



















CONVERTING BLACK GOLD INTO HUMAN GOLD







CONVERTING BLACK GOLD INTO HUMAN GOLD

USING OIL REVENUES TO ACHIEVE SUSTAINABLE DEVELOPMENT

SUMMARY OF FINAL REPORT

This report has been prepared by a team of international experts led by Prof. Michael Hopkins including Prof. John Lawrence, Prof. Allan Webster and Dr. Tom Stephens, within the project on "Potential use of Azerbaijan's oil revenues to convert black gold into human gold" implemented by the Ministry of Economic Development of the Republic of Azerbaijan in partnership with the United Nations Development Programmme (UNDP).

The Report examines one of the most important policy issues facing Azerbaijan today: how best to use the country's oil revenues to reduce poverty and achieve sustainable economic development. The Report provides an analysis of the national situation as well as international comparisons with 40 other single-resource exporting economies. The underlying message of the Report is to emphasize the importance of developing an internationally competitive non-oil sector by "converting black gold into human gold". The Report makes recommendations for investing in Azerbaijan's human capital to achieve this goal.

The views expressed in this report are those of the authors and do not necessarily represent those of UNDP.

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ACRONYMS

AGC Azeri-Chirag-Guneshli

ASD Accelerated Skills Development

AZPROMO Azerbaijani Export & Investment Promotion Foundation

BGHG Black Gold to Human Gold

BTC Baku-Tbilisi-Jeyhan

CER Centre of Economic Reforms

EBRD European Bank for Reconstruction and Development

EITI Extractive Industries Transparency Initiative

ETF European Training Foundation
FDI Foreign Direct Investment
GoA Government of Azerbaijan
GDP Gross Domestic Product
HDI Human Development Index
HRD Human Resources Development
HUCADEF HUman CApital DEvelopment Fund

ICT Information and Communication Technology

IMF International Monetary Fund

JF Job Futures
JV Joint Venture
LF Labour Force

LMI Labour Market Information
M&E Monitoring and Evaluation
MHCi MHC International Ltd
MoE Ministry of Education

MoED Ministry of Economic Development

MoF Ministry of Finance

MolE Ministry of Industry and Energy
PIP Public Investment Programme
PRSP Poverty Reduction Strategy Paper
PSA Production Sharing Agreement

SOCAR State Oil Company of Azerbaijan Republic SOFAR State Oil Fund of the Azerbaijan Republic

SP Scholarship Programme

SPPRED State Programme for Poverty Reduction and Economic Development

SSC State Statistics Committee
SSPF State Social Protection Fund

TVET Technical and Vocational Education and Training

UNDP United Nations Development Programme

UNESCO United Nations Education, Science and Culture Organisation

UNICEF United Nations Children's Fund

VAT Value Added Tax

\$ U.S. Dollar



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In the first instance, the Minister of Economic Development, Mr. Heydar Babayev, actively encouraged our work, and we wish to extend him a special word of appreciation. Not only did he support our efforts, but also convened a BGHG Advisory Board, comprised of representatives from across the Government to review our findings and recommendations. We would also like to highlight the active support and assistance we received from the Director of the SPPRED Secretariat in the MoED, Mr. Mehman Abbas, and his staff who so kindly offered to share their time, insights and substantial knowledge in support of our research programme. The SPPRED Secretariat also provided the team with office space and logistical support which facilitated the conduct of our research and made our visits to Baku that much more enjoyable and effective.

In the course of our work, the team held bilateral meetings with high-level officials from most key Government ministries and agencies based in Baku, including the Ministries of Education; Industry and Energy; Information Technology; Labour and Social Protection; Finance; National Bank; the State Oil Fund and AZPROMO. The Minister of Education, Mr. Misir Mardanov took a special interest in our work as did Mr. Shahmar Movsumov, Executive Director of the State Oil Fund and both served on the BGHG Advisory Board. The team made use of data supplied by the State Statistical Committee and worked with the Centre for Economic Reforms (CER) in MoED on identifying models of the Azerbaijani economy.

