of 45% to 55%) requiring extensive reconstruction work. The resettlement structure in these zones is characterized by a low level of population outflow and is on the whole stable (98%), but fluctuates in keeping with different structural classes of settlements within the range of 70% to 112%. The minimum population exodus is 30% and is of a short-term nature. The zone is also contaminated with undetonated warheads.

4. *Zone of almost complete destruction of the anthropogenic habitat* – territory under short-term occupation and abandoned by all its residents. This type of zone has been subjected to between 80% and 100% destruction. Despite the removal of mines and unused ammunition from certain areas, the danger of irregular mining makes locales within this zone high-risk areas even for irregular settlement. This explains the low level of spontaneous repatriation of the population (7.95%) in the postwar period. Mass repatriation of the population to settlements in this zone requires not only significant restoration and reconstruction work in the zone itself, but also the appropriate preparations at the sites of temporary migrant residence.
5. *Degradation zone* – territory subjected to total destruction of the entire habitat. This zone may not only be totally unsuitable for living, but also for large-scale rehabilitation work, since there remains the risk of new aggression and the territory must first be decontaminated and made accessible. Such areas must be studied in detail immediately after their liberation. Onsite inspection will enable one to divide this zone into sub-categories based on the typological features of the different components of the habitat.

This classification covers all the territories of Azerbaijan that have suffered in some way as a result of the aggression – that is, both those areas within the limits of the potential post-conflict zone, and those that are located beyond its boundaries. The accumulation zone includes temporary residence sites of internally displaced persons (IDP) that are outside the post-conflict territory comprising the target of this study. The zones of direct fragmentary damage fall both within the post-conflict area and in other border areas of the country.

This classification makes it possible to diagnose a resettlement system in the program area and forecast the degree of its structural deformation. On this basis, the following types of territories to be rehabilitated are singled out (again based on previously developed rehabilitation programs):

1. *Degraded system* – total destruction of the habitat, desertion, devastation of most of the territory and the majority of the settlements.
2. *Destructured system* – resettlement characterized by the fact that the main town (district center) is located in a zone of extensive occupation, so the local settlements are non-functional. The local service and administration centers that have survived are outside the zone of access of the small population settlements, thus making the latter nonfunctional as well. A de-structured system of resettlement does not have enough potential for spontaneous renewal. It is likely that the Fizuli and Agdam districts are completely destructured.
3. *Deteriorated system* – the destruction of local centers within the normal access limits of the district center. This kind of system has enough rehabilitation potential generated by its center, although the working capacity of most components of the system is clearly low. This situation might be characteristic of mountainous districts, in particular the Kalbajar, Qubadli, and Zangilan districts, and especially the Lachin district.
4. *Unbalanced system* – destruction of certain components that did not interfere with independent functioning and development of the system. Such areas are characterized by hypertrophic resettlement and overload on the infrastructure caused by an inflow of migrants in numbers exceeding the territory's demographic capacity. Overloading of communications, in turn, can also make exodus of the population difficult. This, as has already been noted, is typical of accumulation zones.

The above classifications make it possible to differentiate the town-planning tasks. For example, new resettlement systems will have to be established in areas with a level of first-type destruction. In second-type territories, the system's structure will have to undergo thorough reorgani-

zation, and settlements must be created that can boost the system's overall functioning. In other words, growth poles of contiguous territories must be formed in the areas of the territory that have suffered most. These poles should have sufficient potential for servicing and developing the entire system of the program area. Districts belonging to the third type are distinguished by the fact that they have the potential to restore a limited range of sectors by making compensatory use of the potential of the district centers. In fourth-type districts, restoration of the territory and infrastructure will be required only in the inflicted settlements and the components that service the habitats of forced migrants.

Specific alternatives of resettlement system reconstruction can be chosen only after onsite inspection has been carried out within the framework of initial rehabilitation. This choice will be dictated not only by the degree or type of destruction, but also by the location of the resettlement systems or their components, freedom of access to the inflicted areas, safety guarantees for carrying out restoration work, the priorities clarified by the time post-conflict rehabilitation begins, the demographic potential, and the economic value of the district being restored.

4. THE GOVERNMENT AND SECURITY

4.1. Improving Administration

4.1.1. Establishing a State Structure to Control Post-Conflict Rehabilitation

The state and its administrative structures will bear the main burden of the large-scale and diverse rehabilitation tasks in the liberated territories because the functions enumerated below are the inevitable responsibility of the state.

- Putting the final touches on the State Rehabilitation Program so as to take account of direct examination of the territories, particularly the population settlements;
- Providing practical overall supervision of the rehabilitation effort;
- Monitoring all governmental and nongovernmental entities involved in rehabilitation under the State Program;
- Coordinating the efforts of the ministries and state agencies under the rehabilitation plan;
- Responding promptly to everyday problems;

- Monitoring the State Program and ensuring its prompt readjustment as necessary;
- Carrying out consultations relating to the project and financial documentation, as well as expert investigations at a later stage;
- Organizing and holding tenders for state purchases, and ensuring their correct execution;
- Training of personnel (including contracting personnel);
- Supervising information support of the rehabilitation effort;
- Identifying the strategy of cooperation with IFIs and foreign donors, and raising funds;
- Encouraging cooperation with the local private sector and foreign investors;
- Carrying out promotional efforts.

A smoothly functioning and centralized management system will boost the efficiency of the rehabilitation effort. Therefore, the state will need some kind of organizational structure that is directly responsible for rehabilitating the liberated territories.

This could be either a ministry or a state committee, but the former would be preferable. A high ministerial status will, first, allow its director or minister to oversee directly Cabinet-level decision-making, while chairmen of state committees are not members of the Cabinet. Second, a ministry can bring together several state agencies under its jurisdiction, which could retain their status as local entities and thus their relative operating independence.

This structure might be called the Ministry for Rehabilitation of the Post-Conflict Territories (MRPT). If and when it is set up, it will take on the tasks of supervising rehabilitation and monitoring fulfillment of the

tasks enumerated above. Its main task, however, will be ensuring that the State Program continues to run smoothly.¹

The Ministry could be set up on the foundation of already functioning state structures, some of which might even be included within it. These structures include the State Committee for Refugees and Internally Displaced Persons (the Refugee Committee), the Azerbaijan National Agency for Mine Action (ANAMA), and the Azerbaijan Reconstruction and Rehabilitation Agency (ARRA), which is devoted to the reconstruction and rehabilitation of the war-torn areas of Azerbaijan. The Repatriation Department of the Refugee Committee will have to play a special role, and should therefore be transferred to the Ministry as one of its departments.

So far, the agencies are functioning under the Commission for the Rehabilitation and Reconstruction of the Liberated Territories, and can also be described as its executive offices. This means that the future Ministry will have the Commission's previous experience to rely upon.

Each of the state structures has already accumulated valuable experience in post-conflict rehabilitation and all of them are familiar with the international standards and donor-related procedures. ARRA, which was established in 1996, was actively involved in the First Rehabilitation Program of 1999-2001, and its efforts were appreciated both inside and outside the country.

¹ An analysis of international experience will be useful. It should examine those states, the structures of which were not established by the country rehabilitating its post-conflict territories, as well as by interested states or international organizations.

The Special Inspector General for Iraq Reconstruction set up by the U.S. Congress in 2004 at the Department of States and the Defense Department is a pertinent example. It is directly accountable to Congress, to which it submits its quarterly and half-yearly reports open to the public in America and elsewhere. The latest report was submitted on 30 April, 2009 (see: *Special Inspector General for Iraq Reconstruction: Quarterly Report to the United States Congress*, available at [<http://www.sigir.mil/reports/quarterlyreports/default.aspx>]).

The Office of Special Inspector General is responsible for the money allocated for reconstruction; it also coordinates the work under the post-conflict rehabilitation programs, draws up recommendations, analyzes the efficiency of the state structures of Iraq, is involved in drawing up and conducting expert evaluations of the regulatory legal acts, and performs various other functions as well.

The MRPT should have central, regional, and local offices. Being distinct from other state bodies, its local network will be limited to the liberated and rehabilitated localities. In fact, the local branches, which will have to cope with a huge volume of work, will operate as field offices.

The best time to set up the MRPT is equally important. Experts consulted by this study think it wise to establish it at the preliminary stage, even before political settlement of the conflict has been reached. After all, they argue, the setting up a ministry, which is a fairly complicated organization, requires detailed and rather planning. At the second stage, the newly established ministry will need time to test its systems and structures. After a political settlement is reached, time will be at a premium. Therefore, if its establishment is delayed, the ministry will waste precious time.

Moreover, many of rehabilitation issues (including those analyzed in this study) call for preliminary investigation. Indeed, all aspects of the future rehabilitation work should be carefully analyzed and scrutinized. If a state structure responsible for post-conflict rehabilitation is involved at the analytical stage, preliminary preparations will be carried out much more smoothly, and with better results.

Additionally, staffing the newly established structure will be a challenging task, mainly because of the ministry's highly specific needs. The best people should be selected well in advance; they will require training and instruction so they will be able to work as a coherent and harmonious team. This will take time.

Finally, the establishment of such a Ministry will show both conflicting parties and the world at large that Azerbaijan is resolved to restore the liberated territories and ensure the best possible conditions of life for all people residing there, regardless of their ethnic origin.

Based on the arguments listed above, it would be most beneficial for the MRPT to be set up during the preliminary stage.

4.1.2. Setting Up Special Units in the Functioning Government Units

The MRPT will not be able to resolve the entire set of rehabilitation problems. No matter how high its status, its directives will carry no weight

with the other ministries and state committees because it will be one of them, and thus on an equal footing with them. Rehabilitation, however, will call for tight control from above, which points to the establishment of special units with the Presidential Administration and Cabinet of Ministers.

However extensive the MRPT's powers might be, it should not assume functions which belong to other ministries or state committees. Each such structure should operate within its own jurisdiction in the liberated territories.

The security of the local people and infrastructure will be ensured by the Ministry of Defense, Ministry of Internal affairs, and Ministry of National Security, as well as the Prosecutor General's Office, and the Border Guard Administration. The Ministry of Transport, the Civil Aviation Administration, and the Ministry of Communications and Information Technology, as well as the Azersu, Azerenergy, and Azerigaz state companies² will be responsible for the rehabilitation of infrastructure. The ministries of economic development, industry, energy, and agriculture will manage economic rehabilitation of the liberated areas. Most of the other state agencies will also be involved, each within its specific sphere.

The scope of the tasks to be fulfilled will require special structures within the state bodies involved. This calls for a more detailed discussion and consultations with the corresponding state structures.

4.1.3. Special Functions of the Local Administrations in the Post-conflict Areas

The local administrations (heads of executive bodies and their officials, local public prosecutors, the police, national security agencies, and the district courts) should be the first to return to the demined territories. They should organize rehabilitation at the local level.

Initially, they will use a temporary infrastructure in order to deal with the problems created by the poor existing infrastructures.

² On 1 July, 2009, Azerigaz was transferred to the State Oil Company by President Ilham Aliiev's decree to create a unified management system of the oil and gas industry. Thus, its rehabilitation tasks will be addressed by the State Oil Company.

For obvious reasons, the local civil administrations will have to work in extreme conditions (though it will, most likely, not be necessary to introduce a state of emergency). This will require flexible decision-making; on the one hand, administrative decisions, no matter how harsh, will have to be fulfilled without discussion. On the other, they will have to avoid serious discontent among the repatriates (especially of the first wave).

Such contradictions appear unavoidable and both sides may have to take special measures in order to alleviate its effects. It is too early to go into details because the nature of and gravity of the problems will differ in each case, and will be determined by the specifics of the situation as a whole. It should be noted that in each case the local administrations should act according to the social, economic, and political context. Socially unpopular decisions may from time to time be permitted if it is agreed that no viable alternative exists.

At the preparatory stage, members of the civil administrations of the occupied territories should be informed of the details and specifics of the areas to be liberated so that they gain an adequate idea of what to expect. They will have to work with the first wave of repatriated IDPs, while the infrastructure facilities (the vital service systems in particular) still await restoration. Training programs will be launched as soon as the State Rehabilitation Program has been adopted.

For greater efficiency, the local administrations will need more authority, which does not necessarily have to be registered formally or legally. Their members should be freed from the obligation to seek the consent of the administrative organs in the capital every time they make a decision.

* * *

The three components of state administration—a special structure in the form of the MRPT; sub-units set up to deal with rehabilitation in the governmental agencies; and the granting of greater autonomy to local administrations—should all be discussed with governmental experts during the current preparatory stage.

4.2. Decontamination of the Post-conflict Territories

Decontamination should occur before all other rehabilitation measures commence, with demining being the key element of the entire procedure, and the main factor responsible for the security of the people, production facilities, and infrastructure. After the liberation of the occupied territories the Demining Agency, which has accumulated enough experience and employs skilled personnel, will face a much larger task than heretofore. It will have to consider larger territories, deal with a densely mine-infested area, and operate under tight time constraints. This will demand more money, better organizational measures, better procedures for hiring and training personnel, and the involvement of foreign experts.

Civilian demining can start as soon as the military supplies all relevant documents and copies of maps of the minefields; it will then proceed in several stages:

1. Identification of the special zones, which must then be marked and blocked off;
2. Demining and decontamination of transport routes and the territories' support centers;
3. The demining and decontamination of other settlements and facilities following the restoration of the whole territory;
4. Demining and decontamination of industrial and agricultural facilities;
5. Demining and decontamination of the rest of the area and facilities.

Demining must precede everything else and will progress at the same time as rehabilitation until it is complete. Civilian demining is planned in four stages.

At the first stage, the foundation for further work and the civilian demining structures will be set up. This includes training, the provision of information and logistical support, the establishment of field bases, and carrying out the necessary studies and pilot operations.

At the second stage, the general plan will be elaborated and implemented. Complete demining of the liberated territories is expected to be underway during the second stage.

At the third stage, direct demining begins. The civilian demining base will be expanded according to the tasks at hand, and its activities will be extended to the priority program territories.

At the fourth stage, adequately trained and equipped units of civilian combat engineers will carry out mass demining.

The following criteria have been adopted to identify the demining priorities:

- Ensure safe repatriation
- Ensure the operation of the vital service systems
- Ensure the safety of the rehabilitation effort
- Minimize the risk of destruction of industrial and infrastructure facilities
- Ensure a safe atmosphere for the repatriates in order to maintain the community's normal living environment (permanent dwellings, jobs, services, recreation, etc.)
- Guarantee the security of agricultural activities
- The demining other territories and facilities

At the second through fourth stages, demining will progress in conjunction with the following:

- readying the demining base for large-scale operations
- military demining carried out by the Defense Ministry, which supplies maps of the minefields and demined areas
- setting up field bases and preventive deployment of trained combat engineering teams to inspect the territories (Level I), conveying all data to the MRPT for ensuring safety in the liberated territories, confirming the

endorsed priorities, and drafting proposals for the further implementation of the State Program

- carrying out inspections of Level II, identifying special zones (mine- and blind shell-hazardous) and facilities, which should be marked and closed off
- elaborating a General Plan of Demining the Liberated Territories and a System of Mine Safety, which should coordinate with the MRPT
- further developing databases and information systems about the minefields in order to inform the population about possible hazards
- organization, training, and advanced training of the combat engineering teams (including special detachments using trained dogs) established during the first stage and supplying them with the necessary equipment
- demining transport routes and the territorial support centers
- demining priority territories and facilities
- blanket demining of the rest of the liberated territory

The correlation of these phases with each of the stages is subject to change depending on the progress of these various efforts.

Executive powers in the sector will belong to the ANAMA (which has been functioning under the Commission for the Rehabilitation and Reconstruction of the Liberated Territories), but at later stages it will most likely become part of the MRPT. The Agency is responsible for all the preparatory work, inspection of the territories, operations, as well as the purchase of all the necessary equipment on a competitive financial basis. It will establish, train, and equip non-governmental civilian combat engineering teams that able to work in close cooperation with the other

teams and detachments. These organizations should meet the highest international standards and function on a competitive level in the world market of demining services.

Environmental safety is another equally important consideration in the decontamination of the liberated territories. This goes beyond the limits of general insurance of safety and should be treated as an important consideration in its own right. Some of its aspects, however, are closely connected to the functioning of the vital service systems, which makes it part of the general security-related effort. This effort, along with the proposed environmental rehabilitation will address the environmental aftermath of the hostilities and deliberate damage of environmental systems hazardous to human life and human activities in the liberated territories.

The following should be done to remove life-threatening environmental conditions, which might also trigger irreversible degradation of the unique natural resources:

- investigation of the environmental situation in places where repatriates are to live and the identification of areas that pose a potential threat to human health, including possible burial sites of toxic substances,
- decontamination of the territories designated for settlement, including the removal of asbestos cement,
- identification of exogenous zones, zones of erosion, and zones of destructive natural environment in order to prepare suggestions for the protection of the settlements and infrastructure against dangerous geological, hydrogeological, and other processes,
- dealing with the effects of destroyed vegetation and the fertile soil layer in the occupied territories, illegal forest felling, and other activities which damaged the natural environment.

Preventing damage to the few hydro-technical facilities that have survived, such as the Sarsang reservoir, should be carefully considered as soon as Azerbaijan restores its jurisdiction. This is necessary in order to ensure security during rehabilitation, as well as later on.

One should note that, if damaged, the protective system of the Sarsang reservoir might cause a widespread environmental disaster, due to its geographic location and water mass of over 500 million cubic meters. It might also endanger the over 400 people living in the valley at Tartar, Agdam, Geranboy and Barda.

Post-conflict rehabilitation should proceed in full compliance with the environmental safety regulations, including the use of environmentally friendly materials.

4.3. Securing Borders

This study does not examine the military side of security in the liberated territories, but we chose to touch upon some aspects of this issue for the purpose of analysis. Presumably, the delineation line with Armenia (Armenian armed units are currently stationed in Nagorno-Karabakh) will be reliably protected by armed forces. The territories of civil administration will be demarcated and the entire area beyond the six km. strip separating the armed forces should be accessible for restoration.

Military threats on the border cannot be completely eliminated because military security will call for rehabilitation of old facilities and the construction of new ones. Almost all the border security infrastructure will have to be built from scratch; the construction of such border security infrastructure as border outposts and checkpoints, fully equipped border crossing points on the borders with Armenia and Iran, etc., should receive priority attention.

The political situation created by an agreement on a step-by-step conflict settlement will require checkpoints along the future administrative border between Nagorno-Karabakh and the liberated territory, thus creating a security infrastructure around Nagorno-Karabakh.

Currently there is no border between Armenia and the Nagorno-Karabakh area of Azerbaijan, which has been joined *de facto* to Armenia. The checkpoints on the future administrative border will function as checkpoints to be used by Armenian and Azeri citizens wishing to cross the border in both directions, as administrative checkpoints used by the citizens of Azerbaijan living in Nagorno-Karabakh, and by the rest of the country wishing to cross the administrative border in both directions.

The ministries of Foreign Affairs and National Security, together with the Ministry of Internal Affairs, will further develop the procedures of the Azerbaijan-Armenia border crossing (in both directions) for the residents of Nagorno-Karabakh and Armenian citizens. They might be simpler than those envisaged for the citizens of Azerbaijan. This will make the border between the two countries more transparent, which will necessitate a discussion of the regulations to be applied to the citizens of Armenia wishing to visit the rest of the territory of Azerbaijan (that is, wishing to cross the administrative border of the Nagorno-Karabakh Autonomous Region). The decision will be correlated with the liberalization of the border crossing procedure for the citizens of Azerbaijan living in the Nakhchivan Autonomous Republic wishing to reach Azerbaijan via Armenia.

These procedures, as well as the related infrastructure, will be temporary. When the territories are completely integrated and normal relations are established between Azerbaijan and Armenia, they will be annulled, while the related infrastructure will no longer be used because checkpoints at border crossings to and from Nagorno-Karabakh will no longer be necessary for the citizens of Azerbaijan.

The border security system is not limited to newly built checkpoints manned by border guards; it will require other infrastructure facilities, such as customs points. We should remember that while those set up along the state border between the two countries will remain in use for a long time, checkpoints set up along the administrative border between Nagorno-Karabakh and the liberated territories (that is, with the rest of the territory of Azerbaijan) will only be used for a limited period of time.

4.4. Internal Security

Within the step-by-step approach to the Karabakh problem, the safety of both the Azeri and Armenian population is considered to be the third most important issue after the Armenian armed forces withdraw from the occupied territories and IDPs return to their places of permanent residence. This, however, does not mean that population safety should only begin after the two previous stages have been completed. Security measures should be taken even before repatriates reach the places of their former residence or, at least, should be installed while the process is still

underway. They should be seen as an indispensable part of the conflict settlement and the first step toward the restoration of infrastructure.

Security in the liberated territories, which will be ensured at the early stages by the army, should gradually be transferred to the civil administration, including the district branches of the ministries of national security and internal affairs, the local public prosecutor offices, and the courts of justice. These entities are expected to outline conceptual principles for the internal security system at the preparatory stage.

Security infrastructure is discussed in Section VI (*6.1. Restoration of the Civil Administration Infrastructure*).

4.5. Regulatory-Legal Rehabilitation Underpinnings

Some of the security issues in the liberated areas, as well as their settlement and rehabilitation, will require changes in the current legislation in order to formalize the measures conducive to social and economic activity and to encourage demographic growth and for businesses involved in rehabilitation to operate in the liberated territories. By necessity, these measures will be limited to the re-integration period and will be lifted as soon as social and economic integration is complete.

The repatriates' rights to real estate should receive legal confirmation. This is one of the cornerstones of the repatriation and rehabilitation effort and relates to landed property, ownership of dwellings, production units, and other facilities of economic activity designated for privatization.

It is equally important to adjust, in legal terms, the administrative structure to the specifics of the post-conflict territory, its rehabilitation, the repatriation order and procedure, the registration regime and control, and consideration of whether citizens of other countries have the legal right to remain in the liberated territory and own real estate there.

To be accomplished, the above calls for a Law on the Liberated Territories in order to give the rehabilitated areas a legal status, identify the responsibilities of state agencies, non-governmental organizations, and repatriates during rehabilitation, and to synchronize the interests of the repatriates, as the most vulnerable population group, with the interests of those who remained in the occupied territories and legally owned their

property. The Law could outline in general terms the privileges offered to companies working in the liberated territories, which should be specified by other legal documents, particularly tax and customs codes.

This law should be drafted during the preparatory stage. It should not be postponed until the post-settlement period and should bring together government, parliamentary, and independent experts, as well as members of NGOs dealing with the problems of refugees and IDPs.

5. RESTORATION OF THE VITAL SERVICE SYSTEMS

5.1. Repatriation

5.1.1. Organization of Repatriation

Returning refugees and internally displaced persons to the liberated areas and their resettlement is the main priority of post-conflict rehabilitation. Repatriation signifies the beginning of the region's socioeconomic revival since full-fledged rehabilitation of the liberated territories is impossible without the direct participation of their indigenous residents. The success of repatriation is also an indirect indication of the efficiency of the measures taken to achieve socioeconomic rehabilitation of the liberated areas, and so can be regarded as an indicator of the entire effort.

A central principle of this effort is that repatriation will be voluntary. Not only is it probably illegal and in any case undesirable to apply stern administrative measures to make people return, it is flatly impossible to do so successfully.

Many families of IDPs and refugees live quite comfortably in their new places of residence. Among them are successful businessmen and civil servants. The current income of many IDPs and refugees is much higher than the earnings they could expect to make in the liberated areas and, more importantly, they have already become fully accustomed to their present way of life. They have decent housing, a steady job, and their children study at well-equipped schools and attend normal kindergartens – they have fully adapted to urbanized life. All of this, in the context of

voluntary repatriation, will significantly complicate the resettlement process. According to preliminary estimates, the share of IDPs and refugees whose repatriation will be complicated by the above-mentioned factors amounts to approximately 15-20% of the total.

Nevertheless, even some of these well-established IDPs, particularly businessmen and those employed at their enterprises, will prefer to return to their native lands. The results of numerous surveys and polls conducted among IDPs at different times show that the overwhelming majority of the people in this category (approximately 85-90%) are waiting for the occupied territories to be liberated in order to return to their permanent places of residence. Therefore, we can quite confidently state that the number of potential repatriates will fall within the range of 450,000-520,000 people.

The wide range in their number is due both to the basic nature of standard statistical reporting, which does not reflect the dynamics of the natural increase in the number of IDPs with sufficient precision, and also to the errors of the direct extrapolation methods used to summarize the poll data. In this study, the general cost parameters for restoration of the region were calculated based on the upper limit (520,000 people) of the number of repatriates.

Despite the large number of likely repatriates, system of special benefits must be envisaged to simplify the mass migration process. Most of these benefits should and will have the double effect of simplifying repatriation and of launching the socioeconomic revival of the liberated areas.

Many benefits, particularly those associated in some way with economic activity, will have only an indirect effect upon the resettlement process since their main purpose is to stimulate business activity in the liberated territories once the populace has returned. This particularly applies to the privatization of land and the granting of a variety of privileges to enterprises functioning within the liberated areas. It stands to reason that IDPs will also fully retain all the property rights that they acquired in their places of temporary residence.

Along with indirect benefits, the use of several direct measures aimed at simplifying the repatriation process should be prepared such as free transportation to former homes, direct monetary assistance to the IDPs, etc. We will further examine these measures in detail below.

The repatriation process will be comprised of several consecutive stages.

A. The preparatory stage. Before the main repatriation begins, detailed regulations will be drawn up, which, in addition to everything else, will set forth the material-technical, regulatory-legal, and financial-organizational aspects of resettlement of people from different areas of the country in the liberated territories. This repatriation plan will begin by compiling documented lists of IDPs designating the approximate dates of their return.

At present, both the local executive power structures of the occupied areas and the State Committee for Refugees and Internally Displaced Persons are keeping records of all IDPs. At the preparatory stage, the number of residents in the districts to be restored will once more be verified. The places of their temporary residence will also be confirmed according to the registration data of the State Committee for Refugees and IDPs, as well as of the corresponding local administrative offices that keep an independent account in the territory under their jurisdiction.

This work will be carried out by the executive offices of the districts to be restored, along with officers and staff of the districts where IDPs are temporarily living, and will be coordinated with the Ministry of Rehabilitation of the Post-Conflict Territories (MRPT). This ministry will also be responsible for compiling and servicing a corresponding database.

Inevitably, the lists of expected repatriates will not fully coincide with the actual numbers of IDPs. Just before resettlement, lists of repatriates will have to be compiled again. An additional sociological survey of IDPs and refugees will be conducted in order to identify and sort different categories of potential IDPs. These lists will form the informational base for the Resettlement Regulations.

The Regulations will set into motion the consecutive stages of the move, and will be entered in two columns – popu-

lation settlement of destination, and category of repatriates. It will also indicate the specific state offices directly responsible for organizing each aspect of resettlement and for resolving technical issues, as well as rendering repatriates essential support. These measures will focus on providing the first wave of repatriates with food, water, and other basic necessities.

B. Relocation of the restoration teams. Since restoration teams must arrive in the liberated territories before mass resettlement begins, their members must be selected at the preparatory stage. The members of the restoration teams will mainly consist of the able-bodied contingent of IDPs and refugees who will remain in the area (in their places of permanent residence) after their original mission has been carried out.

Due to the extreme working conditions, the salary of the restoration teams will be higher than the usual sum, which will be established by multiplying the average national wage of corresponding engineering technical personnel and laborers by specific coefficients (presumably within the range of 1.6-2.0).

Workers of the most diverse professions and skills will be needed for the restoration teams since, in addition to specialized work in construction, power engineering, water services, supply lines, etc., they will also have to carry out social work such as clean-ups, gathering useful materials, and landscaping.

Support groups responsible for setting up pre-fabricated housing for the restoration teams will be formed in advance and relocated to the post-conflict zone. Temporary housing will be set up depending on the priority of the rehabilitation work.

C. Staffing repatriate groups. Based on the lists drawn up at the preparatory stage, repatriates will be grouped depending on the resettlement times, which, in turn, relate to the development level of the population settlements.

These groups will be formed on the basis of a written statement from each repatriate to the local civil administration stating the time he or she wishes to move. Lists of the order in which repatriation will be carried out will be submitted to the MRPT in order to compile the Resettlement Regulations.

The first groups could be comprised of several hundred people each. They should consist of families that make up the populations of small villages, or those residing closely in larger population settlements. The first groups will be resettled in population settlements in which the basic living conditions can be provided in the shortest amount of time. Particularly important will be those areas where residential properties can be made suitable for living relatively quickly, and where water, food, and other basic necessities can be supplied in the requisite amounts.

Questions regarding granting IDPs initial financial aid will be dealt with in compliance with special government instructions. Transportation of IDPs and their belongings (for which a certain limit to be shipped by the government in terms of weight and dimensions will be determined) to their places of permanent residence will be taken care of at the same time.

As groups are formed, explanatory work will begin among the IDPs. This work would best be carried out by the Repatriation Department of the MRPT. Repatriates will be given detailed explanations of the resettlement procedure and schedule, as well as the safety rules that obtain in the territories being restored. They will also be notified of the support the state intends to render them, including the benefits and privileges they are being offered. It is important that any information required by potential IDPs (particularly information about subsequent rehabilitation of the liberated territories) is readily available and clear.

D. Drawing up regulatory-legal acts and registering IDPs' documents. In order to streamline the repatriation process,

the government will approve regulatory-legal acts that define the mechanisms, rules, and procedure for executing the decisions made. These legal documents should be aimed at ensuring that the procedures are efficient, flexible, and effective.

One such legal act will contain a list of requirements of the repatriates' registration documents. Every repatriated family will receive an official document confirming its change in its status. This document should contain basic information about the family, such as the number of members and the number of family members being resettled, and information on school-aged and preschool children, as well as dependent members of the family. This will be the basic document used for registration upon arrival in the settlements, and for obtaining post-repatriation support from the government. Keeping a precise record of the IDPs who leave their places of temporary residence and arrive in their place of permanent residence is a vital component of successful post-conflict rehabilitation.

E. Resettlement. Resettlement will be carried out once the initial restoration work to provide basic living conditions is completed. The local governments will first confirm that the residential properties are suitable for living.

5.1.2. Repatriation Costs

It is not possible to give a precise figure for the sum of money needed for resettlement since, in addition to state expenditures, large amounts of money will be spent by the IDPs and their sponsors, which may include local donor organizations, relatives, friends, and employers. Our task is to provide an estimate of the amount of money the government will spend on a centralized basis. Both the government's own funds, as well as funds borrowed from international donors and IMF loans, can be a source of centralized spending.

In keeping with the proposed scheme of direct state support for repatriation, its costs are comprised of the following components:

- (A) benefits for purchasing basic household items (property compensation),
- (B) transportation costs,
- (C) support for organization of small holdings,
- (D) social support benefits.

Each article of proposed direct state spending on repatriation support will be examined separately below.

A. Immediately before or after they move, IDPs will inevitably need to add to their household belongings. The majority of refugees and IDPs were unable to take their belongings with them when they left their homes. Property left in the occupied zones has either been plundered or is unsuitable for use. A large number of refugees and IDPs lived in emergency conditions during the years of occupation. Their standard of living, which was much lower than the average throughout the country, made it impossible for them to purchase the necessary household items in their places of temporary residence.

Thus, benefits for purchasing basic household necessities are also a kind of compensation for the property lost during occupation. When citizens were forced to leave their homes, the state did not have enough resources to offer them such compensation. Now, the country's level of economic development makes it possible for the government at least to partially assume the cost of providing IDPs with the necessary items.

Preliminary estimates, which require clarification during drafting of the Resettlement Regulations, assess this requirement at 800 manats per person, or 4,000 AZN per family, which is \$1,000 and \$5,000, respectively.

B. The resettlement process will be organized by the Repatriation Department of the MRPT. Based on an agreement between the Department and a transportation enterprise entered into after an open bidding process, IDPs will be offered transportation to their new places of

residence for themselves and their belongings. The date of the move, to be scheduled by the Repatriation Department, will be announced no less than ten days in advance. Departure from the place of temporary residence and arrival at the final destination will be registered in the documents, indicating the change of status. It should also be possible for an IDP to obtain an absentee certificate at the departure point and present it at the destination point for registration. All other forms of resettlement benefits (that is, everything apart from transportation) will be issued based on the registration document at the place of permanent residence.

The market prices of inter-city passenger travel are relatively low and currently fluctuate in the range of 4-5 manats per passenger per 100-120 km. Transportation of belongings is much more expensive. Based on the existing rates, the cost of transporting a family to its place of permanent residence is estimated for a journey of up to 100 km at 200 AZN, for up to 100-300 km—500-550 AZN, and for 300-500 km—700-750 AZN.

In reality, the cost of transportation services for the IDPs and their belongings will most likely be lower since it will be determined on the basis of a competitive bidding process that may significantly lower the starting prices. Considering all of these factors, and acknowledging that a precise evaluation is impossible due to the scattering of IDPs across the country's territory, transportation costs for an average family of five people are estimated at 550 AZN or approximately \$690.

- C. Small holdings, especially at the outset, will play a critically important role in providing IDPs with food. This is mainly true for rural settlements, since in urban settlements of the liberated zones the modest mounts of land available serve mainly as inner courtyards and not gardens.

The rapid organization of small holdings and their transformation into economically beneficial plots requires the purchase of farm equipment, poultry stock, fodder, planting stock, and fruit and vegetable seeds. The government will presumably give each rural family a one-time benefit for this, which will amount to approximately 500 AZN (with an estimated total spending on one person of 100 AZN). This benefit will not be issued monetarily, but in goods. The reason for this is that it is impossible to organize the sale of all the items needed to cultivate small holdings in the liberated areas in such a short period of time, and in the spontaneously emerging markets. Due to insufficient supply, prices for these goods will be much higher than the nationwide average.

A corresponding structure created in the MRPT will purchase the necessary items based on best prices. The items will be distributed by the same structure according to check-lists of the IDPs. In so doing, the list of items offered to each family may differ depending on its preferences, but the total amount of the goods basket should remain within specific limits and not deviate from the sum approved by the government by more than 2%.

It is presumed that 80% of the IDPs will be rural residents and 20% city-dwellers. Therefore, the number of repatriates who receive a one-time state benefit for restoring their holdings will amount, depending on the repatriation year, to 64,000, 80,000, 80,000, 88,000, and 104,000 people (a total of 416,000 people).

- D. The social support benefit differs somewhat in its economic content from the other forms of state support. It will be paid monthly during the first year after arrival at the destination in monetary form. This benefit will guarantee that the IDPs' minimum needs are met until they find a steady job and can earn a stable income.

The monthly social support benefit will most likely amount to 150 AZN (about \$190) for an average family, based on 30 AZN per family member. This amount corresponds to the

total approximate amount of support IDPs are currently receiving from the state in the form of humanitarian aid. The benefits will be issued by the local social security departments, or, until these offices begin functioning, by the district and village departments of the postal service.

Thus, the total amount of direct spending for the repatriation of an average family will amount to 6,350 AZN in the towns, and 6,850 AZN in the villages, the difference being equal to the amount of benefits issued only to the rural population.

The total amount of annual direct spending on repatriation adjusted for inflation depends on the year of resettlement. Corresponding coefficients were calculated based on a 20% annual inflation index. The total funds necessary for direct state spending on repatriation amount to more than 1 billion AZN (approximately \$1.36 billion). Property compensation accounts for the main part of this amount (416 million AZN without consideration of inflation, and 643 million AZN including inflation) (see Table 1). Social support payments are presented in the Table by year, but will be paid monthly. The monthly total amount of spending on this benefit during the first year of repatriation will amount to 2.4 million AZN, and in the fifth year (keeping in mind adjustment for inflation) to 8.1 million AZN, or \$3.0 and \$10.1 million, respectively.

The figures presented in Table 1 reflect only the *direct government* spending on repatriation. The total costs also include spending on the purchase and assembly of pre-fabricated housing at holding stations for the repatriates and their families who have stated their desire to participate in the restoration teams. As for the necessary legal documents, they will be drawn up by the government offices and do not require additional expenses.

An important feature of direct state spending on repatriation, as well as most of the other expense items for rehabilitation of the post-conflict territories, is that it has a clear tendency to increase over time. This tendency is due not only to the increase in the number of repatriates from year to year, but also to inflation. Indeed, the inflation factor plays the most important role in the likely increase in spending. For example, whereas the resettlement of one average family in the first year of repatriation will cost the state 6,750 AZN, in the fifth year this amount will

have increased to 13,973 AZN. The annual dynamics of direct spending on repatriation are shown in Diagram 1.

Table 1. Direct Repatriation Spending

Repatriation period (years)	Number of repatriates (thou. people)	Transportation costs (thou. AZN)	Property compensation (thou. AZN)	Support of holdings (thou. AZN)	Social benefit (thou. AZN)	Total (thou AZN)	Inflation coefficients	Total with adjustment for inflation (thou. AZN)
1st year	80	8,800	64,000	6,400	28,800	108,000	1.00	108,000
2nd year	100	11,000	80,000	8,000	36,000	135,000	1.20	162,000
3rd year	100	11,000	80,000	8,000	36,000	135,000	1.44	194,400
4th year	110	12,100	88,000	8,800	39,600	148,500	1.73	256,905
5th year	130	14,300	104,000	10,400	46,800	175,500	2.07	363,285
Total	520	57,200	416,000	41,600	187,200	702,000		1,084,590

The inflation factor will most likely create the greatest difficulties for the government in those cases involving different types of direct payments to repatriates. Therefore, the benefits paid will have to be indexed (on a one-time or monthly basis), and the difference between the payments at the initial and final stages of repatriation will prove to be rather significant. For example, in the first year after the beginning of mass resettlement, each family will receive \$5,000 by way of property compensation. By the fourth year, this amount will have risen to \$8,650, and by the fifth, to \$10,350.

This increase in compensation payment may cause discontent among the first wave of repatriates, as they will most likely perceive it as an injustice. This discontent could also be aggravated by the fact that it will be the first repatriates who encounter the main difficulties in developing the post-conflict territories.

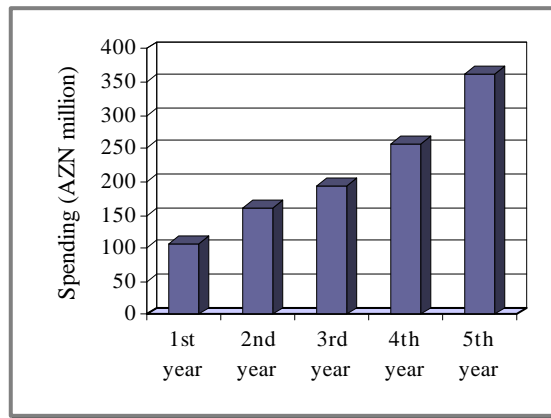
The only way to prevent social tension of this kind is through detailed and open explanations by the government, an important component of which should be timely notification of repatriates of *everything* regarding the benefits and privileges they are to receive. In addition, it is possible that for the first repatriates who return to the post-conflict areas some additional perks (not included in the value indicators in this study) will have to be offered in order to ensure that refugees and IDPs do not try to postpone their move.

Another important issue will be the accurate organization of financing. It is presumed that general control over spending the allotted and borrowed funds will be carried out by the Ministry of Rehabilitation of the Post-Conflict Territories, which will submit proposals about changes in the repatriation budget to the government based on the results of close monitoring.

5.2. Restoration of Residential Properties

Providing IDPs with housing is the highest priority of post-conflict restoration. As one of its target functions, restoration of residential properties is also the most important prerequisite for the socioeconomic rehabilitation of the post-conflict territories. It is an essential component of the voluntary repatriation of IDPs.

Diagram 1. Direct State Spending on Repatriation Depending on the Year of Resettlement



In this study, a distinction is made between putting up temporary settlements at construction sites and building permanent housing for repatriates. Accordingly, the restoration of residential properties consists of the following three components:

1. Putting up temporary housing for the members of restoration teams (this means so-called pioneering development groups, of which repatriates themselves who are participating in the restoration work will also be members). It is presumed that this housing will be pre-fabricated, container-type modular accommodations and, as a rule, will be placed on the territory of support centers in the form of small settlements. Temporary public and production facilities required by the restoration teams for performing their work will also be of the container type. This pre-fabricated housing will be manufactured in Azerbaijan itself and not imported.

During the pioneering development of a particular area, as well as in the case of simultaneous large-scale or community repatriation, pre-fabricated residential and production accommodations can be placed both within and beyond the territory of existing settlements. The advantage of pre-fabricated structures is that an entire complex of vital service establishments, ranging from administrative to social service structures, can be erected alongside the residential accommodations.

In this way, the use of pre-fabricated facilities will make it possible to provide the IDPs, particularly those of the first wave, with suitable temporary living quarters. It will also ensure the mobility of the restoration teams, which is extremely important since they will have to move around periodically as work is completed in one area and begins in another. In addition, it will ensure the multifunctional (sometimes combined) use of the existing facilities both for housing and for administrative, social service, and production purposes. Finally, it will reduce the total funding required.

2. Assembling or relocating container-type housing for IDPs returning from their places of temporary residence to the holdings that belong to them in their native settlements. Most of the repatriates will arrive in their places of permanent residence before their houses have been restored, so they will also need pre-fabricated accommodations as temporary housing, which will normally be set up on their own holdings. Since many families of refugees and IDPs are currently living in precisely that type of housing, the task will come down to relocating the latter.
3. Restoring or building (depending on the category of damage) houses for the repatriates.

The restoration of housing foresees repair and building-reconstruction measures, both with respect to multiple-occupancy buildings, which are situated primarily in urban settlements, and to the individual farmhouses typical of rural areas.

Decisions about whether a particular building requires restoration (and if it does, precisely what this will entail), or whether it should be rebuilt, will be made on the basis of the degree of damage. The methodological basis for these judgments will be the classification of damage to buildings as a result of combat and subsequent pilfering or neglect drawn up by Azeri specialists and foreign experts.¹ This classification divides damaged buildings into five categories. In the first category are the least damaged facilities in which front doors, windows, stairs, and elements of exterior verandas have been completely destroyed, and roofs and exterior plaster, by only 30%, while the fifth category includes the most damaged residential properties – the support structures, walls, ceilings, floors, and roofs of which have been more than 50% destroyed.

The tasks required to restore residential properties will be determined in each specific case on the basis of an estimate by qualified services

¹ See: *Azərbaycanın xarici təcavüzdən zərər çəkmiş ərazilərinin bərpası və yenidən qurulması proqramının texniki-iqtisadi əsaslandırılması*, 1-ci cild (Annotasiya), – Restoration and Reconstruction Agency of the Territories of Azerbaijan, Baku, 1998, pp. 34-35.

and will be compiled in compliance with the indicated technical specifications. Buildings in the first-third damage categories will undergo major overhaul, while those in the fourth category will be fully reconstructed. Overhaul or even reconstruction in their former form of properties in the fifth damage category is economically inadvisable.

To replace the properties in the fifth category, there are plans to build new houses with the minimum necessary residential space, but which structurally allow (and even envision) further extension. In the future, they could presumably be extended by the IDPs themselves, depending on the increase in the size of their families, or simply within the limits that correspond to national sanitary regulations. In other words, new houses should be designed and built in a way that will make it possible to extend them in the future to dimensions that comply with the country's customary standards.

Since resettlement will be voluntary, it is obvious that those residents of the liberated areas whose houses are still more or less suitable for living will return to their places of permanent residence first, though the available information has made it obvious that there are very few such houses in the occupied territories. Even in those cases when housing has not been destroyed and is suitable for temporary residence, it will still need to be cleaned up after standing empty for so long.

The list of residential buildings to be restored will be compiled by the Repatriation Department of the MRPT on the basis of lists drawn up by the local executive offices and municipalities. It is presumed that the restoration of buildings will be carried out as the repatriates return to the region. At this stage, the following priorities can be designated:

- IDPs who have returned to the liberated areas as members of restoration teams, as well as their families, who will presumably be repatriated first
- IDPs occupied in the functioning of life-supporting infrastructures
- Families of the employees of the civil administration and security services (possibly also municipal and socioeconomic service enterprises) who have arrived in the region to live permanently

- IDPs who have been temporarily accommodated in container-type housing
- IDPs who have been accommodated in their own homes
- New families or family members that have emerged or formed during the exile period but who have property rights, rights to inheritance, or other legal claims to residence (including on a registered basis)
- Families of *shekhids*² who have lost their breadwinner and wish to return to the liberated areas, as well as single mothers and invalids

As for resettlement in the liberated areas of people from other regions of the country, this process is not among the priorities examined in this study. It could be carried out at later stages of rehabilitation and financed largely by the migrants themselves.

State support will only be offered to those migrants of this kind who, as craftsmen or tradesmen, will be in high demand for performing restoration, reconstruction, and construction work, particularly in the vital service sphere. In particular, they could be offered free plots of land for building houses or provided with apartments in communal residential buildings. These technicians will also have privileges with respect to the privatization and purchase of apartments in state-owned buildings.

Unfortunately, statistical reports do not contain precise data about the residential properties of the program territory before occupation. Thus, the amount of residential restoration called for must be based on informed estimates.

The amount of residential construction work will depend on the repatriation requirements. Data from 1993 statistical reports indicates that approximately 543,000 people lived in the territories to be liberated prior to the mass exodus of the population. According to official statistics, the population of those who hail from the occupied areas currently amounts to 600,800 people, including 131,500 urban and 469,300 rural residents.

² Shekhid (*here*) – a person who died for his Homeland.

Migrants from other regions of the country should be added to the figure of 520,000 people (including 104,000 urban and 416,000 rural residents), which is defined as the upper limit of the potential number of repatriates. However, it is difficult to accurately estimate their number at this time.

Based on an average family of five, repatriates will need to be offered 104,000 places of residence. To this number we must add the dilapidated and conflict-damaged houses and apartments requiring repair in those regions in which people did not leave their places of residence. This information can only be assembled after a direct inspection has been carried out. According to the statistical report, the average area of a residential unit in the regions to be liberated, calculated according to multiple-occupancy residential buildings located in urban settlements, amounts to 58 sq. m, including 11.6 sq. m of living space per person.

It should be kept in mind that even in urban settlements single-family houses predominated, while in rural settlements essentially all the houses were of a single-family type. Both the total area of a residential unit and the area of living space per person in these buildings were traditionally much higher than for multiple-occupancy buildings.

In keeping with the country's current Housing Code, the minimum amount of living space per person should be 12 sq. m. However, taking the above into account, it is clear that when restoring the residential properties of the liberated areas, we should proceed from a higher figure, even in comparison with the initial parameters.

Considering, first, the current legal sanitary regulations for housing and second, the conceptual orientation toward ensuring that restoration of the residential properties is carried out at a level sufficient to encourage repatriation, it is proposed that the following standards be established:

- restoration or construction of sloping roofs be done with asbestos-free materials,
- the full restoration (or construction to replace those that cannot be restored) of load bearing structures of both single-family houses and multiple-occupancy communal residential buildings,
- the full restoration or rebuilding of the living quarters in houses, including a bedroom for each of the families comprising the larger household,

- building houses for new families,
- restoration of residential properties based on the need to provide each member of the family with living space at a level no lower than the legislatively established sanitary regulations,
- reconstruction of kitchens,
- installation of bathrooms,
- supplying homes with electricity,
- restoration of water supply and heating in multiple-occupancy communal buildings,
- erection of a decorative fence to separate holdings from the street.

Restoration of residential properties will be carried out only with the use of state-of-the-art industrial engineering and construction. Population settlements that suffered the greatest damage offer the greatest potential for landscape planning. An integral part of the new territorial planning will include the development of *standard housing designs* for the families of IDPs. Standard designs will be multivariate depending on the location of the building, its type, the size of the family, and its financial possibilities. It is extremely important that the IDPs themselves have the right to choose a particular standard design.

In urban conditions, it is expedient to restore or build multiple-occupancy 4-5-story residential buildings, the first floors of which can, and usually must be, used as social service facilities. This will allow for rational use of the territory, reduction of the operative construction times, and easier restoration of the water supply, sewage system, and other life-support infrastructures. Such residential buildings can be incorporated more easily into the general settlement plans, as well as designed in greater detail. It is presumed that most of the IDPs who lived in the country's large cities during exile will prefer such apartments to country homes.

In order to ensure temporary residence while restoration work is going on, as well as to rapidly set up settlements for immediate repatriation and for other such purposes, multiple-use pre-fabricated modular accommodations will be used. This housing will be relocated as the main

reconstruction work moves into the interior of the liberated areas. This container-type housing can be delivered from the assembly site or previous location and/or assembled directly at the site from standard elements.

A special feature of pre-fabricated structures is that not only can residential houses be assembled from them, but also facilities to house social services, administrative offices, and production facilities. Within the framework of the upcoming restoration programs in the liberated territories, designs for standard container modules have already been drawn up for a variety of uses including as kindergartens and nurseries, schools, cafeterias, hotel camping sites, offices, and service facilities.

Settlements of container-type housing will be mobile, and so can support the entire range of vital activity, which will make it possible to fully relocate whole settlements to new destinations almost without interrupting the restoration work cycle. They will be used by both the restoration teams, and, temporarily, by the IDPs during the restoration of their homes immediately after the clearance of the liberated territories.

Along with its other advantages (rapid erection, mobility, etc.), pre-fabricated housing is also distinguished by economy. The cost of a module depends on its dimensions and the selection of equipment components, as well as on the finishing materials. But specialists report cost of 40-45% less than for other types of temporary housing.

We must proceed with the understanding that it is the state's responsibility to resolve the housing problem in the liberated areas since it was the state that proved unable to ensure the safety of the citizens of the currently occupied territories and their property. The state should, and will, assume a large part of the cost of restoring residential properties. However, it would be more expedient to provide combined financing of housing construction with the participation of a government agency that acts on behalf of the state, the IDPs themselves, private structures, and international and local donors. In doing so, various combinations of the above are possible.

One of the most preferable alternatives for financing housing construction in the liberated areas is to offer the repatriates privileged mortgage loans. In Azerbaijan, a certain amount of experience has already been gained in mortgage lending, the purpose of which is to bring the population's purchasing power into harmony with the real demands for

housing, and borrow funds from local and foreign banks to finance housing construction.³ These mechanisms, with small changes, will also be used in the liberated areas. These changes include temporary exemption of repatriates from paying interest on mortgage loans or fixing lower interest rates than on average across the country.

In addition, when the rehabilitation work begins, the possibility of offering IDPs special-purpose grants for restoring residential properties will also be studied. Both state resources, as well as funds from local and foreign donors could be the financial sources of such grants.

The main difficulty in providing this kind of support is that if it is offered to all migrant families on an equal basis, it will not yield the expected benefit since the money will be divided up among too many people. Therefore, this aid should only be given to a limited number of families, namely, the most impoverished. Compiling a list of such families is an extremely difficult task since the general level of prosperity of refugees and IDPs is very low, and selection of contenders could arouse serious discontent among them. If the government approves the issuing of building grants as one of the types of state support for repatriates, the choice of candidates should be carried out under conditions of the greatest transparency, and with the participation of official and unofficial community leaders.

Two alternatives for coordinating efforts in housing restoration are offered. For the first, the coordinating state agency will be the Department of Housing Construction, which will presumably be created under the Ministry of Rehabilitation of the Post-Conflict Territory. For the second, a special International Executive Organization-Operator will be created with the participation of representatives of foreign investors and the government, as well as independent experts. This alternative, despite its apparent complexity, might be preferable from the viewpoint of involving foreign donor organizations in housing construction for which the elimination of all corruption is an absolute condition.

It is quite possible that the IMF and foreign donors involved in housing restoration will ask for such an organization-operator to be estab-

³ Since 2005, a specialized Mortgage Fund has been functioning at the Central Bank, created in compliance with the law on mortgage adopted that year.

lished. This condition would entirely suit Azerbaijan since, first, the state itself is interested in eliminating opportunities for corruption and, second, under the supervision of an international operator, housing construction would be carried out more competently and efficiently. Intermediate alternatives are also possible, such as the country's government assuming responsibility for coordination with (on the recommendation of foreign partners) international advisors.

Regardless of which of these alternatives is chosen, the executive agency will coordinate the decisions made with the local civil administration and municipal structures. When the Department of Repatriation provides the list of names of householders, indicating the number of families and their members and, with the cooperation of representatives of the local administration, the list of houses to be restored or built is clarified, the executive agency will carry out a complete technical inspection of the residential properties and draw up design documents and estimates for the entire project.

Housing will be restored on the basis of open tenders. If loans are taken out from the IMF and foreign donor organizations, their terms and requirements must be taken into account when drawing up the set of tender documents.

Work should be divided into the following stages:

1. selecting consulting organizations on a competitive basis and drawing up design specifications and estimates
2. preparing tender documents
3. holding contractual bids
4. drawing up the contract

Regardless of which entity is chosen as the executive agency, the government shall require it to exert efficient and public control over the restoration of residential properties. The process should be absolutely transparent, not least for the IDPs themselves. Any hidden aspect that might lead to social discontent among the repatriates, interfere with their adaptation and, in so doing, lower the efficiency of the rehabilitation work, must be eliminated.

5.2.1. Cost of Residential Properties Restoration

Determining the cost of the restoration of residential properties is one of the most difficult issues in the financial support of rehabilitation of the post-conflict territories. The first problem is the lack of reliable information about the state of the houses and other structures. As a result, all arguments about combined use of major overhaul, reconstruction, and new construction are no more than conceptual. There are reasons to believe that in practice, restoration of residential properties will, in most cases, come down to new construction.

The second problem impeding the estimation of the needed funds is that it is currently extremely difficult to talk about the possible distribution of construction costs among the state, the repatriates themselves, state and private mortgage funds, private companies, and foreign donors. The only acceptable way forward is therefore to determine the total expenditure needed for housing construction without indicating the sources of financing.

The third problem is associated with the housing area designated for the average family or one person. It stands to reason that the repatriates must be provided with living space that is at least on the level of the regulations set forth in the legislation, as noted above. At the same time, housing construction in the post-conflict territory should be oriented toward higher than minimum standards. This is important not only to raise the appeal of repatriation, but also because Azerbaijan as a whole has already moved to a new level in terms of social development. In the context of the rise in standard of living, both achieved and forecasted, the current standards are rapidly becoming obsolete and, in all likelihood, will be re-examined in the next few years. Therefore, in estimating the cost of restoring residential properties, the average standard of living space per person has been set at 18 sq. m.

The average cost of constructional engineering in the pre-crisis period (480 AZN, or \$600 per sq. m) is taken as the basis for the estimates since there is reason to believe that as soon as the world economy recovers from the recession, pre-crisis prices will be restored and will function as the starting post-crisis prices.

Taking into account the indicated allowances, the cost of restoring the residential properties in the program area will amount to 6.9 billion AZN, or approximately \$8.7 billion (see Table 2).

Table 2. Cost of Residential Properties Restoration

Repatriation period (years)	Number of repatriates (thou. people)	Total area of planned new construction (thou. sq. m)	Total cost of housing construction (thou. AZN)	Inflation coefficients	Total with adjustment for inflation (thou. AZN)
1st year	80	1,440	691,200	1.00	691,200
2nd year	100	1,800	864,000	1.20	1,036,800
3rd year	100	1,800	864,000	1.44	1,244,160
4th year	110	1,980	950,400	1.73	1,644,192
5th year	130	2,340	1,123,200	2.07	2,325,024
Total	520	9,360	4,492,800		6 941 376

The figures presented in Table 2 show the main spending on housing construction. In addition, as mentioned above, throughout the rehabilitation work, temporary pre-fabricated housing will also be used, both newly manufactured accommodations and those dismantled in other regions of the country and relocated to the program area. For this reason, the absolute annual amount of spending on pre-fabricated housing will tend to decrease, since as work is completed in the pioneering development regions this housing will be used again at new sites. Thus, the need for newly manufactured units will decrease from year to year.

Pre-fabricated container-type housing will be of different types since it will have different purposes, e.g. temporary housing for the restoration

teams and repatriates, as well as facilities for social purposes. The cost of the different housing units could differ, but this difference will not be substantial. The initial average cost of one temporary housing unit will be around 8,000 AZN or \$10,000. The total spending on these accommodations is shown in Table 3.

Table 3. Spending on Temporary Container-type Housing Units

Repatriation period (years)	Number of new units	Total cost (thou. AZN)	Inflation coefficients	Total with adjustment for inflation (thou. AZN)
1st year	400	3,200	1.00	3,200
2nd year	250	2,000	1.20	2,400
3rd year	200	1,600	1.44	2,304
4th year	150	1,200	1.73	2,076
5th year	100	800	2.07	1,656
Total	1,100	8,800		11,636

Adjusted for inflation, the total spending on housing (permanent and temporary) will be approximately 7 billion AZN, \$8.7 billion, of which expenditures for pre-fabricated housing forms less than 1%.

5.3. Restoration of the Power Supply

The areas to be liberated were previously supplied with power via the country's unified electricity circuit—a ring system of centralized supply. From the energy viewpoint, Azerbaijan is largely self-sufficient in that it fully provides for its own electricity, and even exports it.

But the territories to be liberated have no electricity-generating sources of their own. The energy circuits in this territory were supplied from the Kura cascade of the Shamkir-Yenikand Hydropower Plant and the Mingachevir Azerbaijan State Regional Power Plant by means of Ganja – Agdam, Azerbaijan State Regional Power Plant – Agdam, and Agdam – Imishli high-voltage transmission lines (HVTL 35-330 kW). The electricity transmitted in this way to the Agdam power substation (with a capacity of 330/110 kW) was distributed via HVTL 110 kW. Due to the war, this system, including the Agdam substation, broke down, and more than 17,000 km of electricity-distribution circuits and 2,500 substations were put out of operation or completely destroyed.

Taking into account the sector's pivotal significance as a life-support, as well as its critical importance in carrying out the other restoration work, reconstruction of the power supply system is part of the urgent preliminary restoration work, and is comprised of the following stages:

- 1) Restoration of the power transmission lines to be hooked up to the restored substations at Shukurbeyli, Imishli, and other power supply facilities in the Fizuli and Agdam districts;
- 2) Use of temporary power supply systems, including mobile power stations, for ensuring effective restoration work in the territory of other liberated districts;
- 3) Reconstruction, expansion, and construction of generating capacities, supply circuits, and high-voltage substations in the adjacent territories (for example, the hydropower station built on the Sarsang dam in Nagorno-Karabakh);
- 4) Restoration and connection of power distribution grids for settlements and economic infrastructures.