The team also met with a number of representatives from the international donor community, non-governmental organizations, and foreign embassies, as well as staff from private companies and institutions, including BP, the major international oil company in Azerbaijan; and Khazar and Western Universities. The team would like to express our appreciation in particular to the United Nations Development Programme and Messrs. Marco Borsotti and David Eizenberg, and Mrs. Gyulshan Rzayeva and other staff of the UNDP office for their tireless support and active encouragement.

In writing this report, we recognize that there are many viewpoints about how Azerbaijan should tackle the tough policy challenges that lie ahead for using the country's oil revenue. The next few years will be a time of tremendous change as the Government and Azerbaijani society grapple with these

challenges. We hope that this report, which represents our own views and not necessarily any government official or agency, will in some small measure contribute to successfully addressing these challenges.

Finally, the study team would like to express our appreciation for the opportunity of having worked on this assignment and to experience the warmth and hospitality of the Azerbaijani people and the country's vibrant culture. We return to our own countries richer with "human gold" in our own hearts and minds because of the time spent in Azerbaijan.

EXECUTIVE SUMMARY

This report examines one of the most important policy issues facing the Government of Azerbaijan today: how best to use the country's new oil revenues to achieve long-term sustainable economic growth in ways which benefit all segments of Azerbaijani society? There has already been considerable discussion among national policy-makers about how best to use oil revenues. The Government has also taken many positive steps in managing its oil resources such as signing the Contract of the Century, setting up the State Oil Fund and being one of the first signatories of the Extractive Industries Transparency Initiative. The Government, nevertheless, would admit that there is more to be done and has welcomed the work reported upon here which aims to help national policy-makers better understand the broad strategic landscape in which policy and investments decisions must be understood and implemented. This report is a summary of the findings of the full report.

To provide Azerbaijan policy-makers with an international context, the report compares 40 other single-resource exporting economies and notes that, while there are many that have mismanaged their economies, some countries have done well. Overall, single-resource exporting countries have a very mixed record of success and failure. In addition, the report examines five countries in more depth as a way of pinpointing useful lessons that might be of relevance for Azerbaijani policy-makers. The five countries are Norway and Chile (success), Trinidad and Tobago (promising), Nigeria (failure) and Kazakhstan, a neighbouring country with similar challenges as those facing Azerbaijan. The examination of these five countries shows that governance and transparency issues, along with sound macro-economic management, are clear keys of success.

From a macro-economic perspective, the report argues that Azerbaijan cannot simply spend its way into sustained economic growth. Strategic investments are certainly necessary, but the overriding concern must be one of investment prudence, transparency and understanding the expected benefits, potential risks, and long-term implications of different kinds of investment decisions and spending alternatives. In this vein, this report places considerable emphasis on using oil revenues to significantly expand human capital development and skills formation. This is the basis for turning "Black Gold into Human Gold (BGHG)." Furthermore, accelerated skills development (ASD), especially if created offshore, can serve to dampen the effects of Dutch disease, promote growth in the non-oil sectors, and reduce poverty and income inequality.

An underlying theme of this report is that government policy must strive to facilitate the non-oil sector's entry into the global economy by making it competitive internationally. For it is in the non-oil sector where the vast majority of the Azerbaijan population lives and works. It is this majority who must have the skills and opportunities to compete in the international economy. Paradoxically, Azerbaijan could technically succeed in avoiding the adverse effects of Dutch disease, but fail in the longer term goal of full integration in the global economy with a competitive non-oil sector.

The report suggests a number of practical and immediate steps to be taken to improve human gold. To enhance Azerbaijan's competitiveness and develop the non-oil sector, a massive increase in human skills is required to suit the future labour market. The report argues that the Government should consider preparation of a comprehensive Human Resource Development (HRD) Strategy, as has been done successfully in several other countries. A similar approach is the Employment Strategy of Azerbaijan that is consistent with, and complements well, our suggested HRD Strategy.