The final goal of rehabilitation of the power supply system is to assure the uninterrupted supply of electricity to all the population settlements being restored or newly built. Assuming that consumers are guaranteed sufficient and uninterrupted power, a further goal is to reduce the net cost of electricity by lowering the production costs and delivery losses.

The choice of the optimal power supply system, including that for rural settlements, is rather complicated. The rehabilitation of the power supply systems could be carried out using several conceptual models, among which there are two basic ones:

- 1) The restoration of the power supply system that existed before the hostilities began,
- 2) The formation of local power grids based on small and mini hydropower plants created on the basis of the resettlement structure at each stage of development of the post-conflict territories.

In most of the previously developed rehabilitation programs for liberated territories, preference was given to the first model. The main argument in its favor was that a historically-developed settlement system already existed in the region, and it would largely be retained after repatriation, while local power grids need to be created only in those cases when repatriates would be resettled in smaller hamlet-type population settlements.

Regardless of which alternative is chosen, it will be important to determine the need for electricity at each resettlement stage, basing the estimates on population.. When determining the average consumption, the following indices are considered basic:

- consumption standards compensated for from the state budget established by the Cabinet of Ministers of the Azerbaijan Republic in 2003 and amounting to 150 kW/h per refugee a month,
- indices of electricity consumption by the population and economy in the rural areas of Azerbaijan.

Currently, the regional distribution circuits of Azerenergy Open Joint-Stock Company supply the rural areas of Azerbaijan with electricity. According to the data from 2007, this accounts for 58% of total consumption. In other words, in the country's regions power consumption by the population and other entities (production, commercial, and service) correlates to a ratio of 60:40. At the initial stage of rehabilitation, the region's economic development will be extremely low, and it is unlikely

that any large industrial power consumers will appear. Thus, it is presumed that the distribution of electricity between the population and other consumers will deviate from the average national ratio in favor of the first. According to preliminary estimates, this ratio will be 90:10 in the first year of resettlement, 85:15 in the second, 80:20 in the third, 75:25 in the fourth, and 70:30 in the fifth.

The estimated indices of power requirements in the first five years after repatriation begins are given in Table 4.

Table 4. Power and Generating Capacity Requirements

Repatriation period (years)	Size of population (thou. people)	Power requirements (million kW/h)			Generating capacity requirements (MW)
		Population	Economy	Total	
1st year	80	144	16	160	30
2nd year	180	324	57	381	70
3rd year	280	504	126	630	115
4th year	390	702	234	936	170
5th year	520	918	393	1,311	240

These requirements could be met using existing generating capacities. The resettlement of approximately 500,000 people will not lead to an abrupt rise in the maximum load throughout the power system as a whole. There will only be a shift in loads from the central and eastern regions of the country to the western.

Nevertheless, it should be kept in mind that in the past few years, the country's economy has been developing at unprecedented high rates, and it appears that this trend will continue for quite some time. Shortages during periods of peak consumption are already being felt and could

become far worse if new power stations are not build or old ones expanded. Consequently, the demand for electricity in the rehabilitation zone should be covered by developing new facilities s for power generation, preferably in the region itself.

The following allowances were adopted when calculating the need for generating capacities:

- the use coefficient of the installed capacity for new thermal power stations should be no less than 0.7
- power losses during production (use for own needs), transmission, and distribution should be 10%

The indices of generating capacity requirements in the first five years after the beginning of repatriation presented in Table 4 are calculated on the basis of adding the given allowances to the overall power requirements.

The average cost of 1 MW of new generating capacities currently amounts to approximately 1 million AZN (\$1.25 million). Based on this standard, at least 240 million manats (\$300 million) will be needed to build new power stations to cover the requirements of the liberated areas.

The problem could be resolved by the Fizuli Hydropower Plant, now being built, with its capacity of 25 MW, and the proposed Tovuz cascade hydropower plant, with a capacity of 540 MW. Neither the cost of construction nor the time needed for the latter has yet been determined. In addition, there is the old Terter Hydropower Plant, with a capacity of around 20 MW, in the occupied territories, but its current condition will remain unknown until it is inspected following its liberation. Based on this, approximately 200 million AZN, or \$250 million, must be invested in the construction of new capacities.

The supplying of power to the post-conflict districts by means of large power plants will also require large investments in rehabilitation of the transmission and distribution networks. According to the available information, at present only a small part of the electricity grids in Nagorno-Karabakh are being used. In the rest of the region, however, the transmission and distribution facilities with transformer substations have been almost completely destroyed and put out of service, so the data on the power transmission and distribution networks that existed as of 1 January, 1991 are used as the basis for calculations.

The initial estimate of capital investments needed for rehabilitating the transmission and distribution networks was carried out on the basis of the average prices established by 2008. The results of this estimate are given in Table 5.

Table 5. Capital Investments in the Rehabilitation of Power Grids

		Average cost (thou. AZN)	Required investments (thou. AZN)
Substations	Number		2,124,000
330 kW	1	20,000	20,000
110 kW	23	16,000	368,000
35 kW	80	2,000	160,000
6-10/0,4 kW	3 152	500	1,576,000
Grids	Length (km)		179,537
330 kW	151	300	45,300
110 kW	880	85	74,800
35 kW	835	45	37,575
6-10/0,4 kW	21,862	30	21,862
Total			2,303,537

Restoration of the former transmission and distribution networks, as well as construction of the necessary generating capacities, will require approximately 2.5 billion AZN, or \$3.125 billion.

The role of inflation in restoring the power supply for the post-conflict territories will, in all likelihood, not be as high as in other spheres. Due to the relatively high level of technical engineering, as well as to the experience accumulated during the years of independence, the staff of Azerenergy Open Joint-Stock Company is fully capable of carrying out all the planned work in 1.5-2 years. Even if the 2-year upper limit of this period is taken, and it is presumed that restoration of the power system

begins at approximately the same time as repatriation, the final inflation-adjusted cost will be about 2.8 billion AZN, or \$3.4 billion.

The restoration of the old networks is important for the Agdam, Fizuli, and Jabrayil districts. It will not be difficult to hook these districts up to Azerbaijan's unified power system, and the amount of money needed might be within reasonable limits.

The situation in the Zangilan, Qubadli and, particularly, the Lachin and Kalbajar districts is more complicated. These territories form a kind of corridor between the energy systems of Armenia and Nagorno-Karabakh, and it will only be possible to organize a centralized power supply here by means of these energy systems. Building power transmission lines across the Murovdag mountain range from the north, and skirting the territory of Nagorno-Karabakh from the south, would be extremely difficult from the technical point of view. In addition, in terms of cost and benefits, this construction will be unjustifiably expensive and economically unprofitable.

Furthermore, as the region's economy grows it will be possible and economically viable to hook the territorial power grids up to Azerbaijan's unified energy system. At the initial stages of rehabilitation, however, it appears more expedient to develop the energy industry in keeping with the second alternative—building local power networks based on small hydropower plants that are formed in keeping with the resettlement structure. These territories have sufficient hydropower resources. The increase in world energy prices, particularly for petroleum, coke and natural gas, will make it possible to consider anew the development of an alternative energy industry, in particular small hydropower plants, since they can be made competitive.

Careful analyses establish that building small dam-less hydropower plants is the most efficient strategy. The construction of hydropower plants with dams is not expedient for several reasons. In addition to their higher cost, hydropower plants with dams, even small ones, also lead to environmental damage, the flooding of scarce agricultural land, the prevention of fish migrations and hence of their spawning, and the creation of dead zones below the turbines.

Dam-less plants are free of all these shortcomings. Small hydropower plants, especially dam-less ones, are no less efficient than thermal power

stations (particularly those of small capacity), and considering the near-total absence of operating costs, they may even be superior to them.

As for the equipment for small hydropower stations, its importation poses no serious problems. It should also be kept in mind that in developed countries the production of equipment for small hydropower plants is one of the most dynamically growing branches of the economy. Building a set of enterprises for manufacturing this equipment in Azerbaijan, which would be sufficiently effective in itself, could greatly promote the development of the small hydropower industry in the country and raise its efficiency.

Specific measures to rehabilitate the power systems in the liberated areas will be clarified before post-conflict rehabilitation begins. In each case, an additional analysis will be made (with corresponding technical and economic estimates) in order to substantiate the choice of type and capacity of power plants. In the end, this will depend on the power requirements of the new consumers: households and farm holdings, service facilities, industrial enterprises, and municipal services in the towns. The above arguments provide a conceptual basis for rehabilitating the power supply system, while approximate data make it possible to judge the amount of investments needed. In the final analysis, there is a need for a Comprehensive Electric Power Development Program for the region that will be tied in with the country's power engineering development as a whole.

5.4. Restoration of the Water and Sewage Systems

The provision of drinking water all types of settlements is one of the most important aspects of rehabilitation of the liberated areas. It must be among the top priorities of restoration since it should precede the mass repatriation of the population.

A precise evaluation of the current condition of the water supply sources and water transmission lines will be carried out upon completion of the initial analysis of the post-conflict territories. Taking into account the nature of the destruction, it may be that restoration of both the sources and communal water supply systems either be impossible or will require a long time.

It is presumed that in such cases alternative complexes will be required. Partial restoration and/or reconstruction of the available systems or, in most cases, the creation of entirely new local water supply systems will be necessary. In all cases, preference will go to underground or spring sources of water supply that do not require large amounts of spending on water purification. In doing so, increased attention will be given to sanitary-and-epidemiological control of sources and distribution networks, particularly at the initial stage of repatriation.

Communal water supply networks in villages will be restored to service street water-intake pumps with a service area of 100 m. The water requirements for irrigating farms will then be taken into account. In urban and central settlements, supplying water to restored multiple-occupancy buildings, emergency social service facilities, and the main industrial zones will be among the primary tasks.

There are plans to:

- restore and bore new artesian well and lay water pipelines and distribution networks to street pumps in the settlements of pioneering development,
- reconstruct and build main intake facilities, pumping stations, tank farms, and main water supply lines,
- restore a full water supply complex in central settlements and, when necessary, hook them up to the main water pipes,
- reconstruct existing sewage systems in urban settlements,
- restore the other components of water supply networks in the area.

After the condition of the liberated water supply system has been evaluated, feasibility studies for building and restoring main and local pipelines will be drawn up.

In many cases, the task will not be limited to laying pipelines. Surface or underground traditional irrigation channels or *qanats*,¹ which were the main source of water in many of the population settlements in the occupied areas, will also be required. Azerbaijan already has experience in restoring previous qanats using state-of-the-art technology.

The restoration of the water supply is closely related to other elements of the life-support infrastructure, in particular the power supply. It is also one of the initial pre-requisites for reviving economic activity in the liberated territories, since it is needed to irrigate farm land.

Since there is no other alternative, and due to its high priority, the water supply must be restored en masse – work to lay new main and distribution lines and to restore qanats should be carried out simultaneously. Laying the main lines and the main work on the local water pipes will be completed during the first three pre-arranged rehabilitation periods. Direct hookup to lines is one of the tasks relating to restoration of residential properties and economic, social, and administrative facilities.

The total water requirements are calculated on the basis of an average water consumption of 200 l/day per person. In urban settlements, the requirements of the industrial and municipal sector are also taken into account. At present, water consumption in the country's regions by the population, and by industry and the service sphere correlates, on average, to a ratio of 60:40. As in the case of the power supply, during the rehabilitation period this ratio will be different, with human beings accounting for 90% of total consumption. Thus, calculations of the financial costs will mainly cover household water consumption.

The cost of restoring and reconstructing the water supply infrastructure in district centers and towns is estimated in the same way as in the feasibility studies carried out by international consultants for other cities of the country.

In particular, *Kreditanstalt für Wiederaufbau (KfW)*, a German government financial agency, drew up draft documentation for

¹ Qanats are constructed as a series of well-like vertical shafts, connected by gently sloping tunnels. They tap into subterranean water in a manner that efficiently delivers large quantities of water to human settlements and for irrigation without the need for pumping.

reconstructing the water supply in the town of Sheki, which is situated in the northwest of the country and has similar natural and landscape conditions to the program area. The capital cost for implementing the project was approximately 18 million Euros. Therefore, 12% of the estimated drinking water requirements was met by means of the current water supply system. If the system were absent, the needed total capital investments would be around 20 million AZN (\$25 million). Operating expenses were estimated in the range of 600,000-750,000 Euros a year, depending on which of the alternatives is ultimately used. The project assumed a 30% increase in the urban population in 2005-2030, which is comparable to the demographic growth expected in the post-conflict area. In addition, it must be remembered that the longer pipes, tank farms, pumping stations, and other infrastructure facilities required for rural areas make the supply of water there more expensive.

The various calculation and estimates for urban and rural populations suggest that the total inflation-adjusted capital investment needed to restore the water supply (without qanats) will be some 726.6 million AZN, or \$908.25 million.

As for qanats, restoration or reconstruction of an average qanat for a distance of 2.5 km from the water-intake point, and with a productive capacity of 200-250 l/sec, will require approximately 800,000 AZN (\$1 million). Currently, building a new qanat with similar parameters will cost 1.5 million AZN (approximately \$1.9 million). Building a qanat with a lower productive capacity (100-120 l/sec.) requires significantly smaller financial investments e.g., 500,000 AZN or \$625,000.

A precise evaluation of the financial parameters for restoring the qanat system will be carried out after a preliminary investigation of its state. It is possible that many previously active qanats will have to be rebuilt. Based on the available data, the average cost of one qanat (restoration or construction) is equal to 1 million AZN (\$1.25 million). It is estimated that throughout the rehabilitation period, no less than 100 qanats will be restored or built, which will form the nucleus of the water supply for approximately 15% of the rural population settlements.

Serious attention will be given to restoring sewage systems in the population settlements, primarily in the towns. This is particularly signifi-

cant given that the occupied territories have immense recreation potential, and over time could, and should, become one of Azerbaijan's most lucrative tourist regions. The problem is unique in that it must be resolved essentially from scratch, since even in Soviet times there were no sewage systems that met modern standards in this region.

Calculations of the capital costs necessary for developing sewer systems will be based on the feasibility report on reconstructing the sewage system in the town of Sheki, which was compiled by *KfW* experts in cooperation with Azeri specialists. Thus, the total amount of capital costs (with adjustment for inflation) for restoring the sewage systems in the post-conflict territories is estimated at 494 million AZN, or \$617 million.

The total capital investment in the restoration and reconstruction of the water supply and sewage systems in the post-conflict territories will therefore amount to 1,380 million AZN, or \$1,725 million (see Table 6).

Table 6. Capital Costs on Restoration of the Water Supply and Sewage System

Repatriation period (years)	Drinking water supply (thou. AZN)	Restoration of qanats (thou. AZN)	Restoration of sewage systems (thou. AZN)	Total cost (thou. AZN)	Inflation coefficients	Total with adjustment for inflation (thou. AZN)
1st year	80,000	-	-	80,000	1.00	80,000
2nd year	100,000	15,000	25,000	140,000	1.20	168,000
3rd year	140,000	35,000	100,000	275,000	1.44	396,000
4th year	140,000	35,000	125,000	300,000	1.73	519,000
5th year	40,000	15,000	50,000	105,000	2.07	217,350
Total	500,000	100,000	300,000	900,000		1,380,350

The recovery of industrial and household waste is a separate issue in the rehabilitation of the post-conflict territories. Prior to occupation, waste recovery in the region amounted to piling it on the ground and then burning it. Unfortunately, this practice, which is extremely detrimental to the environment, continues in most of the cities and regions of Azerbaijan. In recent years, however, the government has begun examining and evaluating a variety of projects for creating incinerators and waste-recycling plants. During the preparatory stage, the possibility of building several small waste-recycling plants in the region will be given special attention. These enterprises, though they will be created with direct state support, will be commercial in nature, and so the cost of their construction and operation will not be included in the spending on rehabilitation of the post-conflict territories.

5.5. Gas Supply

In compliance with the classification adopted in this document, the gas supply for businesses and households is not among the top priorities of rehabilitation of the liberated territories since delay in its restoration will not hinder repatriation or the initial revival of economic activity. It is presumed that work in this sphere will begin only during the third period of post-conflict rehabilitation.

Nevertheless, from the perspective of the long-term interests of the region's socioeconomic development, gasification is of immense importance. It is particularly significant in that it could play a key role in the economic (and, indirectly, in the political) reintegration of the highland and lowland parts of Karabakh. Azerbaijan is rich in natural gas fields and is actively producing and delivering gas to world markets. The country has quite enough of these resources to supply the whole of Karabakh with gas, including that part which will primarily be populated with citizens of Armenian origin.

It is quite probable that after Nagorno-Karabakh's status has been resolved politically, the question of exporting Azeri gas to Armenia will become pertinent. Gasification of the post-conflict area could greatly simplify such an undertaking.

The restoration of the gas supply system will require laying a large number of new gas pipelines since many population settlements in the occupied territories were not gasified during Soviet times. As for the previous gas pipelines and infrastructure facilities, they are probably no longer useable. On the whole, the question of gas supply to the post-conflict territories will boil down to building the relevant circuits for supplying it to the consumers.

Considering environmental and other factors, including the above-mentioned recreation possibilities of the region, it is envisioned that in the end, the liberated territories will be fully gasified. The gas supply system and plan as a whole, including the main and local gas pipeline networks, will be drawn up by the country's gas service industry. These plans will be carried out in compliance with the adopted resettlement system and in the order in which IDPs are to be relocated to their places of permanent residence.

Spending on gasification of the post-conflict territories has been estimated on the basis of financial and economic parameters of similar projects implemented in other regions of Azerbaijan. Two groups of tasks have been examined separately.

The first group includes the tasks relating to laying a main gas pipeline. With an overall length of 200 km, the total cost of its construction would amount to approximately 90 million AZN (\$112.5 million) without taking account of inflation, that is, in prices directly preceding the global crisis.

The construction of local gas pipelines, gas-distribution stations, and other infrastructure facilities belongs to the second group of tasks. According to preliminary estimates, approximately 300 million AZN or \$375 million will need to be spent on these purposes. This sum also includes the cost of providing all customers with gas meters (see Table 7).

Table 7. Direct State Spending on Restoration of the Gas Supply

Repatriation period (years)	Main line (thou. AZN)	Local lines for 100,000 customers (thou. AZN)	Total cost of gas supply (thou. AZN)	Inflation coefficients	Total with adjustment for inflation (thou. AZN)
3rd year	40,000	120,000	160,000	1.44	230,400
4th year	30,000	100,000	130,000	1.73	224,900
5th year	20,000	80,000	100,000	2.07	207,000
Total	90,000	300,000	390,000		662,300

According to these data, the total state spending on gas supply of the post-conflict territories will amount to 662.3 million AZN or \$827.88 adjusted for inflation. This amount includes operating and system management expenses during the first two years of operation. i.e. the 3rd and 4th years of the repatriation period.

6. RESTORATION OF INFRASTRUCTURE

6.1. Restoration of the Civil Administration Infrastructure

As previously mentioned, the civil administrative offices of the occupied districts were not disbanded but continued to function in population settlements with the highest density of IDPs. All the same, restoration of their activity in the liberated areas will not be simply a matter of relocation, but will also require a new, more creative approach to the rehabilitation effort prompted by the dimensions and unique features of the problems that the local administrations will have to solve.

The local government and self-administration authorities will need to participate actively in all the rehabilitation cycles, including organizing the work of the first restoration teams (the pioneering development detachments). The authorities' performance of their prescribed functions is not only an undeniable right of the population assured by the constitution, but one of the basic principles of a democratic state. However, during the rehabilitation period, one of the most important functions of the civil administration offices in the post-conflict districts will be direct participation in organizing repatriation and re-naturalization of IDPs and restoring the infrastructure, vital service systems, and the economic and social facilities.

The civil administrative authorities in each district include the local executive power (the supreme authority in the district, the head of which is appointed by the country's president), urban and rural municipalities, the district court, the district department of the Ministry of National Security, the district prosecutor's office, and the district police department.

At the initial stage of the rehabilitation effort, the civil administrations will be situated in the restoration support centers. An analysis will be carried out to determine the feasibility of restoring former buildings and facilities. If these structures do not require major repair work, they may be used temporarily. Otherwise, pre-fabricated accommodations will be used. The construction and accommodation of contemporary buildings for the local administration authorities is a task to be completed in the later parts of the rehabilitation plan, which will be dealt with during the second pre-arranged period of post-conflict rehabilitation.

This approach will apply to all the local authorities, including local branches of the Ministry of Internal Affairs and National Security, as well as prosecutor's offices and courts.

We assume that the civil administrations will immediately be provided with means of communication and service lines, as well as with special transportation. Plans to provide these service lines are examined in detail below.

When designing new buildings for the local executive powers of the liberated districts it must be noted that their total area will be larger than buildings in other cities and areas of the country that serve the same purpose. This is necessary because, first, during the rehabilitation period there will be more staff in the executive offices of the districts being restored than in other areas with similar territorial and demographic profiles and, second, these buildings can be used to accommodate some of the special agencies and international organizations temporarily present in the region, as well as local organizations that still do not have centers of operation of their own.

According to the current plan, standard buildings for the local administration will have five floors, each of which will be approximately 432 sq. m (24 m by 18 m along the perimeter). At average pre-crisis prices (750 AZN or \$938 per square meter), the construction of such buildings, along with installation of service lines and equipment in communal areas, will cost approximately 1,600,000 manats (\$2 million) per building. Another 100,000 manats (\$125,000) is needed to purchase the necessary furniture, communication resources, and service lines. Given these considerations, the construction and equipping of seven buildings for the local authorities in seven liberated districts would cost approximately 12

million AZN (\$15 million). Since the erection of administrative buildings for the local authorities is planned during the second year of mass repatriation, this sum, with adjustment for inflation, will rise to 14.4 million AZN (\$18.75 million).

This study is based on the fact that district, as well as rural and township self-administration offices, despite the important place they occupy in democratic development, will not begin operating with full powers until after the main rehabilitation work in the liberated territories and most of the repatriation has been completed.

This is motivated by the fact that while active restoration work is going on, the authorities' actions and goals will have to be targeted as much as possible. If their scope is too wide, it will create obstacles to the rehabilitation effort. Of the two forms of civil administration – executive power and the municipalities – the former corresponds most directly to the tasks of the rehabilitation period, both in terms of legislatively specific powers and in terms of the tradition of regional administration that has developed in the country. Therefore, infrastructure support of the self-government administrations can be put off until later.

A compulsory task of rehabilitation in the post-conflict districts is the restoration not only of physical facilities but also of full-fledged sociopolitical and cultural life. For this reason, infrastructural support of the local authorities, even if not among the top priorities, must be included in the State Program.

It is proposed that this task be accomplished during the third year of repatriation, first in the Fizuli, Agdam, and Jabrayil districts, and then in all the others. In each of them, a separate building will be constructed for the district municipalities, which will coordinate with the activities of all the other local authorities in the population settlements of the area, and provide them with consultation services. The rural and township municipalities will be allotted their own rooms in schools and community centers and will not require significant additional spending on infrastructure.

Each district municipality will be accommodated in a 5-6-room building of approximately 150 sq. m with subsidiary facilities which, if entirely rebuilt, will cost approximately 130,000 manats (\$163,000). This

sum also includes the cost of furniture and equipment. A total of 910,000 AZN or \$1,140,000 (not adjusted for inflation) will be spent on infrastructure support of the local self-administration structures.

The other civil administration offices, such as district branches of the Ministry of National Security and Ministry of Internal Affairs, district courts and prosecutor's offices, as well as the Ministry of Emergencies and border troops, should begin functioning at approximately the same time as the local executive powers. These administrations will require relatively small accommodations, but they will need to be separate. According to a preliminary estimate, their total space requirements amount to just over 60% of the requirements of the local authorities.

The provision of accommodations for these administrations in each of the post-conflict districts at current prices will cost approximately 1 million manats (\$8.75 million for all the post-conflict districts). Infrastructure facilities for these will be built during the second and third years of the rehabilitation period.

Given this information, the total cost of restoring the infrastructure of the civil administration structures (without providing transportation) amounts to more than 25 million manats, or \$31.64 million (see Table 8), adjusted for inflation.

It is particularly important that the local administrative offices be staffed with qualified personnel who have been specifically prepared for working in the liberated territories. The organization of the courses they would need to take is an integral part of the rehabilitation plan and should include training not only in organizational and technical issues, but also in the social and psychological aspects of work in the post-conflict districts.

It is important to determine the optimal time for carrying out these training sessions. Some have suggested they should be organized immediately, long before the political decisions on the conflict settlement have been reached. The sooner this work with personnel begins, the more likely it is that civil administrators will acquire the skills necessary for working in emergency rehabilitation conditions.

Table 8. Cost of Restoration of the Local Civil Administration Infrastructure

Repatriation period (years)	Infrastructure of the local executive power offices (thou. AZN)	Infrastructure of the self-government offices (thou. AZN)	Infrastructure of other local power offices (thou. AZN)	Total spending on the restoration of the civil administration infrastructure (thou. AZN)	Inflation coefficients	Total with adjustment for inflation (thou. AZN)
2nd year	12,000		3,000	15,000	1.20	18,000
3rd year		390	4,000	4,390	1.44	6,322
4th year		260		260	1.73	450
5th year		260		260	2.07	538
Total	12,000	910	7,000	19,910		25,310

Additionally, the personnel participating in the training sessions should be motivated, and the best motivation in this case is the prospect of imminent application of the knowledge and skills they have received. However, the constant repetition of courses and seminars, along with postponements of the liberation of the occupied territories, could threaten to turn this instruction into a hollow formality.

Considering these circumstances, the training of personnel would yield better results if it were carried out immediately before the rehabilitation effort begins. Therefore, the government should start this campaign 2-4 months before the corresponding political agreements are reached.

Government administrations, as well as non-governmental organizations with the necessary staff and knowledge should collaborate with the civil administrators. Preparations for this campaign, including determining the composition of the government and non-governmental administrations that will design and conduct the training programs, should begin at the preparatory stage.

The cost of preliminary training of personnel for the local civil administration offices in the post-conflict districts will be examined below (see *6.4.4. Professional Training Centers*).

6.2. Restoration of Transport Infrastructure

Unfortunately, there exists no detailed information about the state of the transportation infrastructure in the occupied districts. We must proceed from the assumption that the transportation network is in a state of total degradation, which is an inevitable result of occupation, both due to the hostilities (direct destruction from shelling and mines, as well as from the damage inflicted by heavy machinery traveling the roads) and to its long period of disuse. In addition, during the period of occupation, the remaining transportation infrastructure in the occupied territories has become nearly obsolete.

The only exceptions might be the Lachin corridor which, according to available information, was rebuilt by the Armenians, along with the restored street network in settlements in the mountainous part of Karabakh. The decision about whether these sections need to be restored will be made after an inspection of their technical state has been carried out upon their return to Azerbaijan's jurisdiction.

6.2.1. Roads

Two hypotheses comprise the methodological foundation for the restoration of roads. First, previously existing roads will be examined in order to determine their optimal routes, from both the economic and social standpoints. The only restriction in doing so will be the fact that most population settlements will be preserved as such (the results of sociological polls show that potential repatriates not only want to return to the region, but to their original homes). Nevertheless, an analysis of the

optimal conditions of routes might promote the construction of new roads to replace the old ones.

Second, even if the previous routes are deemed acceptable at this stage, the cost of restoring the old roads will be compared with the cost of building new ones. This comparative analysis is necessary since many of the previous roads were badly damaged during the hostilities and were later subject to neglect. It stands to reason that such comparisons can only be made after gaining access to the territory.

The restoration of highway services between cities and other populated settlements will most likely be of higher priority than such other tasks of transportation rehabilitation as the restoration of rail and air services.

Since the final goals of road rehabilitation will not be drafted until after liberation, we will have to proceed based on the data of the pre-occupation period in order to determine the approximate scope of the work. According to the data of the State Road Police, roads in the occupied territories have the following characteristics:

- Total length of the roads – 4,012 km, of which 3,433 km are paved
- Inclusion of 1,065 km of national roads, of which 897 km are paved
- 110 bridges totaling 3.2 km in length, 77 of which are on national roads.¹

The stage-by-stage resolution of the Nagorno-Karabakh problem presumes that at the first stage, when only the territories adjacent to the former Nagorno-Karabakh Autonomous Region are liberated, road access to some areas of the region, particularly to the Kalbajar district, will be difficult since prior to occupation, the roads leading to these districts passed through the Nagorno-Karabakh Autonomous Region. We reiterate the recommendation raised earlier that in order to ensure direct, reliable, and uninterrupted transportation service in the Kalbajar district, a tunnel

¹ [<http://www.dyp.gov.az/?/as/content/145>].

will have to be built from the north (the Murovdag Pass) along the Khanlar-Kalbajar highway.¹

Specialists have already drawn up a project for the tunnel in the Murovdag Pass. It will most likely be approximately 3 km in length, and cost approximately \$100 million.

But this tunnel should not be regarded simply as a temporary means of linking Kalbajar with the rest of the country. In actual fact, it is of vital importance for optimizing all the country's roads since in the future Nagorno-Karabakh's restored transportation infrastructure will be fully incorporated into the nationwide transport network.

At the initial stage of the rehabilitation effort, however, the temporary restoration of certain roads will also be required, mainly for the movement of freight. The quality of restoration will be secondary in this case; most important will be the quick restoration of the roads to a condition suitable for transporting construction materials. In some cases, it may be sufficient to lay un-surfaced or gravel roads.

Carrying out large-scale road rehabilitation will require material and resource support. Asphalt and cement factories will most likely be built in the region. Specific decisions regarding the factories' capacities and their location will be made after an on-site inspection of the roads and a precise assessment of their condition and the volume of the work required. A preliminary analysis shows that in each of the post-conflict districts at least two cement factories will have to be built. Azerbaijan has its own raw materials for these factories, as well as much experience in the construction and operation of such enterprises.

In addition, the country has accumulated significant experience in road construction, in which several state and private companies are professionally engaged, often with the participation of foreign companies and experts. This experience will play an important role in the long-term rehabilitation of the post-conflict territories since the existence of a high-

¹ See: *İşğaldan azad olunmuş ərazilərin "Böyük Bərpa" proqramı*, – Azərbaycan Respublikası İşğaldan azad olunmuş ərazilərin bərpası və yenidənqurulması üzrə Dövlət Komissiyası, Bakı, 2005.

quality road network is one of the necessary conditions for opening tourism in the region, which is one of the potential fields for overall development (see: *7.2. Branches of Comparative Advantages in the Post-Conflict Territories*).

The rebuilt roads should meet the standards currently used for the country's international roads which perform transit functions on the so-called Silk Road.

Many roadside infrastructure facilities, particularly those related to food services (cafes, restaurants, tea houses, etc.), are commercially attractive, and can be created in a short time by the private sector without governmental involvement. All the state administration needs to do is to make sure that these infrastructure facilities follow the previously approved general plan.

Infrastructure facilities that fall under the state's jurisdiction will also be built (see: *4.3. Securing Borders*). It should be kept in mind that some of these facilities will be temporary, and only operate until the final political decisions on conflict settlement are reached, while others will continue to operate beyond the initial stages.

Temporary facilities include check points on the administrative border between Nagorno-Karabakh and the rest of Azerbaijan's territory. After final settlement of the conflict, internal control concerning Azeri citizens wishing to cross into and out of the territory of Nagorno-Karabakh will be lifted and control will be enforced only on interstate borders.

Another sphere of the government's responsibility will be the building of permanent State Road Police posts. Building these posts is not a technically difficult or expensive undertaking, but the Ministry of Internal Affairs will have to supply the completed posts with means of transportation, communication, and provisioning.

The environmental impact of the construction and reconstruction of roads will be closely examined. In particular, in order to decrease air pollution by exhaust fumes and lower the level of noise pollution, there are plans to create green belts along the main roads, which will also add to the aesthetic appeal of the area. The drainage of surface water will be arranged in a way that prevents erosion of roadside land, which will be extensively

used for farming throughout the area. In addition, special wide-diameter water pipes will be laid near the roads to provide running water.

An important aspect of building and rebuilding roads is prioritizing the work that needs to be done. It is presumed that road services will be restored in four stages:

- *First stage* – The restoration of highways that connect the territories and support centers with the country's transportation infrastructure (Horadiz-Fizuli, Horadiz-Minjivan, Minjivan-Zangilan, Shukurbeyli-Jabrayil, Khanlar-Kalbajar). In so doing, the section of road in the third technical category, Khanlar-Kalbajar, in the Khanlar-Murovdag section, will immediately be included in the reconstruction process.
- *Second stage* – Local roads that connect the support centers of the districts with each other (Tartar-Istisu, Kalbajar-Istisu, Kalbajar-Bashlibel, Nadirkhanli-Damirchidash, Akhmedbeyli-Fizuli, Fizuli-Jabrayil, and Agdam-Agdara-Tartar).
- *Third stage* – Restoration of the street network of the rebuilt towns.
- *Fourth stage* – Restoration of road links with the Nakhchivan Autonomous Republic through Armenian territory (transit roads), and the relocation of supply lines for the construction of the Khudaferin reservoir (it is presumed that another 50 km of roads will be built for this purpose)

The restoration of roads in the liberated territories is one of the most expensive components of post-conflict rehabilitation. Estimations for the cost of this work were made based on three assumptions:

- 1) All the roads that existed in the region before its occupation will be restored. The figures do not extend to laying new roads along previously non-existent routes.
- 2) Pre-crisis average market prices typical of road projects being implemented in Azerbaijan were used as the initial

figures – 1 km of highway costs 2 million AZN, or \$2.5 million, 1 km of ordinary road costs 960,000 AZN or \$1.2 million, 1 km of bridge costs 20 million AZN, or \$25 million, and 1 km of tunnel costs 24 million AZN, or \$30 million.

- 3) Work to restore roads in the first through second years and the third through fifth years has been divided equally. Until an on-site inspection can be completed, it is extremely difficult to judge just how its distribution will be carried out over time. Technical preparatory work will be carried out in the first two years, while the expensive part of road building will be completed in subsequent years.

The results of the estimates are presented in Table 9.

Table 9. Cost of Road Restoration

Repatriation period (years)	Highways (total length – 1,065 km; million AZN)	Other roads (total length – 2,947 km; million AZN)	Bridges (110, total length – 3.2 km; million AZN)	Tunnels (2, total length – 4.5 km; million AZN)	Total spending on roads (million AZN)	Inflation coefficients	Total with adjustment for inflation (million AZN)
1st year	300	500	12	20	832	1.00	832.0
2nd year	300	500	12	20	832	1.20	998.4
3rd year	510	610	14	23	1,157	1.44	1,666.1
4th year	510	610	13	23	1,156	1.73	1,999.9
5th year	510	610	13	22	1,155	2.07	2,390.1
Total	2,130	2,830	64	108	5,132		7,886.5

Given this information, 7.89 billion AZN (\$9.86 billion) will presumably be spent on road restoration.

6.2.2. Railroads

The Azeri section of the railroad that used to connect Nakhchivan to the rest of Azerbaijan's territory will most likely be fully restored. This section of railroad is a total of 150 km in length, but 50 km of this stretch will have to be re-laid due to the fact that part of the railroad will have to be relocated in order to serve the required outlet for the Khudaferin reservoir.

Restoration of railroads will be carried out at a new technological level. At present, Azerbaijan is actively discussing projects with foreign companies for the complete reconstruction of all the country's railroads in order to modernize them and open them to express rail communication. The railroad infrastructure of the liberated territories could become a pilot project for this initiative.

The cost of railroad restoration in the region was estimated based on of the feasibility study of the Baku-Tbilisi-Kars railroad project, which is currently at the implementation stage. The ratio of spending on the restoration of existing railroads versus the construction of new railroads is 1:5, or 600,000 and 3 million AZN per kilometer, respectively. Total spending on the restoration of a 100 km section and laying of 50 km of new railroad will amount to around 210 million AZN (\$262.5 million). These figures will significantly increase with adjustments for inflation, since the restoration of railroads is among the tasks planned for implementation in the second through fourth years. With equal distribution of the expenses, the final amount to be spent on restoring railroads will reach 305.9 million manats, or \$382.4 million.

Compared to highways, the restoration of rail transportation requires more state resource. In essence, all the railroad infrastructure facilities are the state's responsibility, although some of them, particularly food services at stations, could later be developed on a commercial basis. Railway depots and large stations, special subdivisions for cargo operations, shunting depots, siding lines, etc. will need to be restored or built. There is also the possibility that specialized enterprises will be built in the post-conflict

territories for servicing railroads and other elements of transportation infrastructure.

Before the conflict, another seven depots (Agbend, Minjivan, Hakari, Qumlag, Soltanli, Shukurbeyli, and Marjanli) were situated between the currently operating railway station of Horadiz (in the Fizuli district) and the Armenian border. It is presumed that two of these stations, Soltanli (in the Jabrayil district) and Minjivan (in the Zangilan district), will be upgraded and expanded. At pre-crisis prices, around 5 million manats (\$6.25 million) would be required for each project. At the other depots, relatively small stations of approximately 1,000 sq. m will be built. Potential spending on each of them, without adjustment for inflation, is estimated at 1 million AZN.

At the Minjivan station, there are plans to build a specialized enterprise of 3,000 sq. m. for servicing railways and transport. This service and repair enterprise will be in great demand after the restoration of rail communication along the Minjivan-Zangilan and Zangilan-Qafan (Armenia) routes is completed. Its construction and equipping will require approximately 4 million AZN (\$5 million) without adjustments for inflation.

The state investments required for creating other infrastructure systems (siding lines of around 4 km in length, three rail crossings near the Bartaz, Khurama, and Khalafli settlements, and four handling terminals at the Minjivan, Soltanli, Hakari, Marjanli, and other depots) are estimated at current prices at 20 million manats (\$25 million). Spending on the construction of handling terminals (a total of 12 million AZN), siding lines (7.8 million AZN), and rail crossings (200,000 AZN) is provisionally divided into three approximately equal parts. This project is expected to take place during the second, third, and fourth years of rehabilitation. The investment requirements calculated on this basis are shown below (see Table 10).

As the data in Table 10 show, the restoration of railroads in the liberated territories around Nagorno-Karabakh will cost 249 million AZN (\$311.25 million) or, adjusted for inflation, 370.5 million AZN (\$463.1 million). The restoration or construction of rail lines will account for most of the spending (84%), while infrastructure facilities will account for the rest (16%).

Table 10. Technical and Financial Parameters of Railroad Restoration

Technical Specifications									
Total length		150 km							
Section to be restored		100 km							
Section to be built		50 km							
Number of lines		One							
Power		Electricity							
Maximum speed		120 km/h							
Distance between rails		1.435 m							
Spending									
Repatriation period (years)	Sections of railroad to be restored (million AZN)	Sections of railroad to be built anew (million AZN)	Large railway stations (million AZN)	Railway depots (million AZN)	Service enterprises (million AZN)	Other infrastructure facilities (million AZN)	Total spending (million AZN)	Inflation coefficients	Total spending with adjustment for inflation (million AZN)
1st year								1.00	
2nd year	20.0	50.0				7.0	77.0	1.20	92.40
3rd year	20.0	50.0		2.0		7.0	79.0	1.44	113.76
4th year	20.0	50.0	5.0	2.0		6.0	83.0	1.73	143.59
5th year			5.0	1.0	4.0		10.0	2.07	20.70
Total	60.0	150.0	10.0	5.0	4.0	20.0	249.0		370.45

There are many further practical questions relating to the restoration of rail transport. The feasibility study of the railroads and related infrastructure will focus on determining the degree of priority, the main technical and economic specifications, the precise time of construction, or restoration, the equipping of each of the facilities, and the workforce and management requirements.

We should keep in mind that the socioeconomic benefit from transportation rehabilitation in the post-conflict zones may not be fully realized until all the transport lines throughout the entire Central Caucasian region are in operation.

In this respect opening railroad communication between Nagorno-Karabakh and the other post-conflict territories, as well as between Azerbaijan and Armenia, will play a significant role. Railroad communication between Nagorno-Karabakh and the other territories will require restoring the Agdam-Khankandi section, and communication between Azerbaijan and Armenia will require a 40 km Armenian section of the Minjivan-Ordubad rail route. Azerbaijan could assume most of the spending on restoring the Armenian section of this railroad (preliminary cost of the work amounts to 20 million AZN, or \$25 million). This would make it possible not only to remove the almost 20-year transport blockade of Nakhchivan, but also to restore rail communication along the entire Baku-Sadarak route, which would have a positive effect on expanding trade and economic relations between the entire Central Caucasus region and Turkey and Iran.

The opening of rail and transport links between Azerbaijan and Armenia, as well as between Azerbaijan and its Nagorno-Karabakh autonomous region, will only be possible after the necessary political agreements have been reached.

Border control services for the railroad lines will not be required until rail communication is restored between Azerbaijan and Nagorno-Karabakh, as well as between Azerbaijan and Armenia.

6.2.3. Air Transport

Before occupation, there were airports in two towns of the region (Agdam and Fizuli). These airports can no longer be used, not only due to

destruction but also because they are now obsolete. The restoration of these airports or the construction of new ones in all the central population settlements of the liberated territories is inexpedient.

However, there are plans to build a modern airport in one of the large towns of the region (probably Agdam) which would be similar to those put into operation in recent years in some of the country's other cities. Agdam is in an advantageous geographic location for a regional airport. This will also allow for rendering additional support to one of the top priorities — the rehabilitation of town-planning in the Shusha-Khankandi-Agdam region, mentioned above (see *2.5. New Structure of the Resettlement System*).

Flights to Agdam could be carried out using French ATR airplanes. Five of these planes are currently being used in Azerbaijan, and the state-owned Azerbaijani Airlines (AZAL) is in the process of acquiring a few more of them. In the future, it will also be possible to accommodate international flights from the Agdam airport. This is particularly important since tourism, particularly international tourism, is among the region's potentially major enterprises.

In terms of its technical capabilities, the Agdam airport will be identical to the Lenkaran and Zakatala airports. The cost of upgrading the Agdam airport to the level of the one in Lenkaran may amount to approximately 40 million AZN (\$50 million).

Acknowledging this, the restoration of the Agdam airport is not one of the primary targets of the rehabilitation effort as a whole. This work will presumably be carried out in the fourth and fifth years of repatriation. With equal distribution of expenditures, and taking into account inflation coefficients, total investments in the Agdam airport would amount to 76 million manat (\$95 million).

Restoration of helicopter service will be more expedient in the beginning since it will not require the time-consuming construction of expensive infrastructure. Additionally, it can be arranged immediately after the liberation of the occupied districts. Due to their limited technical capabilities and relative expense, helicopters cannot be used for mass repatriation purposes, nor can they later be used as the main means of transportation linking the liberated districts with the rest of the country.

Nevertheless, they will be used for the urgent transport of pioneering development detachments and of civil administrators, as well as in emergency situations.

Helicopters will play a significant role in the restoration of the Kalbajar district, as the absence of land transportation will be the main impediment to mass repatriation. Until the above-mentioned tunnel through the Murovdag mountain range is opened, there will be no other transportation within the Kalbajar district, and aviation will be the only means of linking this district with the other liberated areas and the rest of the country. Helicopters will therefore be used to transport repatriates and their belongings (in the minimum amounts necessary at first) to this district.

Restoration of helicopter service will require the building of helipads and specific infrastructure facilities. Approximately 10 million AZN will be spent on this in the first and second years of the repatriation period. Keeping in mind inflation, the expenditures will amount to approximately 11 million AZN (\$13.75 million).

Thus, the total cost of restoring air service with the post-conflict territories will amount to approximately 87 million AZN (\$108.75 million).

6.3. Restoration of the Telecommunication Network

The restoration of the telecommunication infrastructure seeks to integrate fully the population of the liberated districts into the country's unified information and communication systems. Restoration will be aimed at meeting all the requirements necessary for independent functioning of the vital service systems. This calls for the restoration of five main aspects of the information and telecommunication technology:

- urban and rural telephones, including intercity telephone service;
- mobile telephone service;
- radio and television retransmission;
- local television and radio broadcasting;
- postal and telegraph services.

In order to ensure the efficient organization of the rehabilitation effort and effective oversight, as well as to create acceptable conditions for repatriation and reintegration of the population, telecommunications will be restored in the following order:

- 1) provision of mobile phone service for the restoration teams (pioneering development detachments),
- 2) restoration of radio transmission,
- 3) restoration of the postal and telegraph service,
- 4) restoration of a stable telephone service,
- 5) provision of reliable television retransmission,
- 6) establishment of local television and radio broadcasting.

6.3.1. Telephone Service

The restoration of this sector envisages the complete reconstruction of the network that previously functioned in the territories to be liberated. Reanimation of old telephone and fax systems will be unwise since they are not only physically unfit for use, but have also become obsolete.

Old systems and technologies must be completely replaced with state-of-the-art devices that meet international standards. The telephone communication system should be rebuilt using new digital technology, which has already been successfully introduced during the modernization of most automatic telephone stations (ATS) in Azerbaijan as a whole. The telephone stations to be set up in district centers should perform the functions of rural automatic telephone stations, as well as provide inter-city service.

All the most modern installation methods will be used when restoring the sector, including satellite technology, CDMA technology, EATS, installation of radio telephones, and laying of local cables.

Azerbaijan is the only post-Soviet country that has telephone service in every population settlement, including those in inaccessible regions, or where only two or three families live (for example, settlements for seasonal workers). In other CIS countries, even those with advanced telephone

service, a population settlement must number at least 50 families before telephones are installed.

In order to establish service in each of the seven district centers, a two-story building with a total area of 500 sq. m will be built in each and provided with modern equipment. These buildings will also house postal and telegraph services. Each of these automatic telephone stations will eventually employ 50 people.

The trunk network will most likely be maintained by means of the country's own space satellites, which Azerbaijan is planning to launch into orbit in the next few years. For these reasons, the laying of mainline cables is not included in the financial estimates on telephone installations. The preliminary economic specifications for building and fitting out telephone stations are given below (see Table 11).

Table 11. Cost Specifications of District Automatic Telephone Stations

	Cost (thou. AZN)
Administrative building (30 rooms, 500 sq. m, provided with communication means and equipment for communal premises)	300.0
Telecommunication equipment	150.0
Laying local cables	100.0
Office furniture (50 sets)	30.0
Personal computers (50) and other office equipment	40.0
Total	620.0

The building and fitting out of one district ATS will cost 620,000 AZN (\$775,000). Throughout the entire program area, this are of expense will amount to 4.34 million AZN, or a little more than \$5.4 million. Since

building and fitting out automatic telephone stations will not be carried out until the third year of repatriation, inflation could raise the costs (when equally distributed by year) to 7.58 million AZN (\$9.48 million).

In order to speed up the installation of telephone service in the liberated districts, along with general electronic automatic telephone stations, it would be wise to use the Code Division Multiple Access (CDMA) system. CDMA is one of the most advanced forms of communication, and it takes less time to put into operation than other systems. The services offered by the CDMA system are more expensive than urban electronic automatic telephone stations but are cheaper than GSM mobile communication services. Additionally, CDMA also has the advantage of being installed and operated by private companies. At present, two private CDMA operators function within the country. They have an active expansion policy and appear willing to expand into new markets.

According to a decision by the Ministry of Telecommunications and Information Technology, a new operator may be invited to the liberated areas, or the Ministry may wish to establish a CDMA system in the liberated areas itself, and then offer it for privatization. This alternative is preferable, since it could accelerate the process and would also allow the Ministry to reap promotional profits by turning the operator into a joint-stock company.

6.3.2. Mobile Telephone Service

Mobile telephone service is one of the most advanced development spheres in information and telecommunication technology in Azerbaijan. With respect to the number of mobile telephone users per 100 people, Azerbaijan outstrips other Central Caucasus states. Three mobile telephone service operators, which have more than 4 million customers (over 50% of the adult population), currently function in the country.

By the time the first phase of rehabilitation of the post-conflict territories ends (five years after this effort begins), the number of mobile phone users in this region could reach the same level, and amount to approximately 250,000 people. Providing them with a high-quality mobile phone service is a purely technical problem that will be resolved on a commercial basis by the operators functioning in the country. As in the

case with CDMA, a new operator may be invited to create a cellular transmission network in the liberated regions.

One way or another, the establishment of a mobile telephone service will be a commercial project and will not require additional government spending. Moreover, its development will undergo an additional boost when Azerbaijan launches its own satellites into orbit.

A mobile telephone service has already been installed in most of the territory of Nagorno-Karabakh (within the administrative borders of the former Nagorno-Karabakh Autonomous Region). Compared to the districts adjacent to Nagorno-Karabakh where establishing a cellular transmission network will be a routine technical and commercial undertaking, in Nagorno-Karabakh itself, confirmation of Azerbaijan's "telecommunication sovereignty" will inevitably be a political issue, one that is likely to cause problems and will require a flexible approach.

Azerbaijan should not, under any circumstances, hinder the activity of local companies operating in the mobile telecommunication market in Nagorno-Karabakh once the final political decisions on its status have been reached. Telecommunication operators currently functioning in the country, or new ones that can offer consumers more competitive conditions, should all be welcomed in the region. If necessary, the state could offer these companies tax breaks or other benefits in order to encourage competition over both price and quality.

6.3.3. Television and Radio Broadcasting

At present, Azerbaijan is making the transition to digital television and radio broadcasting, which will be completed by 2015. This reform will be supported by the above-mentioned launching of the country's own satellites. Special retransmission stations will have to be established in the region in order to provide the liberated territories with national television and radio broadcasting, which will be operating in the country by that time. Satellite television broadcasting stations will also have to be built in the region to ensure the high quality of television programs.

At the first stage of rehabilitation (in the first and second years), there are plans to establish three retransmission stations in the liberated regions, the cost of which, in addition to the building of transmission towers, is

estimated preliminarily at 3 million manats (\$3.75 million). Adjusted for inflation, this figure could rise to 3.3 million AZN (\$4.13 million). The country's private television and radio companies could also use these towers for establishing their own, private retransmission stations.

There are plans to establish a state or regional television and radio broadcasting company (RTRC) in one of the towns of the region, which, in addition to offering the usual programming, will also provide information on the progress of the repatriation and rehabilitation effort. The RTRC will be responsible for providing the IDPs with all the information they need, particularly about available jobs, and also for mounting public awareness campaigns.

The town of Fizuli is the preferable site for establishing the RTRC, particularly since decontamination of the territory and priority measures to restore vital services for the first wave of IDPs will begin in the Fizuli district. However, establishment of the RTRC, including building and staffing its infrastructure, will take at least several months.

A separate building with a total area of approximately 1,000 sq. m will be built for the RTRC and will include general studios, a computer-equipped broadcast studio for informational programs, several editing studios, sound recording studios, and other special facilities, as well as office space. More than half of the entire building should consist of sound-proof rooms, which will make its construction more expensive since it requires the use of special materials. The company will be supplied with state-of-the-art digital equipment, including transmitting antennae and other broadcasting equipment, editing tables, stationary and mobile filming equipment, etc. The RTRC will also be equipped with the necessary means of transportation.

Staffing the company will not pose a particular problem since it will be staffed by repatriated journalists who are currently working for national and private mass media organizations. An express poll confirmed that most of these journalists are determined to return to the liberated districts, and believe a job at the regional television company near their homes to be the best way to fulfill their personal aspirations .

Creating the RTRC, without operating expenses, will require the following expenditures (see Table 12).

Table 12. Cost of Establishing a Regional Television and Radio Company

	Cost <i>(thou. AZN)</i>
Construction of the building (1,000 sq. m, 2 stories)	900
Technical equipment	1,200
Fitting out and design of permanent film studios	160
Means of transportation (including transport equipped for mobile filming)	200
Transmission equipment	400
Other expenditures	200
Total	3,060

The RTRC will be built during the second and third years of repatriation. With equal distribution of expenditures by year, the investments in its construction, adjusted for inflation, will amount to approximately 4 million AZN (\$5 million).

Radio programs will be broadcast on ultra-short wave band (FM radio). Such stations can be created on a commercial basis in nearly all of the liberated districts.

On the whole, the restoration of television and radio broadcasting in the post-conflict areas will cost 6.06 million AZN (\$7.58 million), at pre-crisis prices, and 7.34 million AZN (\$9.17 million), adjusted for inflation.

6.3.4. Computerization

Computerization of the liberated districts is an important and extremely expensive part of post-conflict rehabilitation, and it is also a component of the rehabilitation of other spheres, in particular the

restoration of the civil administration, education and public health. For this reason, this study does not make a separate estimate of the funds required for computerization.

State structures will purchase office equipment on the basis of tenders in which both local and foreign companies will participate. Most of the personal computers delivered to the region (particularly those intended for general education schools or for other non-technical purposes) will be assembled locally.

State organizations and institutions will be provided with computers first. We should note that the civilian and governmental administrative offices still functioning in the areas to be liberated already have a certain amount of office equipment, most of which is suitable for further use and will be brought into the region.

Most of this office equipment will have to be updated. The estimated total cost of personal computers and other office equipment necessary for updating the system (keeping in mind not only the above-mentioned civil administrative offices, but also other state authorities such as district public health, education, and pension fund departments, as well as district and regional branches of ministries and departments of economics), will amount to approximately 1 million AZN.

The government will place particular priority on providing secondary education institutions with computers. Examination of the age structure of the population of potential repatriates makes it possible to ascertain that approximately 100,000 of them will be within the range of 5-17 years of age. This population's right to a high-quality education, which is impossible without information technology, is guaranteed by the Constitution and is therefore the state's responsibility.

An estimate of personal computer requirements based on one personal computer for every ten secondary school pupils shows that secondary schools in the liberated districts will require at least 10,000 computers. This figure will grow as repatriation is postponed, due to the natural increase in the number of people in this age group, as well as to expected further increases in computer use nationally. As the estimates show, the total spending on providing educational institutions with perso-

nal computers and other office equipment (including Internet adapters and ADSL modems) will exceed 10 million manats.

The government will undertake decisive measures to ensure that the percentage of computer and Internet users in the liberated areas is no lower than the average throughout the country. In order to provide repatriates with personal computers special programs will be offered, including consumer loans, free computers for IDPs who enroll in higher learning institutions, etc.

A registry will be kept in order to ensure that the same user does not receive two or more computers under such state programs. Non-governmental organizations with the necessary experience in this sphere will oversee these programs.

6.3.5. The Postal Service

A separate goal in the planning of reconstruction should be the restoration of the postal service. The infrastructure of the postal and telegraph service will be restored at the previously existing stations in all settlements. Planning should proceed on the assumption that restoring buildings and supplying them with the necessary equipment will progress at the same level as in areas that have already been liberated.

In most cases, the rehabilitation of the postal service will require building and equipping new buildings in the district centers and in other large settlements. New, modern post offices will be built in the district centers, and branch post offices will be established in the settlements and large villages, while relatively small villages will have more modest postal agencies. Postal agencies in the smaller villages can render services to two or more settlements. The post offices will presumably be located close to telephone sub-stations.

The costs connected with the restoration of the postal service are displayed in Table 13.

The restoration of the postal service will be one of the first steps in the rehabilitation of every populated settlement, so this work will be carried out during the first three years of the rehabilitation period. With equal distribution of costs by year, investments in the restoration of the

postal service will amount to approximately 21.6 million AZN (\$27 million), adjusted for inflation.

Table 13. Cost of Restoring the Postal Service

	Amount	Cost of one unit (thou. AZN)	Total for this item (thou. AZN)
1	2	3	4
Construction of buildings for post offices (each with a total area of 200 sq. m and comprising 15 rooms)	7	100,000	700.00
Office furniture (per 25 employees at each post office)	175 sets	300	52.50
Personal computers (25 at each post office)	175	650	113.75
Other technical equipment for post offices (fax machines, modems, Internet adapters, printers, etc.)	7 sets	1,600	11.20
Construction of buildings for branch post offices (each with a total area of 120 sq. m and comprising 5 rooms)	50	48,000	2,400.00
Office furniture (per 6 employees in each branch post office)	300 sets	200	60.00
Personal computers (6 at each branch post office)	300	650	195.00
Other technical equipment for branch post offices (fax machines, modems, Internet adapters, printers, etc.).	50 sets	1,000	50.0

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Construction of postal agencies (each with an area of 70 sq. m and comprising 3 rooms)	500	24,500	12,250.00
Office furniture (per 4 employees at each postal agency)	2,000 sets	150	300.0
Personal computers (4 per postal agency)	2,000	650	1,300.0
Other technical equipment for postal agencies	500 sets	800	400.0
Total	≈ 17,830,000 AZN (\$22,287,000)		

Along with its traditional functions, the postal service will also provide financial services, particularly in the beginning. This primarily applies to paying utility and other bills, making money transfers, receiving pensions, benefits, and other such financial assistance. In Azerbaijan some of these functions are currently performed successfully by branch post offices, and the experience they have accumulated will greatly simplify the restoration.

In compliance with the generally accepted regulations in the country, the population in the liberated areas will receive their benefits at first through bank tellers at branch post offices. Communication between the tellers and the processing centers at the central bank offices, from which they should receive long-distance instructions, will draw on the latest technology, e.g., satellite communication or fiber-optic telecommunication cables. Banks will set up separate tellers on a commercial basis so as to reduce costs.

* * *

A total of 28.23 million manats (\$35.29 million) will be spent on restoring the telecommunications network or, factoring in inflation, 36.55 million AZN (\$45.69 million). Restoration of the postal service will account for most of these expenditures (60%), while the rest of the funds will be used in approximately equal shares for restoring television and radio broadcasting and telephone service. The mobile telephone service will not require direct state investments since it will be established by private companies.

6.4. Restoration of Social Facilities

Most of the social facilities will have to be rebuilt. The political aspect of the problem is extremely important here: the social facilities (medical institutions, cultural and sports facilities, schools, and children's institutions) rebuilt in the districts outside Nagorno-Karabakh will be more technologically advanced than similar institutions within Nagorno-Karabakh itself.

However, Azerbaijan must create equal opportunities for all of its citizens, regardless of their ethnic affiliation. The construction and rebuilding of social facilities in Nagorno-Karabakh must also be included in the comprehensive restoration plan for all of the post-conflict territories. For example, after the conflict is fully settled and Nagorno-Karabakh's long-term status determined, both Azeri and Armenian schools in Nagorno-Karabakh will be completely rebuilt.

6.4.1. Health Care

Before the hostilities, a fairly extensive system of medical services functioned in the region. In the districts to be liberated, there were 620 public health institutions employing more than 8,000 people capable of rendering services to more than 15,000 patients at a time. The main branches of this system consisted of both general and specialized in-patient medical institutions (80 institutions with beds for 6,000 patients), 55 rural district hospitals with 1,500 beds, 372 rural medical dispensaries and obstetrical stations that could manage 6,600 visitations, 8 first-aid stations, 31 pharmacies, and 8 health inspection stations.

The need for specific medical services should be determined on the basis of a medical assessment of IDPs. Over the past few years, a number of these studies have been organized by such international organizations as the World Bank, UNICEF, USAID, WHO, etc. In addition to these medical studies, organizations have conducted a series of sociological polls in temporary relocation centers such as IDP camps, mobile settlements, and trailer parks, in order to gain more information about the IDPs need for specialized medical services.

An analysis of the results of these polls shows that living in abnormal conditions for an extended period of time and the experience of socioeconomic difficulties have given rise to dangerous forms of chronic disease in large number of the population. The most widespread among them are respiratory diseases, anemia, ischemia, perinatal pathology, diarrhea, malaria, rheumatism and, tuberculosis. On the whole, the level of morbidity among IDPs with respect to these diseases is several times higher than among the local population in the districts where they have relocated, even though the medical services received by the two groups are almost identical.

A comparison of these data confirms that living conditions play a significant role in people's health. Therefore, creating normal living conditions for repatriates in the post-conflict districts for should be a main objective for improving their health and preventing an increase in illnesses. Many facilities of the previous health care system should be restored, thereby ensuring that they are incorporated into the new system. The new system, of course, will differ in quality from the former, both in the level of infrastructure and technical refurbishing, and in its internal organization.

The new health care system in the liberated territories will most likely be based on a combination of regional diagnostic and treatment centers (DTC), district hospitals, and small outpatient clinics, which will be established in most settlements. Azerbaijan already has experience in building and operating DTCs equipped with the latest medical technology that fully meets world standards. The construction of several diagnostic and treatment centers in Ganja, Lenkaran, Qazakh, Siazan, and other cities was included in the State Program of Socioeconomic Development of Azerbaijan's Regions for 2005-2008. Building and supplying one such DTC

with the latest medical equipment will cost approximately 8-10 million manats (\$10-12 million).

In 2008, construction of a diagnostic and treatment center began in the Fizuli district, which has been partially liberated from occupation. This DTC is being built in the village of Boyuk Bahmanli using funds provided by the State Oil Company. In addition to the population of the Fizuli district, the center will serve residents of the Beilagan and Khojavend districts, as well as the IDPs from the Jabrayil district who have been temporarily dislocated in this area. Putting the Fizuli DTC into operation will greatly simplify the organization of medical services for repatriates, particularly at the beginning of redevelopment in the region, though it is not an integral part of the effort that is the focus of this study.

As the estimates show, the Fizuli DTC will not be able to fully meet the medical needs of all repatriates in the liberated areas. Therefore, it would be wise to consider building another two diagnostic and treatment centers – in the Agdam and Zangilan districts. In order to raise the quality of medical services, each of the three diagnostic and treatment centers being planned will have one main branch of specialization, while also retaining their general diagnostic functions. The Ministry of Public Health will define for each its area of specialization before the rehabilitation effort begins, keeping in mind the repatriates' likely needs for various types of medical services.

The diagnostic and treatment center in Agdam will probably be built during the third year of the rehabilitation effort, and in Zangilan during the fifth. The investments required for building and equipping the Agdam and Zangilan DTCs, adjusted for inflation, are much higher than the current amounts, and differ significantly from each other. In the first case, costs are estimated at approximately 13 million, and in the second at 18.6 million AZN (\$16.2 and 23.3 million, respectively).

The second branch of the medical system will consist of central (district) and specialized hospitals. Central hospitals (with an average of 200 beds each) will be built in all seven of the district centers. Chief physicians of the central (regional) hospitals will head healthcare services in their districts. The existence of a diagnostic and treatment center in the district does not obviate the need to build a central hospital there. In Agdam, Fizuli, and Jabrayil, central hospitals will be built at the first stage

of the rehabilitation effort (during the first, second, and third years of the repatriation period respectively,) in Qubadli and Kalbajar only during the fourth year, and in Zangilan and Lachin during the fifth year.

In large towns such as Agdam and Fizuli, maternity hospitals will function independently from the central hospitals, whereas in the others they will be part of a larger institution, with maternity wards to be established in the central hospitals. Independent maternity hospitals will be created in the first and second years after mass repatriation, while maternity wards will appear with the construction of the hospitals in which they will be located.

The same principle will also be applied to children's hospitals. However, independent children's hospitals, unlike maternity hospitals, will be built in the fourth and fifth years of the initial rehabilitation period.

Since there are many people among the civilian population of the occupied areas who were seriously injured during the hostilities or later, when Armenian forces violated the cease-fire, specialized invalid rehabilitation centers will be created at two of the central hospitals, presumably in Agdam and Zangilan districts. These centers will not be built at the same time as the central district hospitals, but some time after they have gone into operation, probably in the fourth year of the rehabilitation period.

On the eve of repatriation, the need for tuberculosis dispensaries with in-patient treatment will be examined separately. Given the high prevalence of this dangerous disease among the IDPs, it is very likely that five or six such dispensaries will have to be built in the liberated territories. If this need is confirmed by the subsequent investigations, tuberculosis dispensaries will be built during the third year of repatriation (probably two dispensaries a year).

A regional dermatovenerologic clinic will be built in one of the geographically central districts (probably Jabrayil) in the third year of the rehabilitation period, while in the others, dermatovenerologic wards will be included in the central hospitals or combined with tuberculosis dispensaries.

In order to maintain a high standard of medical services in the post-conflict districts, it would be wise to forego the establishment of separate

eye hospitals in the region. Instead, there are plans to create regional branches of the Z.Alieva Scientific Research Institute of Eye Diseases, probably in the Agdam district (during the third year), and later in the Kalbajar district (during the fifth year). This practice has already been applied successfully in such regions of the country as Massalli.

The third branch of the health care system will be comprised of central district polyclinics established in all the district centers and providing the population with the same medical services as in other regions of the country. They will function independently (in Agdam and Fizuli), or at central hospitals (in Jabrayil, Zangilan, Qubadli, Lachin, and Kalbajar). Children's polyclinics will be established on the same principle.

The fourth branch will consist of small outpatient clinics and medical and obstetrical stations, which will be set up in nearly all of the rehabilitated population centers. The vaccination of the population against epidemic diseases will be one of the most important functions of these stations. Several people will be employed at each such facility, including one or two physicians.

A total of 734 rural settlements are located in seven of Azerbaijan's occupied districts. According to national statistics, fewer than 500 people live in 43% of these rural settlements. A simple extrapolation of this proportion to the post-conflict territories indicates that it will not be necessary to set up rural outpatient clinics and medical and obstetrical stations in 316 of the rural settlements in the liberated districts. As for the other 418 settlements, if we again examine the national statistics, the population exceeds 3,000 in only 36 of them, and so rural outpatient clinics will be created there.

Medical and obstetrical stations will be set up in the other 382 settlements, where the population ranges between 500 and 3,000 people. It is not planned to Construct separate buildings for them, at least at the initial stage of the rehabilitation. It is presumed that the repaired and restored old facilities will be used to accommodate medical and obstetrical stations, possibly on the first floors of buildings that are used for other purposes.

Both rural outpatient clinics and medical and obstetrical stations can be classified not only as infrastructure but also as important vital services.

As such, they should function from the very beginning of rehabilitation. The establishment of approximately 55-60 percent of all rural outpatient and medical and obstetrical stations is planned for the first two years after the beginning of mass repatriation, with the same number to be established during the third, fourth, and fifth years.

The fifth branch of the health care system will consist of first-aid stations, which are to be set up at all the central hospitals, as well as in relatively large settlements. In both cases, the construction of separate buildings for first-aid stations is planned. Such buildings will include garages for the ambulances. First-aid stations will be distributed throughout the liberated areas in such a way that no settlement is located more than a 20-30-minute drive from one. It is presumed that a total of eight first-aid stations will be set up in the region.

Finally, the sixth branch of the healthcare system will focus on health inspection stations, the number of which will eventually amount to seven. The schedule for their construction and equipping will be the same as for the central district hospitals.

Pharmacies constitute a separate component of the healthcare system. With the exception of those pharmacies to be established at the diagnostic and treatment centers and district hospitals, all the others will be private commercial establishments and are therefore not a focus of this study. The same applies to specialized dental clinics, which have already been privatized in most regions of the country. It is presumed that they will also open as private undertakings in the liberated districts.

The efficient functioning of the health care system in the post-conflict districts will require the training of highly qualified specialists. Most of the personnel working for the medical institutions will be recruited from IDPs returning to the liberated districts. Able-bodied repatriates who were employed in health care before their forced displacement but who did not work in their field of specialization while in exile, will have to take advanced remedial courses under the supervision of local and foreign experts and obtain the relevant certification. The Ministry of Public Health will organize these courses in advance.

Just as in the general hospitals and polyclinics, DTC personnel will also have to take special training courses (most likely at other functioning

diagnostic and treatment centers) in order to familiarize themselves with the latest equipment and techniques. Some of the staff from these centers could then be sent to the liberated districts.

Foreign specialists may also be invited for short periods of two to three weeks to work and provide trainings. Cooperation between local and foreign physicians is currently widely practiced by both state and private clinics in the country. In addition to their main responsibilities, visiting specialists will also help the IDP medics, particularly young doctors, to increase their skills in a kind of on-the-job training.

Not including operating expenses, which in this case comprise a very large sum, the cost of restoring the health care facilities will be as follows (see Table 14).

Table 14. Capital Costs on Restoration of the Health Care System

	Amount	Cost of unit (thou. AZN)	Total cost (thou. AZN)	Cost with adjustment for inflation (thou. AZN)
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
Building and fitting out diagnostic and treatment centers in Agdam and Zangilan	2	9,000	18,000	31,590
Central (district) hospitals – total	7	6,200	43,400	69,688
<i>Including:</i>				

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>Constructing buildings (each with 4 stories and a total area of 6,000 sq. m) and landscaping (1 hectare of fenced-in area)</i>	7	4,500	31,500	50,580
<i>Specialized medical equipment</i>	7 sets	1,000	7,000	11,240
<i>Office equipment</i>	7 sets	120	840	1,349
<i>Initial supply of medicines and medication</i>	7 sets	500	3,500	5,620
<i>Transportation</i>	7 sets	80	560	899
Children's hospitals—total	2	3,025	6,050	11,495
<i>Including:</i>				
<i>Constructing buildings (each with a total area of 2,500 sq. m) and landscaping (1 hectare of fenced-in area)</i>	2	1,875	3,750	7,125
<i>Specialized medical equipment</i>	2 sets	600	1,200	2,280
<i>Office equipment</i>	2 sets	100	200	380
<i>Initial supply of medicines and medication</i>	2 sets	400	800	1,520
<i>Transportation</i>	2 sets	50	100	190
Maternity hospitals—total	7		3,050	3,886
<i>Including:</i>				

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>At central district hospitals (providing wards with specialized equipment and medication)</i>	<i>5</i>	<i>150</i>	<i>750</i>	<i>1,356</i>
<i>Independent</i>	<i>2</i>	<i>1,150</i>	<i>2,300</i>	<i>2,530</i>
<i>Including:</i>				
<i>Constructing buildings (each with a total area of 1,200 sq. m) and landscaping (1 hectare of fenced-in area)</i>	<i>2</i>	<i>900</i>	<i>1,800</i>	<i>1,980</i>
<i>Specialized medical equipment</i>	<i>2 sets</i>	<i>100</i>	<i>200</i>	<i>220</i>
<i>Office equipment</i>	<i>2 sets</i>	<i>50</i>	<i>100</i>	<i>110</i>
<i>Initial supply of medicines and medication</i>	<i>2 sets</i>	<i>100</i>	<i>200</i>	<i>220</i>
Central (district) polyclinics— total	7		3,750	5,010
<i>Including:</i>				
<i>At central district hospitals (providing departments with specialized equipment and medication)</i>	<i>5</i>	<i>250</i>	<i>1,250</i>	<i>2,260</i>
<i>Independent</i>	<i>2</i>	<i>1,250</i>	<i>2,500</i>	<i>2,750</i>
<i>Including:</i>				

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>Constructing buildings (each with a total area of 1,200 sq. m) and landscaping (1 hectare of fenced-in area)</i>	<i>2</i>	<i>900</i>	<i>1,800</i>	<i>1,980</i>
<i>Specialized medical equipment</i>	<i>2 sets</i>	<i>250</i>	<i>500</i>	<i>550</i>
<i>Office equipment</i>	<i>2 sets</i>	<i>50</i>	<i>100</i>	<i>110</i>
<i>Initial supply of medicines and medication</i>	<i>2 sets</i>	<i>50</i>	<i>100</i>	<i>110</i>
Children's polyclinics—total	7		2,010	2,565
<i>At central district hospitals (providing departments with specialized equipment and medication)</i>	<i>5</i>	<i>100</i>	<i>500</i>	<i>904</i>
<i>Independent</i>	<i>2</i>	<i>755</i>	<i>1,510</i>	<i>1,661</i>
<i>Including:</i>				
<i>Constructing buildings (each with a total area of 700 sq. m) and landscaping</i>	<i>2</i>	<i>525</i>	<i>1,050</i>	<i>1,155</i>
<i>Specialized medical equipment</i>	<i>2 sets</i>	<i>150</i>	<i>300</i>	<i>330</i>
<i>Office equipment</i>	<i>2 sets</i>	<i>30</i>	<i>60</i>	<i>66</i>
<i>Initial supply of medicines and medication</i>	<i>2 sets</i>	<i>50</i>	<i>100</i>	<i>110</i>

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
Tuberculosis dispensaries— total	6	675	4,050	7,074
<i>Including:</i>				
<i>Constructing buildings (each with a total area of 700 sq. m) and landscaping</i>	6	525	3,150	5,502
<i>Specialized medical equipment</i>	6 sets	70	420	734
<i>Office equipment</i>	6 sets	30	180	314
<i>Initial supply of medicines and medication</i>	6 sets	50	300	524
District health inspection centers—total	7	570	3,990	6,407
<i>Including:</i>				
<i>Constructing buildings (each with a total area of 500 sq. m) and landscaping</i>	7	375	2,625	4,215
<i>Specialized medical equipment</i>	7 sets	100	700	1,124
<i>Office equipment</i>	7 sets	25	175	281
<i>Initial supply of medicines and medication</i>	7 sets	70	490	787
Regional dermatovenerologic clinics—total	1	600	600	864
<i>Including:</i>				
<i>Constructing a building with a total area of 500 sq. m</i>	1	375	375	540

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>Specialized medical equipment</i>	<i>1 set</i>	<i>150</i>	<i>150</i>	<i>216</i>
<i>Office equipment</i>	<i>1 set</i>	<i>25</i>	<i>25</i>	<i>36</i>
<i>Initial supply of medicines and medications</i>	<i>1 set</i>	<i>50</i>	<i>50</i>	<i>72</i>
<hr/>				
Regional branches of Scientific Research Institute of Eye Diseases—total	2	950	1,900	3,335
<i>Including:</i>				
<i>Constructing buildings (each with a total area of 500 sq. m) and landscaping</i>	<i>2</i>	<i>375</i>	<i>750</i>	<i>1,316</i>
<i>Specialized medical equipment</i>	<i>2 sets</i>	<i>500</i>	<i>1,000</i>	<i>1,755</i>
<i>Office equipment</i>	<i>2 sets</i>	<i>25</i>	<i>50</i>	<i>89</i>
<i>Initial supply of medicines and medication</i>	<i>2 sets</i>	<i>50</i>	<i>100</i>	<i>175</i>
<hr/>				
First-aid stations—total	8	245	1,960	2,715
<i>Including:</i>				
<i>Constructing buildings (each with a total area of 250 sq. m, including garage) and landscaping</i>	<i>8</i>	<i>125</i>	<i>1,000</i>	<i>1,385</i>
<i>Specialized medical equipment</i>	<i>8 sets</i>	<i>10</i>	<i>80</i>	<i>111</i>
<i>Ambulances (an average of 4 vehicles each)</i>	<i>8 sets</i>	<i>70</i>	<i>560</i>	<i>775</i>

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>Office equipment</i>	<i>8 sets</i>	<i>20</i>	<i>160</i>	<i>222</i>
<i>Initial supply of medicines and medication</i>	<i>8 sets</i>	<i>20</i>	<i>160</i>	<i>222</i>
Invalid rehabilitation centers—total	2	8,050	16,100	27,853
<i>Including:</i>				
<i>Constructing buildings (each with a total area of 10,000 sq. m) and landscaping</i>	<i>2</i>	<i>7,500</i>	<i>15,000</i>	<i>25,950</i>
<i>Specialized medical equipment</i>	<i>2 sets</i>	<i>300</i>	<i>600</i>	<i>1,038</i>
<i>Furniture</i>	<i>2 sets</i>	<i>200</i>	<i>400</i>	<i>692</i>
<i>Initial supply of medicines and medication</i>	<i>2 sets</i>	<i>50</i>	<i>100</i>	<i>173</i>
Rural out-patient clinics—total	36	365	13,140	17,783
<i>Including:</i>				
<i>Constructing buildings (each with a total area of 400 sq. m) and landscaping</i>	<i>36</i>	<i>300</i>	<i>10,800</i>	<i>14,616</i>
<i>Specialized medical equipment</i>	<i>36 sets</i>	<i>20</i>	<i>720</i>	<i>974</i>
<i>Office equipment</i>	<i>36 sets</i>	<i>20</i>	<i>720</i>	<i>974</i>
<i>Transportation</i>	<i>36</i>	<i>15</i>	<i>540</i>	<i>731</i>
<i>Initial supply of medicines and medication</i>	<i>36 sets</i>	<i>10</i>	<i>360</i>	<i>488</i>

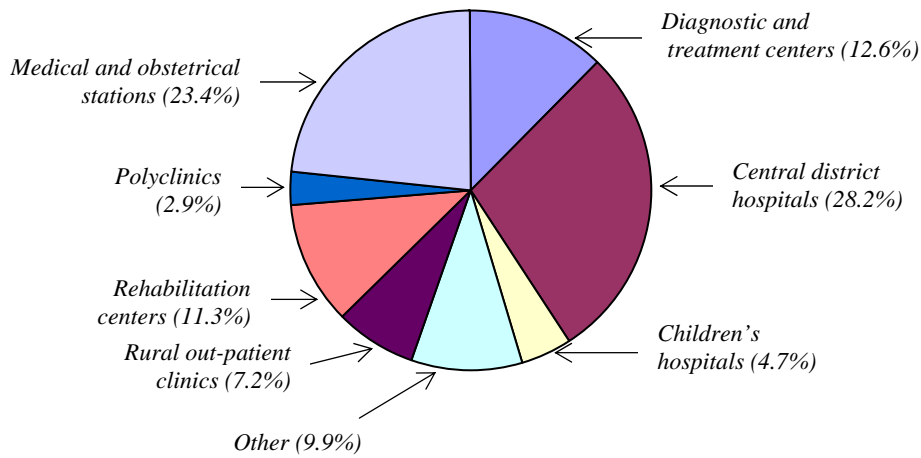
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
Medical and obstetrical stations	382	113	43,166	57,865
<i>Including:</i>				
<i>Repair and adaptation of facilities (each with a total area of 200-250 sq. m)</i>	<i>382</i>	<i>75</i>	<i>28,650</i>	<i>38,406</i>
<i>Specialized medical equipment</i>	<i>382 sets</i>	<i>15</i>	<i>5,730</i>	<i>7,681</i>
<i>Office equipment</i>	<i>382 sets</i>	<i>15</i>	<i>5,730</i>	<i>7,681</i>
<i>Initial supply of medicines and medication</i>	<i>382 sets</i>	<i>8</i>	<i>3,056</i>	<i>4,097</i>
		<i>Total</i>	<i>161,166</i>	<i>248,130</i>

It should be kept in mind that the estimate of capital costs for the restoration of health care facilities includes only the cost of the medicines and medication with which the medical teams will be supplied with at the very beginning. However, the bulk of these expenses will recur annually. Taking into account the corresponding estimate update, expenditures on medicines and medication throughout the entire first stage of rehabilitation could reach 12 million AZN.

With adjustment for inflation, approximately 260 million AZN (\$325 million) will be spent on restoring healthcare facilities. Expenditures for the construction of central (district) hospitals, medical and obstetrical stations, and diagnostic and treatment centers constitute the largest share of the costs (see Diagram 2).

As already noted, the districts being rehabilitated can, and in some cases should, become a testing ground for new methods and processes which, if successful, could then be applied elsewhere in the country. The development of a medical record system using electronic cards might be one such innovation that could be tested in the liberated areas.

Diagram 2. Structure of Costs on the Restoration of Health Care



In keeping with this innovation, every repatriate will be registered in the health care system and receive a Smartcard. These cards carry all the patient's medical information and records, which can be accessed from a single district healthcare information center. As early as in 2006, the Ministry of Public Health has started the implementation of two such systems in the country – Electronic Health Card and Medical Examination Card – and efforts in this direction are currently progressing.

6.4.2. Education

Before occupation, the school and preschool system in the relevant districts consisted of more than 800 institutions, and accommodated more than 120,000 children and pupils. It included 226 kindergartens and nurseries for more than 11,100 children, 575 general education schools at which more than 105,600 pupils studied, as well as 12 professional vocational and secondary special educational establishments for 4,400 students.

The restoration of the education system (specifically, secondary and primary schools) at the initial stage will inevitably entail a drop in educational quality since it will be impossible to avoid interruptions in the educational process during relocation. The situation may be aggravated by the fact that many schools in the occupied districts have been completely destroyed and will need to be reconstructed.

When defining priorities, the schedule for restoring schools and preschools (kindergartens and nurseries) will be coordinated with the schedule for IDP repatriation.

This component of post-conflict rehabilitation includes the restoration or construction of:

- a preschool network,
- schools (including eight-grade and secondary schools),
- professional vocational colleges and secondary special educational establishments,
- centers of post-conflict psychological rehabilitation.

Rehabilitation of the education system in the liberated districts will be carried out based on the following principles:

- the stage-by-stage reconstruction and restoration of the entire preschool and school network;
- choice and sequence of restoring or constructing facilities in compliance with the procedure of settlement reconstruction, taking into account the location of the facility in the settlement, as well as other similar facilities within a thirty-minute walk;
- appraisal of residents' real needs prior to each of the repatriation stages;
- establishment of child rehabilitation centers in the district centers;
- the interpretation of priority restoration of schools as multi-functional centers of public activity which makes it possible to carry out teaching and cultural and

instructional activities, provide social and informational services, and promote organizational and community self-government, all in the first 1-2 years of rehabilitation.

The restoration of schools as public activity centers will help to accelerate and re-animate intra-community relations and the adaptation of community members to their new living conditions, as well as encourage the community's interest in managing the schools and preschools and, make it possible to finance the education sector from several sources.

The restoration of schools and preschools will be one of the first priorities of the rehabilitation effort, depending on local conditions, and in keeping with the following phases:

- A. Small schools in places of new development at the initial stages of repatriation, including the use of pre-fabricated container-type accommodations in order to meet the needs of the repatriated families.
- B. Schools in settlements that serve a group of villages (rural councils) situated within a thirty-minute walking distance in numbers that will meet the estimated population of repatriated residents in the entire group of villages. Similar approaches are to be employed in the following cases:
 - when merging two or more population settlements with damaged schools, one of which will be restored at the first stage,
 - when there are several schools in settlements situated in close proximity to each other (at the first stage only a few of them will be restored),
 - when settlements are situated beyond easy walking distance of each other (in these cases, schools will be restored in each of them).
- C. Medium-sized schools (for 480-640 pupils) for the first groups of residents returning to towns.
- D. Large schools and preschool institutions for each town's residential district.

- E. Technical (secondary) schools and professional vocational educational institutions.
- F. Other missing facilities.

In the case of villages situated in close proximity to each other, consideration should be given to combining different types of schools. In these cases, proceeding from the territory's demographic prospects and the age structure of the children, incomplete (eight-grade) and complete (eleven-grade) secondary schools could be combined. In some cases, primary schools can be restored in small villages situated within walking distance of a secondary school. Incomplete secondary schools could be used for teaching 120-190 pupils in one session. Secondary eleven-grade schools will be situated in settlements in which at least 30 higher school children live.

If possible, schools and preschools will be created by restoring the existing facilities and assuring their structural stability and security. The multi-functional nature of the schools necessitates the full restoration of all their facilities, including assembly and sports halls, which can be used for community functions and accommodating libraries, computer classrooms, first-aid stations, etc.

Schools will also be provided with laboratory equipment, sports equipment, libraries, etc. The program for restoring schools includes minimal landscaping of the school yard, the construction of a fence separating the school from the main street, a paved driveway, and school yard, toilets, fire extinguishers, etc. However, the available information indicates that the damage inflicted on the existing schools and preschools makes their restoration economically unrealistic. In order to raise them to the necessary level they will have to be entirely rebuilt.

Construction will be carried out on the basis of standard designs drawn up for the different types of educational facilities. A complete set of design specifications and estimates for all types of schools and preschools will be drafted in advance (before political settlement has been reached), i.e., at the preparatory stage.

When designing general education facilities, it should be kept in mind that some of their rooms will be used for accommodating social and psychological rehabilitation centers for the population, primarily children.

Certain international organizations may be involved in child socio-psychological rehabilitation, a practice that has already been appraised in 26 of Azerbaijan's regions. The activity of international organizations in child socio-psychological rehabilitation in the liberated areas will be organized based on Azerbaijan's existing mechanisms. In so doing, the child rehabilitation centers can be situated both in specially converted buildings and in rooms at the restored schools and kindergarten-nurseries.

Kindergarten-nursery complexes will be restored according to the standards adopted for reconstructing the school network. The main components of the preschool network will be standard kindergarten-nursery complexes for 50, 90, and 140 children. It should be kept in mind, however, that in Azerbaijan's rural areas, parents usually prefer to bring up their children in the family, and not in specialized institutions, especially since women in rural areas usually do not work and, if they do, only seasonally.

Therefore, it is presumed that during the first 5-7 years of the restoration effort, the need for preschools will remain at a much lower level than in urbanized population settlements, particularly large towns. Based on these considerations, the construction of preschools, compared to the restoration of secondary general education schools, is not one of the top priorities. They will be built based on an on-site evaluation of the real demand.

It is assumed that the number of preschools in real demand will be around 100 (less than half the number in the pre-war period), and that no more than 10,000 children will attend them. Building and equipping preschools will not begin until the end of this rehabilitation stage. It is presumed that 50 preschools will be built in the post-conflict territories during the fourth year and that in the fifth year after mass repatriation begins, there will be a total of 100 institutions.

An estimate of the capital costs for restoring secondary educational institutions is based on the assumption that 450 general educational schools will be built in the liberated districts, 30 of which will accommodate 480-640 pupils each, 100 will accommodate 300 pupils, and 320 will accommodate 180 pupils each. Most (approximately 70 percent) of the funds will be spent on construction and reconstruction work, and only around 30 percent will be used to provide the schools with furniture,

equipment, and means of transportation. Furthermore, it is assumed that 50-55 percent of all the general education schools will be built and equipped with equal distribution of the work over the first two years of repatriation, and the other 45-50 percent during the following three years, again distributed equally throughout the years.

As for secondary specialized and vocational establishments, the bulk of their construction will be postponed until the later stages of post-conflict rehabilitation. During the first through third years of repatriation, only a few (5-6) vocational colleges, mainly specializing in construction, are to be built.

A separate component of the restoration of the education system is the rehabilitation of music education. At present, it comprises three stages in Azerbaijan – primary, secondary vocational, and higher vocational education. The rehabilitation of primary music education – music schools and art schools – is among the top priorities of this study. The state provides 99.4 percent of the financing for these schools, while parents pay only around one dollar a year per student. Preference will be given to schools that teach instrumental and vocal folk music.

It is presumed that at the first stage of rehabilitation in the post-conflict areas, 12 music schools will be built – 1-3 schools in each district. There are plans to spend more than 10 million AZN on their construction and furnishing. These costs will be distributed equally over the years of the repatriation period at an inflation-adjusted cost of just over 15 million manats.

In the future, some of the graduates from these schools will be able to continue their education at either of two secondary vocational music establishments, one of which will probably be located in Agdam, and the other in Shusha. They will be built 7-10 years after repatriation begins, and so are not included in the estimate of capital costs for restoring educational facilities. It is very possible that in the future consideration might be given to the establishment of a branch of the State Conservatory in one of the post-conflict districts.

The results of the estimates of the capital costs on restoration of the education system are presented in Table 15.

Table 15. Capital Costs on the Restoration of Educational Facilities

	Number of pupils	Number of facilities	Cost of unit (thou. AZN)			Total costs (thou. AZN)	Total with adjustment for inflation (thou. AZN)
Preschools	10,000	100	350			35,000	66,500
Secondary schools – total	104,400	450				260,000	362 464
<i>Including</i>			<i>buildings</i>	<i>equipment</i>	<i>total</i>		
<i>for 480-640 pupils</i>	16,800	30	1,000	300	1,300	39,000	53,560
<i>for 300 pupils</i>	30,000	100	600	170	770	77,000	108,600
<i>for 180 pupils</i>	57,600	320	360	90	450	144,000	200,304
Music schools	2,400	12	850			10,200	15,178
Vocational learning establishments	2,400	6	800			4,800	5,824
Total	119,200	568				310,000	450,000

On the whole, with adjustment for inflation, 450 million manats, or \$562.5 million, will be spent on restoring schools and preschools. Without adjustment for inflation, expenditures on one preschool child will amount, on average, to 3,500 AZN (\$4,375) on one secondary school pupil to 2,500 AZN (\$3,125); on one music school pupil to 4,250 AZN (\$5,313); and on one vocational student to 2,000 AZN (\$2,500). These expenditures correspond to similar figures for most of the countries of the world that have approximately the same per capita GDP as Azerbaijan. As for developed countries, expenditures on one secondary school pupil are no less than \$3,000.

Educational establishments in the post-conflict districts will be restored in compliance with the highest international technological standards. This will lay the foundation for improving the educational system in the country as a whole. However, as the most recent studies show, the level of material and technical development, despite its importance, cannot guarantee a high quality of education, the main role in which is still played by the Teacher.

The relevant central and local authorities will organize academic activity and be responsible for how the buildings and equipment are later used, but these aspects are not a direct focus of this study. All the same, these issues, particularly the advanced training of teachers who will mainly be recruited from the repatriates returning to the post-conflict districts, should remain a priority at the preparatory stage of the rehabilitation effort. In these districts, there will be limited opportunities to use the staff screening system that is gradually being introduced in the country by means of testing, but this problem will be resolved by creating a system of permanent advanced teacher training.

In the future, a regional Advanced Teacher Training Center may be set up in one of the liberated districts. Prior to this, during the period of initial post-conflict rehabilitation, there are plans to enhance the Agjabedi branch of the Azerbaijan Advanced Teacher Training Institute, both by raising its material and technical level, and by recruiting additional specialists.

6.4.3. Culture and Sport

Prior to occupation, the districts to be liberated boasted an extensive network of social and cultural facilities (see Table 16).

Table 16. Social and Cultural Infrastructure Facilities in the Region before Occupation

	Cultural and General Facilities	Community Centers	Clubs	Libraries	Total
Agdam	598	13	27	71	709
Qubadli	205	10	28	60	303
Jabrayil	197	10	49	58	314
Zangilan	138	8	23	35	204
Kalbajar	134	9	27	55	225
Lachin	575	19	54	67	715
Fizuli	415	20	45	69	549
Total	2,262	89	253	415	3,019

The restoration of cultural and sports facilities is an extremely important task in terms of motivating IDPs to return to their homes, as well as for their subsequent adaptation. Nevertheless, it is a lower priority than, for instance, the restoration of the vital service systems or health care facilities. Therefore, during the first few years after repatriation (or, to be more precise, until the basic systems ensuring the relatively independent existence and development of the region have been restored), only those cultural and sports facilities will be restored without which full-fledged vital activity of the first wave of repatriates will be impossible. The restoration of human service facilities will be carried out gradually, from ensuring certain immediate services, to restoring facilities that support the population's adaptation and rehabilitation in the territories being revived at the various stages of redevelopment.

Most of the community centers, rural clubs, libraries, and museums will be restored at the later stages, particularly if this will require new construction, while architectural and cultural monuments will be restored within the framework of a special program under the auspices of the corresponding state agencies. Exceptions will only be made for those cultural facilities and natural monuments that could play a key role in realizing the potential competitive advantages of the region's economy.

Postponing the restoration of historical monuments until later rehabilitation stages is dictated by two factors.

First, the measures required, and their costs, can only be determined after a careful on-site inspection of the cultural facilities. In most cases, efforts in this area will require in-depth preliminary investigation by specialists and the drawing up of individual restoration plans for each structure.

Second, there is every reason to believe that the cultural monuments in the occupied territories have been almost totally destroyed. There is reliable evidence that throughout the occupation period, Azerbaijan's historical and architectural monuments were being deliberately destroyed and that this process continues. This vandalism can evidently be explained by the desire to create the illusion that there is nothing in this region historically related to Azerbaijan and the Azeris.

As mentioned above, the restoration of community centers can be postponed until a later date. But considering that the performance of Azerbaijan folk music, known as *mugham*, is among the region's economic assets (see 7.2. *Branches of Comparative Advantages in the Post-Conflict Territories*), a certain minimum number of community centers will be restored during the initial post-conflict rehabilitation. In addition, it should be kept in mind that community centers are multi-functional, and will be used for a variety of purposes, including district-wide political, organizational, social, and cultural events can be held.

There are plans to restore nine community centers at the first rehabilitation stage: two each in the Agdam and Fizuli districts, and one each in the Jabrayil, Qubadli, Lachin, Zangilan, and Kalbajar districts. This is a little more than 10 percent of the pre-conflict number of community centers in the post-conflict area. Community centers will be built along standard designs and adapted to local conditions.

A preliminary estimate puts the cost of building and equipping one community center with a main hall accommodating 400-450 people and a small hall accommodating 80-100 at around 2 million AZN (\$2.5 million). Based on this estimate, 18 million AZN (\$22.5 million) would be needed to restore the first network of community centers. Since this work will presumably begin in the third year of repatriation and continue in subsequent years, the total cost of restoring community centers, with equal distribution of the work over 3-5 years, will amount to 31,440 AZN (\$39,300 million), adjusted for inflation.

Before the military conflict, clubs, particularly rural, were mainly used as cinemas. Cinemas are no longer as popular in Azerbaijan as they were 20 years ago due to the advances in television and video technology. All the same, in the liberated regions which will essentially be entirely redeveloped, rural clubs will be in great demand, not only as entertainment centers, but also as centers of socio-political and cultural life in the communities. As such, they will be an indispensable for the IDPs' adaptation to their new living conditions.

It is presumed that at the first stage, 120 rural clubs will be restored or rebuilt: 30 each in the Agdam and Fizuli districts, 20 in the Jabrayil, and 10 each in the Qubadli, Lachin, Zangilan, and Kalbajar districts. Like the community centers, they will be built according to standard designs. The cost of building and equipping a rural club with a hall accommodating 230-250 people will come to approximately 800,000 AZN (\$1 million). A total of approximately 96 million AZN (\$120 million) must be spent on restoration of the first network of rural clubs, figured at pre-crisis prices. With equal distribution of costs by year, this figure, adjusted for inflation, will reach approximately 143 million AZN (\$179 million).

Restoration of the entire system of public libraries that previously functioned in the region is not among the goals of the first rehabilitation stage. Provincial public libraries, as observations and sociological surveys show, no longer play the role in education that they did in the mid-20th century. There are several reasons for this, an analysis of which is beyond the scope of this study. It should also be kept in mind that every school in both rural and urban communities will have a library which, in addition to educational and methodological literature, will offer a wide range of fiction and socio-political literature as well.

All the same, there are plans to build one public library in each district center, which, in addition to its primary purpose, could also function as a public learning center. Each library will be equipped with modern computer technology and will be hooked up to high-speed Internet. Personal computers can be placed in the general reading room of the library, or in a special room designated for their use. A collection of at least 10,000 books will be created in each central district library. In addition, these libraries could eventually form their own collection of electronic publications and resources.

According to a preliminary estimate, building and supplying one central district library will cost around 650,000 manats. A total of 4,550,000 AZN or \$5,687,500, not adjusted for inflation, will be needed to restore central libraries in the post-conflict districts. An estimate of the final costs will be carried out based on the schedule for building and equipping libraries, which will begin during the second year in Agdam and Fizuli and will continue at the same rate, with Jabrayil and Kalbajar in the third year, Zangilan and Qubadli in the fourth year, and Lachin in the fifth year. Based on this estimate, costs, with adjustment for inflation, will top 7 million manats (\$8.75 million).

One of the most important components of the social infrastructure are sports complexes, for the construction of which Azerbaijan has, in recent years, accumulated a wealth of experience. Such complexes (usually called Olympic sports complexes) are currently functioning in many cities throughout the country. These complexes, often in the best locations in the district, consist of roofed and open-air sports grounds, swimming pools, gyms, etc., and usually include hotels. It is presumed that sports complexes will continue to be built throughout the country, and will eventually be constructed in post-conflict districts as well. However, within the framework of initial post-conflict rehabilitation, their construction should be planned for in only two districts—Agdam and Fizuli (in the fourth and fifth years, respectively). At current prices, 12 million AZN (\$15 million) would have to be spent on these targets. Adjusted for inflation, this figure will rise to 22.8 million manats, or \$28.5 million.

Horse breeding is assumed to be one of the competitive advantages of the region in agriculture (see 7.2. *Branches of Comparative Advantages in*

the Post-Conflict Territories). Its development will require efficient state involvement, including the support and encouragement of equestrian sports. Therefore, a hippodrome will be built in the Agdam district, which was previously the location of the country's main stud farm for breeding Karabakh racers before the occupation. The hippodrome could be included in the structure of the stud farm, or function as an independent enterprise. It will be commercial, and could eventually become quite a profitable company, but the lessons it offers in its sports clubs should be free. One goal concerning the hippodrome will be to create favorable conditions for children's clubs.

The total cost of the restoration of cultural and sports facilities, adjusted for inflation, will amount to a little more than 204 million manats, or \$255 million (see Table 17).

6.4.4. Professional Training Centers

The adaptation of repatriates and reintegration of the liberated territories into the social, political, and economic structure of the country will require a whole system of precautionary measures. This primarily entails the social and psychological preparation of the repatriates, training them in the conditions and rules of living in the post-conflict territory, and the explanation of means of overcoming crises (including mine safety).

Such adaptation measures call for the advanced training and retraining of personnel. Since they are directly focused on raising the competence and effectiveness of the labor force, these measures will be of vital significance, both for the adaptation of repatriates, and for the socio-economic rehabilitation of the liberated districts.

Teaching IDPs new forms of economic relations, which in previous programs of post-conflict territory restoration was regarded as one of the objectives of state policy, is no longer as urgent since the IDPs (like other citizens of the country) have been living for quite a long time under a market economy.

But economic conditions in the liberated areas, despite the universality of the economic regulations applied in the country, will have some specific features due to the higher level of state involvement and regulation in them, as compared to other regions of the country. Advanced

training courses should include informing local business owners of those special features that might bear on how they formulate their own economic plans.

Table 17. Cost of the Restoration of Cultural and Sports Facilities

Repatriation period (years)	Community centers (thou. AZN)	Rural clubs (thou. AZN)	Central district libraries (thou. AZN)	Sports complexes (thou. AZN)	Total expenditures (thou. AZN)	Inflation coefficients	Total with adjustment for inflations (thou. AZN)
1st year		19,200			19,200	1.00	19,200
2nd year		19,200	1,300		20,500	1.20	24,600
3rd year	6,000	19,200	1,300		26,500	1.44	38,160
4th year	6,000	19,200	1,300	6,000	32,500	1.73	56,225
5th year	6,000	19,200	650	6,000	31,850	2.07	65,930
Total	18,000	96,000	4,550	12,000	130,550		
Total with adjustment for inflation (thou. AZN)	31,440	142,848	7,027	22,800			204,115

A specialized Professional Training Center will be built in each of the liberated districts. It will be aimed at developing local business and at providing the region's economy with employees that have the necessary qualifications and skill level. It will also be the most efficient tool for minimizing unemployment.

These centers could be under the jurisdiction of the district employment services of the Ministry of Labor and Social Security, but other state departments will also participate in their development, primarily the Ministry of Economic Development and Taxes. This will be simplified by the fact that the Ministry of Economic Development already has a certain amount of experience in creating and managing regional business centers. In addition, they can draw on the experience of a whole series of non-governmental organizations that offer business owners help and training in business development.

A separate, two-story building with a total area of approximately 600 sq. m will be built for each Professional Training Center, and will include a conference hall for 50 people. This facility will also be used to organize exhibitions and fairs. The training centers will be equipped with the latest office equipment, including computers, telecommunications and communication resources, printing equipment, projectors, etc.

It is possible that the training centers could also provide business support. In this event, the building, part of which will be rented out temporarily (for 2-3 years) under privileged conditions as offices to local businessmen, should be larger. A similar privilege will be offered to companies from other regions of the country working in the liberated districts, as well as to foreign investors. The estimate of investments required will be carried out while allowing for the fact that the total area of two of the seven buildings will be larger than the others (1,000 sq. m). These larger training centers will be built in Agdam and Fizuli.

According to a preliminary estimate, building and fitting out each of the five ordinary training centers will cost around 550,000 AZN (\$687,500), and the two larger ones will cost 890,000 AZN (\$1,112,500) each.

The training centers, despite all their importance for successful adaptation of IDPs and efficient organization of rehabilitation work and subsequent economic revival of the post-conflict territories, are not as high a priority as other entities. It is therefore likely that they will be built closer to the end of the rehabilitation period (during years 4 and 5). This will increase the costs somewhat, bringing them to 8.5 million AZN (\$10.6 million), inflation adjusted.

Acknowledging this, the need to train various groups of personnel participating in the rehabilitation work, including the employees of various offices of the local civil administrations and the repatriates themselves, will arise long before the Professional Training Centers are in place. There are therefore plans to carry out training sessions in adapted facilities (possibly in the buildings of the local authorities) prior to the time that the Professional Training Centers are in operation.

The absence of special facilities is unlikely to be a major obstacle in organizing training sessions. A much more significant factor hindering this work will be the possible shortage of qualified people to organize and conduct these training sessions. In addition to inviting specialists from abroad, it will be necessary, at the preparatory stage, to organize training sessions for training the trainers. In Azerbaijan, neither public nor private organizations generally consider training to be a pre-requisite for successful development, and this may prove to be an additional hindrance to the functioning of training centers. Removing this limiting factor should also be a focus of the preparatory stage.

7. ECONOMIC REHABILITATION

7.1. Targets and Principles

The economic rehabilitation of the liberated territories will be extremely complicated. The territory must be developed into a new and economically self-sufficient area fully integrated into the country as a whole and its international economic activities. This requires a multi-stage approach, and the task cannot be fulfilled without cooperation among the districts within the region and local enterprises.

The economic revival of the post-conflict areas will help spread the state's economic sovereignty to its entire territory and aid in the creation of an integrated economic system. Encouragement should be given to those repatriates who are willing and able to become economically and financially independent. In time, this will lower the poverty level and alleviate the burden on social programs designed to support the refugees and IDPs. Post-conflict economic rehabilitation is expected to prevent further environmental degradation in the occupied zones and the places where IDPs are currently located. It has been confirmed that in the zones where refugees and IDPs live in the largest numbers, the environment deteriorates more due to excessive anthropogenic pressure.

The above goal of economic rehabilitation in the post-conflict territories guides the specifics of the region's economic revival. If the goal is to produce a self-sufficient economy, it will be a long process, stretching out far longer than a few years.

Economic rehabilitation is also a resource-intensive activity. It will be realized not so much with the help of material and financial resources, as with the help of the intellectual potential of the private sector mobilized on a voluntary basis, and attracted by favorable conditions and promises of re-training for repatriate businessmen (particularly with courses in economics and law).

In addition, economic rehabilitation will require diverse strategies and tactics. Since the choice of the strategy falls to the government and its political will, we offer the recommendations described below.

Economic rehabilitation of the post-conflict territories should be aimed at creating a new “hearth of development” oriented toward the future. The recently adopted and, on the whole, successfully realized programs designed to reduce poverty, encourage social and economic progress in the regions, promote priority development of the non-oil sector, and so on, can be logically extended by drawing the liberated territories into the national economy. This will make the country less dependent on its oil sector and contribute to Azerbaijan’s sustainable economic development.

Post-conflict rehabilitation will give us a chance to test progressive models of economic regulation, especially methods designed to attract local and foreign private companies to participate in efforts that are considered national priorities, and also to encourage the re-training of businessmen. It is extremely important to test a wide range of methods in various possible combinations in order to ensure transparency in the expenditure of public funds. The liberated areas should become a testing ground for various new economic ideas, the most successful of which can then be applied elsewhere in Azerbaijan and could also be implemented by countries facing similar problems.

Economic revival in the liberated territories will be based on the following principles:

- 1) It will be coordinated with the state’s long-term strategic economic goals. It is not enough to describe the strategy as priority development of the non-oil sector in order to identify the future of the industrial sectors in the post-conflict areas; we shall need a much more specific definition of the state’s economic priorities.

The country's transport potential can be described as one such priority; transit reconstruction will require a higher quality of infrastructure rehabilitation and at the same time accelerated development of transport-related services. The food industry should receive special attention since it is directly involved in promoting food safety. This will be considered when dealing with the restoration of existing or construction of large new industrial facilities with the help of partial or complete government funding.

- 2) The process of economic revival should be geared toward local resources (agriculture, recreation, and tourism being the most promising). Employees should be recruited from among the repatriates, and their managerial capabilities utilized when planning the restoration or construction of facilities of all sorts. They should be employed on a priority basis and trained or re-trained if necessary.
- 3) The private sector is expected to be of primary importance in the post-conflict areas when the economy has been restored to normal and begins to function as a self-sufficient territorial unit. At the stage of intensive rehabilitation of the life-supporting infrastructures (power production, water and gas supplies, and transportation), public companies might dominate. However, even then private companies will be involved on a large scale as sub-contractors.

7.2. The Branches of Comparative Advantages in the Post-Conflict Territories

To render the rehabilitation programs maximally effective, we should identify those sectors that present the greatest comparative economic potential. The following should be taken into account:

- Competitive potential of sectors as they relate to the comparative advantage of the country as a whole. Those enterprises which do not produce competitive final products or services but are involved in the

realization of the country's overall economic functions should be treated as part of the region's competitive potential;

- Enterprises which ensure the region's competitive advantages should rely mainly on local resources;
- These enterprises should employ local workers and offer them adequate wages that are no lower than the average for the country in order to strengthen the repatriation process.

Competitive enterprises should be restored or built on a priority basis, with their competitiveness being identified by the following criteria:

- Absolute priority: competitiveness in the international markets, including Azerbaijan's neighbors;
- High priority: competitiveness in the domestic market;
- Average priority: competitiveness in the local and regional markets.

Some of the enterprises providing vital services to the local market should receive priority attention at the early repatriation stage.

The comprehensive definition of the criteria of competitive advantage must be based on the region's economic traditions and its labor potential. We can currently identify several attractive spheres.

A. Agriculture:

- *Grain production* – The global food crisis that hit the world in 2008 suggests that we should revise our ideas about the structure of agriculture. Azerbaijan annually imports over 1 million tons of grain, mainly for the production of bread. In 2008, Kazakhstan suspended grain exports until post-harvest time, which pushed Azerbaijan to the brink of a crisis that was only averted through the government's frantic efforts. We should note that in the last few years, grain prices in the world

markets have been steadily increasing. The trend will continue since demand outstrips supply and pushes prices ever higher.

This means that the country should produce enough grain to reduce its grain imports. Grain production can therefore be considered an economic priority.

The climate and natural conditions of at least three of the seven target districts (Fizuli, Agdam, and Jabrayil) are favorable for grain production. Furthermore, they can boast of centuries-old traditions and decades of the latest experience in growing grain. Hence, farmland should be returned to agricultural production as quickly as possible so that sowing could begin early.

- *Horse breeding* – There are several top breeds of riding horses in the world, and Karabakh horses have an honorable place along the Arabian, Akhalteke (Turkish), and English thoroughbreds. The Karabakh breed goes back to the Middle Ages; it remained popular until the 20th century when horses lost their military and transportation value, but they are still very popular among sportsmen, and are used in the tourist business.

The very name of the breed indicates that horse breeding should not be ignored as one of the territory's potential areas of comparative advantages. The recent experience of horse breeding has not been lost; before occupation, Karabakh horses were bred in Agdam.

The international market for thoroughbred horses is steadily growing, and Karabakh steeds are obviously in short supply. As a result, horse breeding might develop quite rapidly into an export-oriented and highly profitable economic industry.

- *Livestock breeding* – The areas to be liberated have good potential for livestock breeding, and especially for sheep farming in the mountains. Karabakh mutton is the best in

Azerbaijan, since the region's farmers can rely on centuries-old traditions as well as the most up to date information concerning animal husbandry. So far, the country produces enough mutton to meet its needs; in the future, it might be able to export more meat to its neighbors and possibly even to the nearby developed countries as well.

- *Grapes and cotton* were well developed prior to the occupation, with the natural conditions and climate across the region being particularly favorable to the growing of elite grapes. Cotton was limited to the Agdam and Fizuli districts. The comparative economic efficiency of these branches requires further study before they are fixed as priorities.

B. Industry:

- *Carpet-weaving* – Handmade Karabakh carpets, the most popular among Azerbaijan's carpets, are in high demand in the world markets. For many centuries they have retained their popularity and traditions, which have survived among the repatriates. The quality of Azeri and Karabakh carpets is one of the best in the world: the average knot-density is 50 by 10 cm.

This industry is competitive for several reasons:

- 1) The export potential of the Karabakh carpets is fairly high, although active marketing will be required to return them to the international markets. For many years, these carpets have been sold in developed countries under different, much more recognizable, names (for example, as Persian carpets).
- 2) This industry can be re-launched without large investments. It can start in private homes, as well as in small enterprises.

- 3) The profitability of carpet weaving can be judged from the fact one square meter of Karabakh carpet can go for at least 100 AZN (about \$120) in the international markets.
 - 4) The carpets with a large share of handwork (thread spinning, dyeing, and weaving by hand) are much more expensive. Natural dyes produced by hand add to the carpet's cost and price. Carpet-weaving is an extremely labor-intensive enterprise and is bound to create new jobs in the post-conflict regions, especially at the early stages.
- *The leather industry* – Its prospects depend on livestock breeding: it will develop along with animal husbandry as one of the agricultural priorities.

In 2007, leather production more than doubled, yet leather products and footwear occupy only a tiny sector (about three percent of manufacturing) of the country's economy. The share of the main leather industry is even smaller despite its potential profitability is about 100 percent a year according to preliminary assessments. The larger part of the leather used inside the country is imported; hides are exported mainly to Turkey, from which finished footwear and other leather products are imported.

The conditions across the country and in Karabakh are highly favorable for leather production; there are practically no limits on the export of high-quality natural leather.

Expanding this industry might have to confront two significant yet manageable problems. First, leather production requires a lot of water (water contamination can be prevented with the help of new and generally effective purification methods). Second, the liberated regions have no traditions of working with leather, and

no existing skills. The leather industry, however, is technologically very simple, and it is currently being developed other areas of the country.

- *Construction material industry* – The still-occupied areas are rich in all sorts of construction materials, including limestone and raw materials used for cement production.

This industry can rely on old traditions and high demand, which will be generated by large-scale restoration work in the post-conflict areas. A preliminary analysis has confirmed that local resources can be developed on-site for a much lower cost than deliveries from other parts of the country.

This industry will retain its high profitability for at least 15 to 20 years.

- *Dairy and meat industry* – Its priority is determined by the need to reduce the import of meat and dairy products. Animal husbandry in the liberated areas will contribute to the industry's continued progress, and will combine old traditions and the latest knowledge and skills. Several companies are working effectively in Azerbaijan's dairy and meat industries and are prepared to move into the post-conflict areas.
- *Viniculture* – Before the occupation, viniculture was one of the main industries of the region. Recent analyses confirm its comparative economic benefits, suggesting that wine production will become one of the priority branches of agriculture. It can rely on rich traditions as well as its geographical proximity to northern markets, particularly Russia. It will not be easy, however, to join the international liquor and wine markets, which have demanding standards and prefer recognized brands. The companies currently working in the domestic market fully meet the home demand.

C. Services:

- *Tourism* – In Soviet times the mountains of the now-occupied region attracted tourists from neighboring localities, other parts of Azerbaijan and across the Soviet republics. Tourism in the liberated areas will be developed in keeping with the same criteria identified for the rest of the country. It will entail efforts to realize its high potential in the areas of recreation, health, and the culinary arts.

The liberated areas will become quite attractive for people from other parts of the country as soon as the region becomes safe and essential services begin to function. The development of international tourism should be postponed until the political decisions on conflict settlement have been reached and the final status of Upper Karabakh is agreed upon. For at least 8-10 years, the region will have to focus mainly on reaching international standards for tourist infrastructure. During that period, the political risks will likely be assessed as unacceptably high, mainly due to inertia.

- *Music* – Karabakh has been, and remains a center of mugham – a unique type of folk music. Only a real connoisseur of this music and someone who is knowledgeable about its place in Eastern culture can appreciate its boundless comparative advantages. The historical traditions and the high prestige of the Karabakh khanende³ in the East (especially in Iran, Turkey, India, and the Arab and Central Asian states) will move the liberated regions and Upper Karabakh to the center of mugham music.

³ Khanende – a singer whose fame rests on his performance of traditional folk music, mughams in particular.

Mughams and folk music as a whole have great economic potential; to tap it, the region needs an international center for music education, sound recording studios, international mugham festivals, and world tours for the Karabakh khanende. The international education and concert mugham market is nearly unlimited and this is extremely promising for Azerbaijan; the economic potential should be further studied.

7.3. State Support for Projects of Comparative Advantages

Economic revival in the post-conflict territories will strengthen the country's overall industrial and resource base. Before the hostilities, the area accounted for approximately 10 percent of GDP (more exact figures are impossible to calculate because at that time this index was assessed by administrative, rather than market prices). This level can be attained once more over a relatively short period of time.

To achieve this, the state should direct its funding toward the most competitive areas of economic activity. Each of them should be officially endorsed as priority branch, which would make it possible to focus on the details. But as to the general measures that are needed, they can be outlined with a great degree of reliability even now.

In the agrarian sphere, the free distribution of privatized land among the repatriates is very important. This calls for cadastral surveys, the restructuring of land reserves, and the redistribution of land among the repatriates, which has to be confirmed by special land acts that are in full conformity with the current land reform in Azerbaijan. The Azeris have always regarded land as the highest value, thus the distribution of land will attract not only repatriates and IDPs, but also people from other areas of the country.

This will most likely call for more detailed legislation related to land ownership and land use in the liberated territories. New legislation should protect the rights of land ownership and also encourage more effective use of privatized land.

The state will be responsible for supporting those repatriates who wish to set up a farm. It should help them buy machinery, cattle, seeds,

fertilizers, fuel, etc. The state should treat the agrarian sector (both crop growing and livestock breeding) as one of its priorities, since 75 percent of the repatriates worked in agriculture before the occupation. Moreover, a large part of the urban population in the areas to be liberated is associated in one way or another with the agrarian or agro-industrial sectors.

The absence of agricultural machinery will be the main obstacle in developing farming on the 200 thousand hectares of arable land in the post-conflict areas. The establishment of several agricultural service companies, each covering an area of about 8-10 km, is planned. Each of the liberated districts should be provided with 3-5 service companies that have an adequate amount of agricultural equipment adapted to the local conditions at their disposal in order to serve the farms within their zone of responsibility. Machinery and equipment can be either rented out for one season or leased or sub-contracted on an individual or collective basis.

It is expected that in the first two years, fuel, lubricants and service will be free of charge. Later, the companies will switch to a paid program; from that time on, the farms in the liberated territories will enjoy the same privileges as farms in other parts of the country.

State support may take the form of free marketing and consulting services extended primarily to agricultural companies working in the most highly competitive sectors. Mobile information and consulting companies are not very expensive to establish and maintain in the agricultural areas, so several companies could operate in each of the liberated districts. Their services will remain free for a longer period of time (at least five or six years) than those of the agricultural service companies.

Animal husbandry is much more practical than crop growing because it requires less start-up capital. Many of the future repatriates still live and work in the countryside and are involved in livestock breeding. They have thus preserved their skills and they have cattle they can bring with them to the liberated territories. To revive cattle breeding, families might be offered 1-2 heads of horned cattle and 5-7 heads of small cattle.

During occupation, the areas were left without adequate supervision, which calls for health and epizootic control to create a safe environment for cattle-raising. State control will be entrusted to the local executive offices. Farmers will also gain access to an entire range of free veterinary services during the first few post-conflict years.

To encourage agricultural production and increase the competitiveness of the local farms, the state will buy their products. However, this measure to encourage the farmers might not be necessary. The same may be true concerning additional budget funding since the market of local agricultural products is already sizeable. Encouragement will be limited to creating an enabling environment for the local farmers.

Instead of buying agricultural products from the farmers, the state will encourage private companies engaged in storing, processing, and marketing agricultural products to do so (for details see *7.6. Motivating Private Companies to Work in the Post-Conflict Areas*).

To achieve a better psychological effect, the above services should be offered for a small fee rather than be free of charge. Azeris are no different from other people: they set greater store by what they buy (even for a symbolic price), than by things they get for free. They tend to use things they buy much more judiciously.

The state will have to extend some specific forms of support to certain of the priority sectors. For instance, horse breeding is impossible without consistent state support. Private companies will become involved at a later stage when the industry has become more competitive. At the early stages, this activity should be developed under the public sector, with limited involvement by private companies. However, from an early date private firms will be involved in buying horses, organizing exhibitions and races, and even exporting thoroughbreds. In fact, this is one of the fields in which cooperation between the public and private sectors can produce excellent results.

Carpet-weaving also calls for a special approach: it might not take long for private companies to become involved, but prompt results should be planned at the preparatory stage in the form of targeted decisions. Carpets will be sold in foreign markets. Therefore, carpet export should be exempt from all non-tariff restrictions, and even encouraged. An incentive program, where rewards are dispensed in monetary and material forms (threads or dyes), will encourage companies that put their export earnings in special company deposits.

Below we discuss in greater detail some specific forms of state support of businesses in the liberated areas.

7.4. Employment

It is extremely important to link post-conflict investments and rehabilitation with actual jobs for the repatriates. The rehabilitation plan will include a section concerning the number of jobs and skill level required for each of the restored or new enterprises at each stage. This will give rise to an employment sub-program.

This program will be connected to the various elements of the rehabilitation plan, since the number of jobs will depend on the pace of decontamination, guarantees of safety, and the restoration of the economic and infrastructure facilities. Restoration will also require a workforce, which means that both the investment and labor plans should be drawn up simultaneously, and by the same research group.

The employment sub-program can rely primarily upon the local workforce. Later on it should be focused on creating an economically self-sufficient population in the post-conflict areas. Special attention should be paid to jobs in the local administrations and vital service systems.

The sub-program will consist of the following components linked to the corresponding stages:

- Involving repatriates in public works (clearing, tree planting, etc);
- Involving repatriates in restoring the vital service systems, such as dwellings, the power, water and gas supply, and communal services;
- Employing repatriates in rehabilitating infrastructure and transport (rail, roads, and air, in particular);
- Involving repatriates in rehabilitating social services (health, education, cultural, and sports facilities and services);
- Creating jobs in the process of reconstructing old and building new production facilities.

The employment sub-program is also intended to completely overcome the parasitic habits some of the IDPs acquired during their exile from their homes due to governmental and other social programs.

This task will be divided into two stages. At the preparatory stage, the repatriates will attend special courses at which they will be taught that despite financial and material support from the state, they should rely on their own labor to provide for themselves and their families. The media and NGOs will also be involved in this process.

At the second stage, the repatriates will encounter conditions conducive to their independent activities. This will be achieved by the means enumerated above, which will make it possible for every family to support itself, albeit at a minimum level.

7.5. Land Privatization

Privatizing land in the post-conflict areas is expected to revive agriculture. This will be achieved in full compliance with the laws of Azerbaijan, which are the most progressive in Eastern Europe. They create the necessary conditions for affirming the entire range of rights pertaining to the private ownership of land (including the right to dispose of property in land). This means that the law needs no adjustment to the post-conflict conditions.

Land reform in the post-conflict areas is intended not only to encourage those wishing to work in agriculture, but also to address other tasks, including:

- The development of market relations in the post-conflict territory, without which the region will never become an integral part of the rest of the country;
- Simplified repatriation of IDPs in order to settle the depopulated and ruined territories (at a later stage, the repatriates will develop closer bonds with the land they own);
- Voluntary settlement of families from other parts of the country (Such families under certain conditions will be able to acquire land in the post-conflict districts on the same basis as IDPs).

Land reform in the liberated areas will have two parts. First will be the privatization of small plots of land adjacent to private houses. Before occupation, this land belonged to homeowners on an individual or family basis. This is extremely important since legal ownership of these dooryard plots will acknowledge their economic importance and generate increased taxes through the property tax. The money will go to the municipalities, as their strengthening is one of the priorities of rehabilitation.

Privatized plots should be based on their pre-conflict boundaries. This will present very few difficulties in the urban settlements because the population density ruled out landed plots larger than the officially established sizes. The situation is different in the countryside, which means that taking inventory of these plots will be as labor-intensive and time-consuming as it is important.

The sizes of plots around private houses transferred to families who are not IDPs and instead move to the post-conflict areas from other parts of the country will be based on average sizes, which vary from district to district. The IDPs will gain back their privatized their plots at the preparatory stage, before the territories have been liberated.

Privatization of agricultural lands in the liberated areas is the second component of the land reform program. It is a much more complicated and painful process, as many countries have already learned from experience. Azerbaijan is fortunate to have experienced no large-scale discontent with its nearly completed land reform. Indeed, 100 percent of agricultural products are now produced privately.

In the post-conflict areas, land reform will face numerous obstacles arising from the fact that repatriation will proceed in several stages. The local administration will have to pay particular attention to the economic rights of the latecomers, no matter what the reason for their delays in returning. The rights of all people who formerly lived in these territories, including the local Armenians, must be respected.

This means that socioeconomic equality must be treated as the foundation for the privatization of agricultural lands. Paid privatizations will present fewer problems since land will be bought by those who can afford it. In the case of the post-conflict territories, there is no legal alternative to the full and free privatization of land since it was free in the

rest of the country. Indeed, the imposition of even small and symbolic payments for land would be unfair.

Preparation for land reform can, and should, begin even before liberation. The land should be re-surveyed, the land fund should be re-structured, and the areas to be privatized must be mapped in great detail. The existing regulatory documents and standard application forms need no changes, which will save money and time.

We should discuss the possibility of completing the legal process of land privatization in the regions where this can be done at the preparatory stage, during which repatriates will receive legal documents that confirm their ownership of the land. This should be done wherever possible, first, in order to save money, which is badly needed for the region's economic revival, and second, because these documents will create additional incentives for repatriation. There is, however, a negative side: even before the first repatriates arrive, social tension will rise in the still occupied territories. At the same time, people will be looking forward to liberation. In order to draft well-targeted recommendations, we must study the situation in greater depth and conduct more sociological polls.

Privatization in the post-conflict areas will cover private plots, land which belonged to collective and state-run farms, and part of the publicly owned land. At the preparatory stage, a complete inventory of all the land must be carried out; such a survey should register the sizes, configurations, and other parameters of all lands within each category. It is necessary to identify the municipally-owned territories, paying attention to which local authority was responsible for them. The resettlement pattern in the liberated territories must also be considered since it might differ from the previous plan. Obviously, the municipalities should be ready to adjust to these changes.

The privatization of collectively owned land requires reliable lists of those with legally confirmed rights to the landed plots. Plots that belonged to people now deceased will be offered to their legal heirs. New members of IDP families, including those born during the occupation, should be added to the lists. This is a labor-intensive job, but one which must nevertheless be done.

Those Azeri citizens who wish to move to the areas to be liberated but did not live there prior to the occupation, should be allowed to be

equally involved in the privatization process and be given their share of landed plots. Those who end up working in agriculture may acquire land later from the land reserve of the municipalities and/or the state.

To date, the transfer of land in any form, as well as the right of foreigners to own land, are legally prohibited in Azerbaijan, even though foreign investors can be invited to participate in the agrarian sector. Without this prohibition, however, it is highly unlikely that foreigners will be attracted to the post-conflict agricultural sector in the near future, which means that the legal side of the issue can be postponed.

There is an unfortunate possibility that part of the land may turn into passive capital, since some repatriates may prefer not to use their land for agricultural purposes. Since the current laws limit other options, they will be simply removed from farm use for some time. This is extremely undesirable from the economic perspective, which suggests that the law should be adjusted to prevent this.

Certain aspects of land use in the post-conflict areas, such as the emergence of formal and informal land markets and their possible repercussions, both positive and negative, require more detailed investigation, and can be postponed. The resulting recommendations should regulate land use in the post-conflict territory, both in the interests of landowners and also to make its exploitation more efficient.

7.6. Motivating Private Companies to Work in the Post-Conflict Areas

The private sector is expected to play a key role in the economic revival of industry, agriculture, and the service industries. Some of the branches (trade and services in particular) will be privately owned. Private businesses will dominate in the production of food, clothes, household items, construction materials, etc.

The public and private sectors can work together to address many other tasks related to post-conflict rehabilitation. It is much most efficient for the government to join forces with private companies in order to restore the industrial and social infrastructure.

It is expected that the private sector will be invited to contribute to many of the rehabilitation tasks, including:

- The essential services, including dwellings, the water and gas supplies, energy and sewage systems,
- The transportation infrastructure, e.g. railways, roads, and airports,
- The telecommunication network,
- Social facilities,
- The civil administration,
- The reconstruction of ruined or damaged industrial facilities,
- Industrial and agricultural infrastructure, e.g. the construction and/or utilization of storage facilities for agriculture products, leasing machinery to farmers, and other types of cooperation with them.

Due to the specifics of the market economy, the private sector will prefer to work in spheres with low initial capital but the potential for high returns on capital. Therefore, it will focus on retail trade in industrial and agricultural products, everyday services, fast food catering, etc. The private sector will not require stimulation, but capital-intensive and less profitable businesses will need encouragement.

In the post-conflict areas, private capital will act in one of two ways.

First, it will follow its own initiative to open businesses or branches of its larger structures (in this case, there is no difference between them). For obvious reasons, it will go into fields that promise higher than average profits.

Second, private companies will be attracted to the post-conflict areas by profitable state orders distributed on a competitive basis. Enterprises owned by repatriates will be favored over those engaged in large-scale investment projects in the post-conflict territories, while enterprises with a history of pre-conflict cooperation and partnership will come third.

At this point, it appears that private businesses will be ready to join in post-conflict economic rehabilitation if invited by the state. Indeed, many of their owners insist that they consider this their patriotic duty.

At the same time, informal surveys indicate that private business owners are fully aware of the potential profitability of their involvement in post-conflict economic rehabilitation. Most are convinced that the profitability of construction projects, the production and trade in construction materials, wholesale and retail trade in nearly all products brought into the region from elsewhere, and other types of business activities in the liberated areas will all be higher than the national average in those fields.

The prospect of privatizations will attract private capital, an important natural incentive that requires no additional encouragement from the state. The region is dotted with damaged or half-ruined facilities that can be offered for privatization through auctions, public tenders, etc. The prospect of the privatization of public land can also be described as another such incentive.

Private capital, however, should be further stimulated to join in post-conflict rehabilitation. The state support program intended to boost the region's competitive economic potential should be complimented with other general stimulation tools applied in all sectors.

The following mechanisms can be used:

- Free financial support in the form of *state grants to private businesses* involved in economic rehabilitation on their own initiative. So far, this option is limited to extreme situations (mainly at the initial rehabilitation stage) because of the high risk of corruption created by the selection process.

State grants are very effective at the initial rehabilitation stages, especially when intended for low-profit projects (which includes all social projects). Therefore, the selection of projects must be absolutely open and transparent, with strictly limited grant sizes for each enterprise.

- *Fiscal (tax and customs) privileges* extended to private ventures are traditional in Azerbaijan, which has accumulated rich experience in granting tax concessions and tax holidays mainly to private agricultural enterprises, rebates or price concessions for farmers on fuel and lubricants, and subsidies. Enterprises in other fields can expect similar privileges during the rehabilitation period.

The state should be very clear that these and similar measures are temporary. Azerbaijan has opted for a fairly “right wing” type of market economy, and is gradually moving toward a ban on all privileges which put businesses, both private and public, at a disadvantage. In fact, the IFI agree with this plan of action; the talks with WTO members regarding the country’s future WTO membership suggest that the range and forms of selective support should be reduced.

Post-conflict economic rehabilitation, however, will be carried out under extreme conditions, which means that fiscal privileges are applicable only for a specified period of time.

- *Soft loans* for private businesses involved in economic rehabilitation constitute another tool that may be utilized. Azerbaijan has accumulated vast experience in this sphere, too, during the period many years ago in which institutional problems were removed. While it functioned, the Business Development Fund financed several commercial projects in the capital and the regions. In this new venture, the State Investment Company will also be involved in the process.

Commercial banks may also play an important role. The Central Bank plans to offer a dedicated credit line which will rely not only on its centralized lending resources but also on the money extended by the IFI and, partly, by foreign donors. Commercial banks will buy financial resources at a price lower than the Central Bank’s rate in

order to enable them to grant loans to businesses at a lower price. This will be one of the conditions of the Central Bank's special loans.

The state may also give up part of its dividends on the shares in commercial banks on the condition that the money will bridge the gap between normal and soft loans to companies involved in post-conflict rehabilitation.

Small loans extended by banks and other structures specializing in micro-financing to local businessmen can be very effective.

It is advisable to treat private companies owned by repatriates as priority clients when considering soft crediting and other privileges. This will create additional social and economic attractions; after they become established, the repatriates will be more eager to succeed and will adjust to the local tastes and needs and become personally involved in business operations. Similarly, banks and other lending organizations involved in soft crediting of commercial projects will become more interested in cooperation, with no further outside inducements needed.

Financial services in the post-conflict areas will present a unique obstacle to be overcome jointly by the state and private commercial banks. The financial and banking sector will be encouraged by consumer loans on easy terms, as well as by agricultural loans and loans to small and medium-sized businesses in the agro-industrial sector and the service sphere.

7.7. Attracting Foreign Private Companies to Post-Conflict Rehabilitation and Economic Revival

If foreign companies and investors will be allowed to contribute to post-conflict rehabilitation, the state should work hard to attract them. And while they have the ability to work on a wide range of projects, they will probably be interested in only a limited range of undertakings.

They will be less enthusiastic than the local companies, because for many of them political risks will be at much higher level than they would tolerate. Post-conflict areas often attract dishonest investors seeking easy money at the expense of the state and donors, or large companies with the

brands that protect them against any political and other external risks. Azerbaijan will prefer the latter, though they might limit their financial interests to large-scale multi-million projects.

This suggests the following spheres:

- Rehabilitation of the vital service systems (dwellings, water and energy supply);
- Rehabilitation of transport infrastructure (railways, roads, airports);
- Rehabilitation of production infrastructure;
- Establishment of new telecommunication systems.

Private and foreign companies can become involved in rehabilitation projects by applying directly to the Azeri government. However, the government will have to work hard to persuade foreign companies to join the post-conflict rehabilitation effort.

Unlike foreign businessmen, local people are constantly exposed to social and political discussions on the possible liberation of the occupied territories. Azerbaijan's media are brimming with liberation ideas, albeit in a slightly veiled form. As to foreign companies, the liberation of currently occupied territories will be kind of sudden for them. This should be considered when working with potential foreign investors.

The originality of situation is that there is no use to start a promotional campaign long before political decisions have been made, and at the same time, it should not delay significantly thereafter. The government should have a solid plan prepared well in advance (preferably during the preparatory stage).

This plan should identify the branches that might attract foreign businesses, list the projects of potential interest to foreigners, prioritize them according to efficiency and speed of realization, outline their technical features and costs, and prioritize the privatization spheres open to foreigners.

The state should determine what might attract foreign companies and investors to the area other than state-guaranteed high profits. Foreign

companies and investors may also be attracted by the opportunity to use post-conflict territories as a testing ground for new technologies and commercial ideas.

In fact, Azerbaijan has already acquired adequate experience in this field. The annual business forums organized in Azerbaijan and abroad can help the government bring foreign investors to the country. In this case, the forums will be targeted at foreign investors that might be willing to get involved in specific projects in the post-conflict areas.

7.8. Resources for Economic Development

To find out what local resources can be used for economic advancement in the areas to be liberated, we should pay particular attention to location, as well as the region's past cooperative efforts. In the past, they were connected to form resource and cooperation units tied to the closest settlements in the highland and lowland parts of Karabakh and other areas of the country.

The neighboring areas have a surplus workforce, which will inevitably cause a kind of pendulous migration. On the other hand, the closest large cities (such as Ganja, Mingachevir, and Yevlakh), and other relatively large settlements were, and remain, fairly extensive markets compared to the production potential of the post-conflict areas. Cattle breeders from other parts of Azerbaijan used the areas' mountain meadows, and the mountain cattle breeders used the Karabakh valleys for winter grazing.

This past cooperation explains why the potential of neighboring areas must be considered in evaluating the resources of the post-conflict territories. Economic autarchy of the post-conflict territories should be avoided, however. It goes without saying that they should become an intrinsic part of the country's national economy.

The extent to which local resources correspond to the development goals of the priority branches (agriculture, industry, and services) should be further discussed at a later stage of planning for rehabilitation. This is when possible inter-branch specialization will be identified, together with the advisability of either restoring industrial enterprises or building new production facilities. New patterns of technological cooperation among

local enterprises and between them and those outside the post-conflict territory should also be created.

On the whole, however, a preliminary analysis of the material and labor potential of the areas to be liberated is adequate for developing the system-forming groups of enterprises discussed above.

It is difficult, if not impossible, to calculate the economic rehabilitation costs with any degree of accuracy since the money will come from the state and both local and foreign private companies. Much will depend on the pace of rehabilitation of the regional market and its capabilities, as well as on the willingness of private companies to invest in a profitable but much more politically hazardous region.

The state will offer two types of funding:

First, indirect state funding in the form of concessions and privileges of all sorts (mainly fiscal) extended to foreign and local companies, both public and private. This funding, along with rebates on fuel and lubricants for farmers and exporters in such select fields as carpet-weaving, is a good example of how the state will be indirectly involved in funding the companies working in the post-conflict areas.

Second, direct state investments in the rehabilitated districts are much easier to predict. If, for example, the government recommends that a certain number of horned cattle and small cattle should be distributed among the local people, it will have to pay some 125 million manats (\$156 million), or 193 million AZN (\$241 million), adjusted for inflation. It is expected that this money will buy one cow or other horned cattle for the current average price of 1,500 manats, and small cattle for a similar sum for each family. The number of families is calculated by the repatriation plan offered above.

State grants to private, government endorsed companies involved in post-conflict rehabilitation will become another form of direct state funding. The state is expected to offer grants to 40 commercial projects in each of the districts every year, especially to companies working in the service sphere. Grants will amount to no more than 50 thousand manats (30 thousand AZN on average) and each business will be limited to only one grant. The state will extend equal amounts of money every year. The

above estimates suggest that the state will allot about 62.5 million AZN (\$78 million), adjusted for inflation

The state will also fund the restoration of production infrastructure; the money will go mainly to the rehabilitation of old irrigation systems and the construction of new ones. Irrigation is extremely important for the agrarian sector as the main type of activity for the majority of the local population. Its role in processing agricultural products has also placed irrigation high on the list of priorities.

The pre-conflict irrigation infrastructure included 22 headwork complexes, a network of main irrigation canals 1,040 km long, inter-farm facilities and canals 5,386 km long, 7,880 permanent structures on on-farm canals, 780 km of drainage and collecting network complete with over 120 facilities, water reservoirs with a total capacity of 630 million cubic m, 1,430 artesian wells, and other facilities.

The completely restored and newly built facilities will irrigate about 150 thousand hectares of agricultural land. These are recommendations to reach this expectation:

- A new irrigation scheme should be created to correct the problems of the pre-conflict pattern, when many of the agricultural enterprises never had enough water. The region has enough irrigation potential; the volume and quality of its water resources, as well as the terrain, are adequate for providing water to all of the agricultural land in the region.

In view of the above, it is expected that the irrigation system will be restored; the old faults will be removed to bring water to all the post-conflict districts and to some of the neighboring localities.

- Reconstruction of the surviving headwork irrigation complexes and local irrigation systems should be carried out regardless of the repatriation schedule; it should follow decontamination and demining.
- Restoration of the main components of the irrigation systems, including the headwork structures of water

storage and water intake systems, pumping stations, and canals (Mil-Mughan and Mil-Karabakh in particular).

- Restoration of the local irrigation systems connected with the mainline.
- Irrigation of other production territories adjusted to the repatriation time schedule and stage-by-stage economic rehabilitation.

Reconstruction will be aimed at replacing the obsolete and energy-consuming equipment with more economic and technologically advanced devices. Gravity irrigation is preferable, providing that a new system of monitoring water consumption and water resource protection will be developed simultaneously.

In the first 3-5 years, water consumption for economic purposes will be free, with payments for water possibly to be instituted later. The economic rehabilitation plans should take into account that private businesses may be invited to restore the irrigation systems and that some of their elements may be privatized.

According to a preliminary estimate, the rehabilitation of the irrigation systems will cost about 120 million AZN (about \$150 million) at pre-crisis prices. We have already expressed that work on creating an economic new system for supplying water should follow decontamination. By the end of primary rehabilitation (which will take place during the first five years), about 70 percent of the irrigation system will be restored at the cost of about 84 million manats (\$105 million). Spent in equal annual shares, the figure (adjusted for inflation) will reach 125 million AZN (\$156 million).

In the early post-conflict years, the state will fund the setting up and equipping of service structures in agriculture in order to provide for the free rental of machinery and equipment to farmers. This is another form of the state's direct support. An estimated 30 such service structures will appear in the post-conflict districts, with about 30 units of agricultural machines (tractors, grain and cotton combine harvesters, etc.) in each. The state will have to pay 31.5 million manats (\$39.4 million) to provide this direct support.

Each of the newly established entities will be provided with the necessary maintenance and repair equipment; it will have production and administration facilities and well-organized grounds, which will cost the state another 15 million manats (500 thousand AZN per unit).

Free consultations for local business owners are another type of direct state support. Though the services are free for the businesses, the consulting company will operate on state money. It is expected that each of the post-conflict districts will acquire 3-4 companies. Initial investments will not be too large; the companies will use as offices two or three rooms with furniture and equipment. The government expenditures on this item (primarily wages) during the initial rehabilitation period will be no more than 4 million manats. Distributed evenly by year and adjusted for inflation, the figure will reach about 6 million AZN (\$7.4 million).

Some of the branches with a potential competitive advantage will require specific forms of state support. Grain production, which should be developed from scratch in the Fizuli, Agdam and Jabrayil districts, is an example of an industry that will require initial government support. The industry will need at least three fairly large grain storage facilities, at an estimated cost of 500 thousand AZN per unit.

Each of the post-conflict territories will need at least one mill. These mills will be privately owned and operated, therefore, with no state involvement in their construction and functioning. The state will, however, pay for fertilizers and other chemicals; during the initial rehabilitation period, the repatriated farmers, as well as other grain producers, will receive them from the state. This will require 500 thousand manats per district every year (7.5 million manats over 5 years).

On the whole, the state will spend 10 million manats (\$12.5 million) on direct investments in grain production at current prices. The larger part of the funding (providing fertilizers and chemicals for the farmers) will be evenly distributed over the years. This means that direct state investments in grain production, adjusted for inflation, will reach 14.9 million AZN (\$18.6 million).

It should be borne in mind that a large part of the money devoted to grain production is not included in this figure; it was calculated along with other investments in irrigation, technical, and other forms of support.

Before the conflict, the total area of agricultural land in the Fizuli, Jabrayil, and Agdam districts was over 63 thousand hectares (23,807, 20,495 and 18,748, respectively). Seventy percent of the total area under cultivation will produce about 125 thousand tons of grain (28 centners per hectare on average). This will exceed the needs of the total post-conflict area (estimated at 92 thousand tons) and the rest can be sold in the neighboring markets at an average price of \$250 per ton, or over \$8 million per year.

Cattle breeding will be almost entirely in private hands. In addition to households which, as mentioned above, will be supplied with cattle, private farms run by repatriates and people from other parts of the country will also be involved in this sphere.

The state will limit its involvement to the rehabilitation of pastureland and establishment of district veterinary centers. Before the conflict, meadows and pastures covered over 200 thousand hectares; the larger part was idle, however, and will therefore probably need little to no rehabilitation, at least during the early stages.

The preliminary cost of one veterinary center is about 200 thousand AZN; for seven districts, it will amount to 1.4 million manats (\$1.75 million). Construction of these centers is planned for the second year of rehabilitation, after which, investments will be spread evenly over the years. When adjusted for inflation, that sum will reach about 2.3 million manats (\$2.8 million).

During the early stage of economic rehabilitation, the state will concentrate on horse breeding. Like many other branches that the government has focused on due to their future potential, horse breeding will receive a detailed development plan as well as a detailed schedule of measures to be applied and money to be paid.

A preliminary analysis suggests that the plan should include rehabilitation of the Agdam stud farm, construction of at least one regional equestrian complex, several regional hippodromes, and a specialized school. In the future, the region will probably gain a specialized college. A stud farm with a hippodrome complete with all the necessary equipment (including several thoroughbred Karabakh racers) should be identified as a priority of the initial rehabilitation period. Only a few

hundred Karabakh thoroughbred horses remain in Azerbaijan, which will make the rehabilitation of horse breeding a difficult task.

It is expected that in the first three years (construction will start in the third year of repatriation), the state will pay no more than 5 million AZN (\$6.25 million). Spread evenly by year and adjusted for inflation, the figure will reach 8.7 million manats (\$10.9 million).

We have already mentioned that the production of construction materials will be absolutely necessary as the region becomes engaged in wide-scale rehabilitation. Local production is much more efficient than moving construction materials from other parts of the country, and it will produce jobs and reduce transportation costs.

It is expected that the post-conflict districts will acquire about 10 concrete-mixing and cement plants, 5-7 brick works, 4-5 woodworking plants and small woodworking facilities, one plastic tubes plant, 10 plants producing plastic window and door frames, glass works, over 10 quarries, as well as other enterprises. The abovementioned facilities and the majority of other similar enterprises will be privately owned; the state will limit itself to fiscal preferences and organizational support.

The state will, however, fund an asphalt plant of average capacity, as well as steelworks, which will cost no more than 2 million, and about 20 million AZN respectively. These facilities should appear during the first two years, which means that the final, inflation-adjusted cost will not be prohibitively high (about 24.2 million manats, or \$30.3 million).

If local and foreign private companies are slow to engage, the government will probably have to invest in other projects in this sphere to speed up rehabilitation.

During the early rehabilitation period (mainly the first three years), the state will most likely spend around 50 million AZN (adjusting for inflation will bring the sum up to 69.3 million AZN, or \$86.6 million). Thus, the total state investments in the construction materials industry will reach 72 million AZN, or \$90 million (93.5 million AZN, or \$116.9 million when adjusted for inflation).

Carpet-weaving, another activity with considerable potential, will require active involvement from the local private sector. A large number of

carpet-weaving enterprises are likely to emerge, and carpet makers will work at home using looms and wool supplied by the company.

Given the high social importance and economic profitability of carpet making, the state should pay for two carpet-making factories supplied with 200 looms each. Metal looms are simple and easy to produce, and they can be promptly produced in Azerbaijan. The factories will also have several auxiliary shops, including a spinning shop and a dye-house.

One factory complete with production and administrative facilities will cost 3 million AZN (including primary working capital). The first factory will be built during the third year of the initial rehabilitation period, and the second during the fourth year; together they will cost the state 9.5 million AZN (adjusted for inflation) or \$11.9 million.

Tanneries will be privately owned; the government will limit itself to certain stimuli and modest support for drinking water, energy, etc.

Folkloric music is another sphere that will need direct state investments. We are concerned not so much with its social and cultural aspects as with its economic aspects. The educational aspects have been discussed above (see 6.4.2. *Education*). The state will have to take several measures in order to realize the potential in this area. The community centers in one or two districts (probably in Agdam and Fizuli) should receive the status of Mugham Palaces in the same way as the Mugham Center in Baku, which opened in 2009. They should be equipped not only with state-of-the-art sound recording studios, but with any other necessary infrastructure as well. These costs are negligible when compared to construction and infrastructure investments, and can therefore be safely ignored for now.

This means that direct state investments in post-conflict economic rehabilitation will be about 396 million AZN (\$495 million) at pre-crisis prices; the inflation-adjusted figure is 566 million AZN (\$708 million).

It should be noted that investments in economic development are not limited to the above figures: the larger part of the funds to be devoted to restoration of the vital service systems (energy, gas and water supply, and sewage), infrastructure (transportation and communications), and social facilities can also be described as economic rehabilitation spending since these systems are part of the production infrastructure.

Indirect state investments in the post-conflict economy should be investigated well in advance and the following components should be identified: first, the cost of tax concessions for the private sector, and second, the cost of soft loans to state and private enterprises. These costs should be calculated for the period as a whole, as well as on an annual basis.

An integrated technical and investment plan should be compiled at the concluding stage of the preparatory period to identify the resources needed to restore ruined and build new, mainly industrial, facilities. This plan should contain detailed and verified information about the total amount of investments needed to commission enterprises, taking into account the value of current assets.

The plan should offer estimates of the annual profits anticipated and the payback time for investments, as well as a concise technical description of each of the enterprises including their specialization (as well as a description of the changes in specialization when the production units are restored), the final products, the planned capacity, the time of putting in operation, and the sources of raw materials and other inputs.

The reconstruction plan should specify the management specifics. Both state agencies and the private sector will be guided by the plan, which means that it should be published well in advance and publicly discussed on multiple occasions in order to familiarize the business community with it.

* * *

On the whole, the country's potential is sufficient for prompt post-crisis economic rehabilitation. This means that the post-crisis territory will become an integral part of the rest of the country, and of the state's sovereign economic life. Economic rehabilitation of the still-occupied territories will contribute to higher living standards for the residents, regardless of their ethnic origin; it will favorably affect the social and economic development of the Central Caucasus as a whole.

8. THE ROLE OF IFI AND FOREIGN DONOR ORGANIZATIONS IN POST-CONFLICT REHABILITATION

So far, international financial institutions (IFI), sponsor organizations, and foreign investors cannot work in the still-occupied territories. Such activities would violate international laws and the Charter of Economic Rights and Duties of States, adopted by the U.N. General Assembly in 1974. Many of the most prominent IFI, such as the WB, IMF, ADB, IDB, and EBRD, have repeatedly expressed their interest in direct involvement in post-crisis rehabilitation as soon as a political settlement had been reached.

These institutions have backed up their statements by involving themselves in the development of rehabilitation programs, as well as the pilot rehabilitation of the already liberated territories. The pilot rehabilitation process provided an opportunity to test whether the organizational and coordinating systems are adapted to the procedures of donors and to international standards. The UNDP/UNHCR, European Union, Islamic Development Bank, and other international structures have already endorsed the experience accumulated by the Azeri government during the pilot rehabilitation process.

This system should, and will be used at such a time when full-scale post-conflict rehabilitation becomes possible.

IFI may primarily be involved in solidifying the final version of the State Rehabilitation Program. It should progress with continuous adjustment to the changing conditions (see 2.9. *Continuous Improvement*

and Adjustment of the Program) until the occupied territories are finally liberated. The very approaches to post-conflict rehabilitation, its philosophy, and the specific methods applied change over the course of time, which means that Azeri and IFI experts should exchange opinions about the programs and continually adjust them through a process of consultation, as well as through direct contributions to the Program.

Theoretically, IFI and foreign donors can be involved in the entire range of rehabilitation efforts, from strategic social and economic planning (identifying long-term development priorities, assessing investment projects, and formulating state policies designed to stimulate the private sector, etc.), to risk management. In the practical sphere, which requires large-scale investments, cooperation with IFI will be most successful in the following areas:

- Restoration of transportation infrastructure (railways and highways);
- Restoration of the vital service systems (particularly housing, sources of drinking water and water for other uses, and the energy system);
- Creation of new telecommunication systems;
- Restoration of social facilities (particularly, healthcare and education).

Everything relating to the program and all the planning efforts are goals for the preliminary stage. At this stage IFI and foreign donors may also be involved in providing training and re-training in the form of courses for the administrative staff, who should learn how to administer the rehabilitation programs. These training opportunities can be extended to specialists expected to protect the people and infrastructure in extreme conditions, restore the vital service systems, and be involved in other jobs.

To ensure the best effect, IFI and foreign donors should be invited to participate in a variety of post-conflict projects with multiversion functions. For example, in housing rehabilitation, they can be useful as (i) consultants at the planning and designing stage, (ii) investors prepared to extend grants and long-term soft credits, (iii) members of the International Executive Organization.

This multiversion involvement makes IFI's and donor organizations' demands obligatory when drafting the tender documents (see 5.2. *Restoration of Residential Properties*). IFI involvement in the management of post-conflict rehabilitation, besides all, will reduce certain internal risks typical of large-scale programs – risks that are examined in the next chapter.

The Azerbaijani government should have well designed plan and act rationally and consistently in order to practically involve foreign investors in post-conflict rehabilitation. The cooperation initiative itself in most cases should come from the government. This study imparts the task of planning the cooperation strategy with IFI and foreign donors, as well as fundraising abroad, to the Ministry for the Rehabilitation of the Post-Conflict Territories. However, the strategy should be elaborated even before the Ministry is established.

Cooperation with IFI, foreign donors, and foreign investors should be a main priority during the preparatory stage. A corresponding plan should contain recommendations about which projects are preferable to invite IFI and other donors to implement, and which IFI and other donors namely should be invited to implement each of them. In addition, it is advisable to coordinate the plan with the foreign partners in advance, at the preparatory stage. To achieve this, the government and IFI should start a constructive and detailed dialogue about post-conflict rehabilitation right off the bat.

9. RISK MANAGEMENT

9.1. Types of Potential Risks

All large-scale and costly post-war rehabilitation programs are risky enterprises. Experience has proven that there are greater and more hazardous risks when neither side admits defeat.

Local armed conflicts that are stopped and settled through the interference of third parties (usually larger and stronger states), but in which neither of the involved states is prepared to accept defeat are fraught with the possibility of renewed conflict, regardless of the methods employed (military force or diplomatic mediation) by the mediating parties.

The Nagorno-Karabakh conflict is one of the most difficult to deal with because of the large extent of both the destruction that occurred and of post-conflict rehabilitation. Unlike many other cases when the state that initiated the conflict fights outside its territory and has to leave the conflict zone eventually, in the case of Nagorno-Karabakh, the states involved (Armenia and Azerbaijan) are living alongside one another, while the Armenian and Azeri communities share the contested territory.

Regardless of its form, a future peaceful political settlement will be achieved through compromises that will leave certain political groups in both communities and countries dissatisfied and eager to upset the agreements and to disrupt peaceful rehabilitation.

The ideas provided by Azerbaijan and Armenia's large neighbors (Turkey, Russia, and Iran) about settlement of the conflict and their interest in it, have remained more or less the same throughout the conflict,

which makes risks even more probable, and this becomes clearer when looking at the nature of individual risks. It should be remembered that the internationalization of the conflict with massive involvement of political forces from outside the region, which occurred in the last decade, and the interests of the leading world powers in the peace effort complicate the situation and create more potential risks.

Given the above, the risks can be divided into two groups: external risks and risks created by the nature of post-conflict rehabilitation. Both can be either universal or highly specific. Universal risks are the threats typical of all (or the majority) of similar large-scale rehabilitation projects, the specific risks are created by the Nagorno-Karabakh conflict.

9.2. Neutralization or Reduction of Risks

9.2.1. External Risks

A. Armed struggle resumed – One of the main external risks is the use of force by one of the sides in the Karabakh conflict, based on disagreement over the terms of a peaceful settlement.

Since the latter half of 2008, the leaders of both countries and the members of their political communities have subdued their hostility; discussions about the present need to achieve compromises are underway. The public on both sides of the border, however, is not prepared to accept compromise as a condition of settlement. This means that until complete settlement is achieved, the risk of resumed military clashes persists.

The use of force would radically change the methodology and practice of post-conflict rehabilitation, and would call for a radically different plan. Nearly the entire infrastructure, as well as all other facilities, would still have to be entirely reconstructed, but the new conditions in which rehabilitation would have to progress would demand new approaches to resettlement, citizens' safety, and rehabilitation in general, including decontamination and even the infrastructure networks.

Power supply and transportation lines would have to be laid according to different principles. The State Program would have to be revised in conformity with new, less rational, and frequently discriminato-

ry decisions relating to the ways the technical infrastructure is organized in various parts of the post-conflict territory.

Resumed fighting would further devastate the territory to be liberated, thus making post-conflict reconstruction even costlier.

This study is not concerned with the measures needed to decrease the risk – this should be considered by the heads of state and their representatives at the peace talks, as well as interested third parties. In light of the August 2008 events in Georgia, however, it appears that a rational solution requires the withdrawal of the occupation forces and disarming of the illegal armed formations. To achieve the best possible reconstruction results in the post-conflict territory, the conflicting sides and the mediator states would have to declare the post-conflict territory a demilitarized zone.

It is a distinct possibility that a demarcation line would have to be drawn along the Armenian border to be controlled by international peacekeepers in order to prevent resumption of the fighting. A legally justified border control would have to be restored along the borders of the post-conflict territory of Azerbaijan with its neighbors.

Cooperation among all the forces (Azeri, Armenian, and international) expected to maintain security and stability in the liberated territories should be treated as an absolute priority. It would be wrong to avoid possible cooperation with international police forces keeping the highland part of Karabakh under control.

These issues are beyond the scope of this study but they cannot be completely ignored since they require certain redefinitions of the infrastructure, which is the core of post-conflict rehabilitation.

B. Shortcomings of the political agreements – Possible shortcomings of the peace agreements could give rise to new risks.

Such a problem would arise if the transportation corridors between the two countries and parts of the post-conflict territories acquire different economic and legal statuses. We are particularly concerned with the Lachin Corridor between Nagorno-Karabakh and Armenia and the Meghri Corridor between Azerbaijan and the Nakhchivan autonomous zone. If the Lachin Corridor, which is believed to be indispensable for the security of

the Armenian community of Nagorno-Karabakh, acquires a special status while the Meghri Corridor remains closed, thus depriving the Nakhchivan Autonomy of contacts with Azerbaijan, full-scale regional integration will be unachievable.

This will not merely complicate the post-conflict situation and rehabilitation but will also deprive the region of a chance to restore the interstate transportation system. This will leave Armenia outside the regional railway system and the international cooperation projects of the transcontinental West-East and North-South supply lines.

C. Inter-community differences – Unregulated (or not entirely regulated) disagreements among the communities are fraught with risks.

Before the conflict, the Armenian community of Nagorno-Karabakh was part of Azerbaijani society. Moreover, the ethnic Armenian population outside the administrative borders of the Nagorno-Karabakh Autonomous Region was fairly large and the Azerbaijan territory was dotted with Armenian villages. The few conflicts that did occur were trivial. Today, the Armenian community of the highland and lowland parts of Karabakh is isolated and alienated from its Azeri neighbors on both communal and individual levels.

Political settlement alone will not create harmony and understanding between the repatriates and the Armenians living in the liberated districts. We should expect strained relations, which will complicate post-conflict rehabilitation since every step, no matter how small, will require serious attention to the viewpoints of both communities. No party can be left with the conviction that one of the sides is profiting more than the other from the restored infrastructure, highways, and energy distribution.

This risk can be decreased if the State Program of Post-Conflict Rehabilitation is corrected and readjusted based on the results of studies of the post-conflict situation. People living in the post-conflict territory will regard rehabilitation as a form of direct assistance to the local communities, and will expect fairness in its distribution.

E. Sabotage – Sabotage and provocations staged by extremists and local criminal groups might create certain risks for the rehabilitation process.

This can be dangerous not only because of direct and indirect damage to restored facilities, but also because they might lead to military escalation and invasion by another country or countries. This implies that the police must be involved in the rebuilding process in order to prevent sabotage and provocations. Complete transparency is advised to avoid the misinterpretation of police actions as punitive measures directed against one of the communities.

9.2.2. Internal Risks

A. Corruption – Corruption should be regarded as one of the gravest internal risks created by the rehabilitation process itself.

The risk of corruption is universal and unrelated to where the money comes from (the government of Azerbaijan or international organizations), or who the embezzlers are (Azeri bureaucrats or foreign partners). This risk is present in all large-scale state programs, even those implemented in economically developed democracies, the political systems of which have otherwise learned how to suppress corruption.

Corruption is dangerous for several reasons: it might reduce the efficiency of rehabilitation work and discredit the very idea of post-conflict rehabilitation. The success of post-conflict rehabilitation will largely depend on whether corruption is stamped out or at the very least, greatly decreased.

The methods employed elsewhere can, and should, be used to reduce corruption in the post-conflict territories. The government of Azerbaijan, private sector, civil society, and foreign partners should all collaborate in order to resist corruption. Maximizing the transparency of financial transactions has proven beneficial in many otherwise very different countries. It must be applied in Nagorno-Karabakh since all, or nearly all, of the proposed projects should be completely open.

Non-traditional anti-corruption measures might also prove useful. As one of possible methods, we have in mind the collaborative use of foreign administrators in specific rehabilitation projects. There are several forms of these measures:

- 1) the government can appoint an international organization as an operator,
- 2) the government and its foreign partner (or partners) may set up a joint venture to manage one or multiple projects,
- 3) the government can appoint foreign partners as members of project management councils

Finally, international councils can be established in the post-conflict territorial districts. Azerbaijan has tested this in the form of oil contracts in the PSA (Production Sharing Agreements) format. They are executed by boards with equal numbers of Azeri and foreign directors. Adjusted to the local conditions, this experience might be useful in the case of post-conflict rehabilitation; it will acquire special importance when applied to projects funded either fully or partially by international organizations.

B. Excessive bureaucratization of management – Nearly all large-scale projects realized by the state run the risk of excessive bureaucratization of the decision-making process.

There are too many barriers between departments; branch interests prevail over the state's, which causes delays at every stage of decision-making. This may slow down rehabilitation and greatly reduce its efficiency. We should remember that excessive bureaucratization may arise from good intentions, whether to avoid taking bad decisions or to reduce corruption. This suggests that all types of cooperation with international organizations in the post-conflict territories can be seen as an alternative to excessive bureaucratization; they help prevent bad decisions and make many bureaucratic procedures redundant.

In the final analysis, we need the best possible correlation between the speed with which decisions are made and their efficiency.

C. Deficit of managerial staff – The expected scope of post-conflict rehabilitation will require trained managers. Finding qualified managers will be difficult due to the country's lack of experience in post-conflict rehabilitation. Additionally, searches for experienced personnel will be difficult to coordinate once rehabilitation has started. A deficit of highly qualified managers able to operate in extreme situations is therefore one of the potential risks.

To avoid this, the state should start training personnel well in advance; the Ministry of Post-Conflict Rehabilitation must bear responsibility for training managers with the relevant skills for the civil administrations and particularly for the local executive offices that will be set up after liberation.

The Ministry can be entrusted with training operational and engineering staff, as well as with upgrading the managerial skills of regional and district heads in strategic and tactical social and economic planning. The latter can be completed with close cooperation with other state offices such as the Economic Development Ministry.

Most personnel training should occur before post-rehabilitation gathers momentum; personnel should be offered short- and medium-term courses and sent abroad for study tours. Cooperation with international organizations, particularly IFI, will add use accumulated experience rather than money to improve effectiveness.

D. Financial deficit – Post-conflict rehabilitation and reconstruction will be extremely expensive. Azerbaijan currently has vast international reserves accumulated as a result of increased oil and gas export and the high fuel prices that persisted until mid-2008. In the last few years, several of the economically developed countries, interstate structures, and IFI (primarily the World Bank and its subsidiaries) repeatedly confirmed their interest in investing in rehabilitation if, and when, political settlement is achieved.

The current global financial crisis somewhat clouds the prospect of financial support of post-conflict rehabilitation. Plummeting oil prices have reduced the influx of foreign currency into Azerbaijan and the government has had to spend some of the stabilization fund to cover the budget deficit.

The risk of insufficient funds has become very real indeed. Careful timing of post-conflict rehabilitation is the only answer; spending should be minimized without undermining quality, and rehabilitation priorities should be continually revised, with the less urgent infrastructural projects put on the waiting list.

We should start consultations with IFI, foreign donors, and investors about their possible financial involvement in post-conflict rehabilitation; they could make target or auxiliary grants, long-term loans, or direct and portfolio investments. We should further study the degree to which the local private sector can be involved in rehabilitation. For this, the government could draw up statements of intent with local businessmen.

E. Shortages of materials – Reconstruction and rehabilitation will require huge amounts of construction materials. They will most likely be locally produced by newly built enterprises. The higher demand will increase the prices, creating higher profit margins than elsewhere in the country. This may bring new private firms into the process but it will not necessarily reduce the possibility of a shortage of materials. Any shortage would slow down the pace of rehabilitation.

Optimal planning is paramount; the financial and material resources needed for rehabilitation of infrastructural, production, and social-cultural facilities should be fully coordinated at the preliminary stage. Gaps which cannot be bridged using the country's own resources must be filled by importing material, the availability of which should likewise be researched well in advance.

F. Inflation – All the money pouring into the economy might accelerate inflation, which is already high. Before the global crisis, inflation had reached double digits; counter-inflation measures should be discussed and adopted on the eve of rehabilitation. We will need to know how much rehabilitation will cost, how much money is available, and what the inflation level is by the time rehabilitation starts; foreign economic factors should also be taken into account.

* * *

Even if the list of external and internal risks turns out to be much more extensive, and the risks themselves much more real than is currently believed, they should be neutralized at all costs. Failure to do so would be to abandon all or part of the idea of post-conflict rehabilitation, which is unthinkable. The rehabilitation and reconstruction of the post-conflict territories are both extremely important for Azerbaijan, the Caspian-Black Sea region, and the world community as a whole.

CONCLUSION

Liberation of the occupied territories, their re-integration into Azerbaijan's political and economic sphere, and restoration of normal living conditions in the post-conflict areas are just a matter of time. The timing of these processes is of fundamental importance for many reasons, including the overall rehabilitation philosophy. It is the Azeri government's responsibility to draft the State Program. However, that document should take into consideration the interests of all the sides, and particularly the Azeri and Armenian communities within the post-conflict territory.

If delayed, the rehabilitation process might create contradictory circumstances; continued occupation will cause continued devastation and depopulation, and hence require more resources for rehabilitation. As time goes on, newer, cheaper and more efficient technologies can be applied in civil and industrial construction, the vital service system, and infrastructure. However, inflation caused by the influx of oil and gas money will probably greatly reduce the anticipated cost reduction to zero. So far, the global economic crisis has slowed down aggregate demand and inflation.

Rehabilitation will require formidable material resources and manpower. Here we have relied on pre-crisis prices, but rehabilitation will start no earlier than 2011, which means that inflation (which will regain its pre-crisis level once the crisis is over) will cause all prices to increase. We proceeded from a 20 percent annual inflation rate as forecasted by the Central Bank (before the crisis) for 2009.

The civil administration should be restored during the earliest phase of repatriation, and as promptly as possible. If this occurs, inflation will not affect the cost of rehabilitating the civil administration. The same apply to energy supply, because Azerbaijan, indeed, has all the resources needed to restore the energy supply within one to one-and-a-half years.

The financial requirements specified above were calculated without factoring in the time value of money. But together with inflation, this will affect the projected cost of post-conflict rehabilitation. So far, this has remained an underestimated aspect in long-term economic planning. The government tends to ignore the discount coefficients normally used when assessing projects that are expected to go on for many years. This explains why it was fairly complicated to include this factor in our calculations of the post-conflict rehabilitation plans.

In some cases, however, this factor was accounted for, albeit indirectly. This is true both for the costs of restoring the drinking water supply and the sewage system. They are based on the technical and economic parameters of projects currently being implemented and supplied by foreign advisors, who used the annual five percent discount coefficient, even while skipping an adjustment for inflation.

Calculations should take into account the possibility that current expenditures in the budget sphere might be non-existent. Wages, which constitute one of the main expense items in education, health protection, and the local civil administration, account for the majority of these expenditures. Nearly all of them are paid for by the state since these institutions and organizations are already functioning in the IDP settlements. This means that no new jobs will be created and old ones will merely be moved to the rehabilitation zone.

In some cases, the operation of infrastructural facilities will require considerable new expenditures. This should be remembered so as not to distort the financial forecasting. We have in mind the water and gas-supply systems, the operating expenses of which have been introduced into our forecasts.

The number of repatriates should also be taken into account. It is expected that during the first year, some 60,000-80,000 will return. During the next two years, 80,000-100,000 people will return each year, the fourth

year will bring 90,000-110,000 repatriates, and during the fifth year, we estimate that their numbers will swell to 100,000-130,000. These figures are approximate, but remain very important to the planning of repatriation because they extend the time line into the future and the calculated costs must be adjusted upward for inflation.

The value appraisal was carried out according to the upper limit of the number of repatriates (520,000). It is expected that throughout the early rehabilitation period the urban population will account for 20 percent of the total returnees.

We have proceeded from the fact that the entire post-conflict territory (including the highland part of Karabakh, which will probably become autonomous within the administrative limits of the former Nagorno-Karabakh Autonomous Region) will merge into a single economic and social unit. From the perspective of social and economic rehabilitation and restoration, the division into highland and lowland is based on nothing more than convention. However, at the present stage of the programming, rehabilitation of the districts adjacent to Nagorno-Karabakh is easier to plan separately.

The above conditions were taken into account when we calculated the rehabilitation cost of the functional components of the program. Table 18 presents, in general form, the state's expenditures on rehabilitation and reconstruction.

Table 18. Direct State Investments in Post-Conflict Rehabilitation

	<i>Not adjusted for inflation</i>		<i>Adjusted for inflation</i>	
	<i>Million AZN</i>	<i>Million U.S. dollars</i>	<i>Million AZN</i>	<i>Million U.S. dollars</i>
1	2	3	4	5
Vital services	8,993.6	11,242.0	12,830.3	16,037.8
Repatriation	702.0	877.5	1,084.6	1,355.7

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>Including:</i>				
<i>Property compensation</i>	416.0	520.0	642.7	803.4
Housing	4,501.6	5,627.0	6,953.0	8,691.3
<i>Including:</i>				
<i>New housing</i>	4,492.8	5,616.0	6,941.4	8,676.7
Power supply	2,500.0	3,125.0	2,750.0	3,437.5
Water supply and sewage	900.0	1,125.0	1,380.4	1,725.4
<i>Including:</i>				
<i>Water supply</i>	600.0	750.0	886.6	1,108.2
<i>Sewage</i>	300.0	375.0	493.8	617.2
Gas supply	390.0	487.5	662.3	827.9
Infrastructure	6,094.2	7,617.9	9,329.2	11,661.4
Civil administration	19.9	24.9	25.3	31.6
<i>Including:</i>				
<i>Executive structures</i>	12.0	15.0	14.4	18.0
<i>Self-administration</i>	0.9	1.1	1.5	1.9
<i>Other administrative structures</i>	7.0	8.8	9.4	11.7
Transport infrastructure	5,431.0	6,788.8	8,344.7	10,430.8
<i>Including:</i>				
<i>Highways</i>	5,132.0	6,415.0	7,887.2	9,859.0
<i>Railways</i>	249.0	311.3	370.5	463.1
<i>Air transport</i>	50.0	62.5	87.0	108.7

1	2	3	4	5
Telecommunications	28.2	35.3	36.6	45.7
<i>Including:</i>				
<i>Telephone</i>	4.3	5.4	7.6	9.5
<i>TV and radio</i>	6.1	7.6	7.4	9.2
<i>Post offices</i>	17,8	22,3	21,6	27,0
Social Sphere	615.1	768.9	922.6	1,153.3
<i>Including:</i>				
<i>Health protection</i>	170.0	212.5	260.0	325.0
<i>Education</i>	310.0	387.5	450.0	562.5
<i>Culture and sport</i>	130.6	163.2	204.1	255.2
<i>Training centers</i>	4.5	5.7	8.5	10.6
The economy	395.7	494.6	584.2	730.4
Investments in the economy	46.0	57.5	68.4	85.6
<i>Including:</i>				
<i>State grants</i>	42.0	52.5	62.4	78.1
<i>Consulting companies</i>	4.0	5.0	6.0	7.5
Agriculture	271.7	339.6	412.9	516.1
<i>Including:</i>				
<i>Irrigation</i>	84.0	105.0	125.0	156.3
<i>Services in agriculture</i>	46.5	58.1	69.2	86.5
<i>Grain production</i>	10.0	12.5	14.9	18.6
<i>Cattle breeding</i>	126.2	157.8	195.1	243.8
<i>Horse breeding</i>	5.0	6.2	8.7	10.9

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
Industry	78.0	97.5	102.9	128.7
<i>Including:</i>				
<i>Production of construction materials</i>	72.0	90.0	93.4	116.8
<i>Carpet weaving factories</i>	6.0	7.5	9.5	11.9
Total	15,483.5	19,354.5	22,743.7	28,429.6

According to the basic plan, post-conflict rehabilitation will cost the state 15.5 billion AZN (\$19.4 billion), the inflation-adjusted figure being 22.7 billion AZN (\$28.4 billion). In the former case, 58 percent of the total sum will be spent on the restoration and rehabilitation of the vital service systems, 39.4 percent on infrastructure, and 2.6 percent on economic renewal. In the latter case, the proportions remain practically the same: 56.4 percent will be spent on the vital service systems, 41 percent on infrastructure, and 2.6 percent on economic renewal.

This outline, however, is not completely accurate because a large part of what will be poured into reconstruction and rehabilitation of the vital service and infrastructural facilities will also be spent on restoring the production infrastructure.

In fact, the state expenditures will differ from what has been calculated here. In some cases, particularly housing construction, which will be paid for mainly by the repatriates, the state will spend less. The government could announce in advance that it will fund only a part of the cost of housing – let us assume, for example, half. At the same time, we have eliminated the organizational and financial costs of decontamination and border security, tasks that are beyond the scope of the present study. It is clear, however, that total costs of rehabilitation might be higher than projected here.

Our calculations provide an overall idea of how much the state will have to pay during the primary period of rehabilitation, that is, the first

five years of mass repatriation. If, for any reason, rehabilitation takes longer than expected, each of the pre-arranged years may cover from 1.5-2 calendar years, and the entire period will last for 7.5-10 years, while the cost of the functional rehabilitation components (together with the total cost of primary rehabilitation) will increase considerably because of inflation.

The rehabilitation costs have been determined by year based on the time at which the work will actually be carried out, and cannot be changed depending on the availability of funds. This should not be taken to mean that the rehabilitation schedule cannot be adjusted to the financial situation. Table 19 shows how state investments will be distributed by year.

Table 19. State Investments in Post-Conflict Reconstruction and Rehabilitation in Terms of Years of the Primary Rehabilitation Period (inflation-adjusted, million AZN)

	1st year	2nd year	3rd year	4th year	5th year	Total
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
Repatriation	108.0	162.0	194.4	256.9	363.3	1,084.6
Housing	694.4	1,039.2	1,246.4	1,646.3	2,326.7	6,953.0
Power supply	1,250.0	1,500.0	–	–	–	2,750.0
Drinking water supply and sewage	80.0	168.0	396.0	519.0	217.4	1,380.4
Gas supply	–	–	230.4	224.9	207.0	662.3
Civil administration infrastructure	–	18.0	6.3	0.5	0.5	25.3
Transport infrastructure	837.0	1,096.8	1,779.8	2,178.1	2,453.0	8,344.7
Telecommunications	7.4	10.8	12.9	2.5	3.0	36.6
Social sphere	119.4	149.3	150.4	236.4	267.1	922.6

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
Investments in the economy	9.2	11.0	13.3	15.9	19.0	68.4
Investments in agriculture	47.3	63.0	77.9	97.8	126.9	412.9
Investments in industry	23.5	28.2	22.3	16.0	12.9	102.9
Total	3,176.2	4,246.3	4,130.1	5,194.3	5,996.8	22,743.7

Table 19 shows that investments in nearly all spheres will increase over the course of time, mainly because repatriates will continue arriving home in greater numbers. In addition, rehabilitation will spread to larger territories and new settlements, and inflation will further increase the cost. In some cases, inflation will play an even greater role than the other two factors.

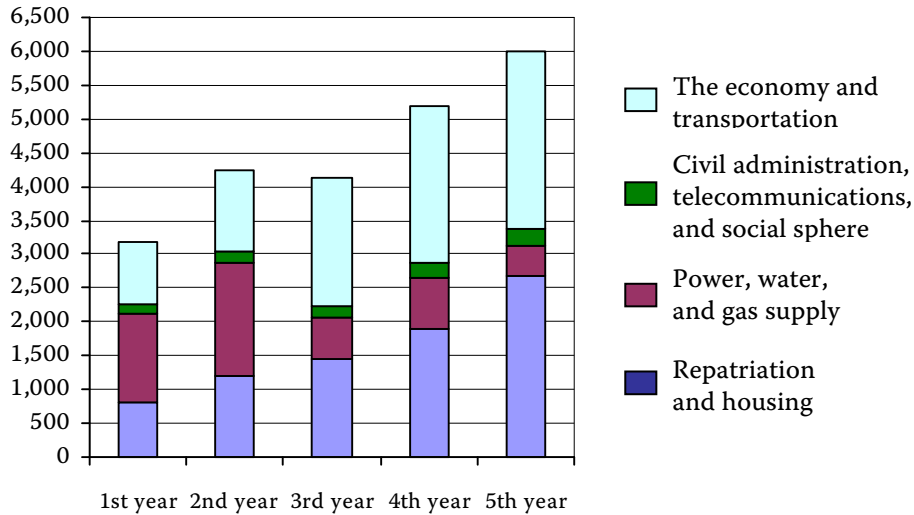
We have already noted that the spheres to be rehabilitated were grouped more or less conventionally. For example, direct state investments in repatriation and housing construction can be placed in the first group, funds spent on power, water, and gas supply in the second group, spending for the local civil administration, telecommunications, and social facilities in the third group, and the money spent in the economic and transportation spheres can be placed in the fourth group. Diagram 3 shows the year-by-year spending based on the outlined scheme.

The diagram shows that the general trend toward increased state investments in post-conflict reconstruction and rehabilitation is disrupted in the third year of the rehabilitation period because the energy system will have been restored during the first two years; the same explains the somewhat lower annual expenditure for the rehabilitation of the power, water, and gas supplies – a trend absent in the other spheres.

An analysis of the republic's economic prospects for the coming 10-15 years shows that despite the high resource-consuming nature of post-conflict rehabilitation, the republic will be able to manage this challenge. In recent years, its economy has demonstrated unprecedented growth

rates, while the country's strategic international reserves (\$22 billion as of 1 April, 2010) have reached 40 percent of GDP. We can rest assured that the international reserves will increase once the global economic crisis is over.

Diagram 3. State Expenditures on Rehabilitation Spheres, by year
(inflation-adjusted, million AZN)



The specifics of the world financial crisis, accompanied by the accumulation of ready assets, are factors favorable to economic rehabilitation. The governments and central banks of most states will attempt to revive their economies by pouring money into them in the form of additional centralized credits, lower interest rates, or lower bank (including reserve) liabilities. Azerbaijan will be no exception.

These and other measures will help commercial banks expand their credit capacities. Today they tend to limit the placement of their assets to avoid bad debts – a precaution that is well justified in times of crisis. Once the world economy starts to grow, most of the financial institutions that survived the crisis will begin looking for reliable and effective partners.

Additionally, in the last few years, Azerbaijan has acquired efficient tools for cooperation with IFI; it can expect them, as well as donor states

and other institutions, to extend their material and technical support to post-conflict rehabilitation.

This study, the result of joint efforts between local and foreign experts, presents the regional and international communities with arguments in favor of this kind of material and technical involvement.

To this end, *Basic Principles for the Rehabilitation of Azerbaijan's Post-Conflict Territories* will be sent to the republic's governmental officials, international organizations, and diplomatic missions accredited in Azerbaijan. Public discussion will help attract more attention to the problem, and will demonstrate that the republic is resolved not only to liberate its territories, but also to integrate them into its political, economic, and cultural context.

The authors hope that the content of this study will prove useful to other countries (including the CIS states) still coping with territorial conflicts, and are willing to extend their assistance in drafting similar documents.