At the same time, and as a component of the HRD Strategy, the report argues for an Accelerated Skills Development Programme (ASD) or Initiative aimed at urgently using oil revenues to educate Azerbaijanis in a broad range of skills and training suitable for an internationally competitive non-oil sector. Options include a HUman CApital DEvelopment Fund (HUCADEF) based upon the initiative in the President's October 2006 decree on the subject, to send significant numbers of Azerbaijanis abroad to study. We suggest expanding the President's initiative to include (i) in-country education parks, (ii) establishment of a "community college" model of vocational and technical training to provide opportunities for continuing post-secondary education and a (iii) 'radar' scanning system to improve data and analysis of skills to allow a better match of labour market supply and demand. In this process, the report advocates using a framework of public-private collaboration to design and implement an ASD development programme.

The report makes practical recommendations to place greater emphasis on supporting the analytical tools needed by government to facilitate monitoring black gold into human gold, namely, agreement on the economic modeling tools to be used by government and more systematic use of labour force surveys to track changes in labour market conditions. A second recommendation calls for the government to give greater attention to more systematically learning from the experiences of other successful oil-producing countries, and, in turn, Azerbaijan sharing its 'lessons learned" with newer, less experienced countries.

The report encapsulates its recommendations in what are called "BGHG Principles". These serve as the framework for defining specific and concrete

"next steps" and are given in a 'BGHG Strategic Principles: Programme of Action' matrix in the concluding chapter of the report. To date, discussion on the findings and proposed recommendations of this report were coordinated by an inter-ministerial and inter-sectoral BGHG Advisory Board. It is recommended that this Advisory Board be continued into the future to oversee some, or possibly all, of the recommendations and suggested next steps made in this report.

In summary, the report suggests that Azerbaijan's stated Vision can be achieved provided that the oil revenues are allocated wisely and, equally important, sound policy decisions and continued institutional reforms are vigorously pursued at the same time. The current task before Government is not so much what should be done, but the more complex task of deciding how it is to be done, who is to do it, the costs for undertaking it, and the sequence for carrying out the multiple components. Government must give concerted attention in 2007 to formulating concrete action plans that move beyond the broad policy framework and draw the roadmap of what has to be done. Given the level of oil revenues now flowing into Azerbaijan, anything short of this will likely result in significant inefficiencies and failure to achieve desired outcomes.

CHAPTER 1: INTRODUCTION

1.1. PURPOSE OF REPORT

This report has been written at the request of the Ministry of Economic Development to examine one of, if not, the single-most important policy issue facing the Government of Azerbaijan today: namely, how best to use the country's new oil revenues to achieve long-term sustainable economic growth in ways which benefit all segments of Azerbaijani society. The report aims to help national policy-makers better understand the broad strategic landscape in which policy and investments decisions must be understood and implemented to ensure that Azerbaijan can achieve sustainable and equitable growth.

There has already been considerable discussion among national policy-makers about how best to use oil revenues. Policy-makers have likewise become familiar with the terms, oil curse and Dutch disease, to describe what has happened to the many single-resource (largely oil based) economies that have mismanaged their economies, and experienced negative growth along with worsening poverty and greater income inequality.

On the other hand, some single-resource countries have managed their resource revenues well and significantly expanded their economies, promoted the non-single resource sectors, and reduced poverty and income inequality. Needless to say, Azerbaijan's policy-makers are keenly aware of the importance of learning from these other countries' experiences and ensuring that Azerbaijan joins the ranks of successful single-resource economies.

Azerbaijan's policy–makers are also aware of another oil revenue issue with which they must contend. Oil wealth does not necessarily mean full employment. The Gulf States have shown how difficult this has been and have offered the solution of public employment. With Azerbaijan's larger population, the 'Gulf model' is not an option. It is imperative, therefore, that Azerbaijan develop its non-oil economy where most of its population lives and works. The oil sector itself, and related industries, are largely capital intensive and therefore not great providers of employment.

1.2 WHAT IS MEANT BY BLACK GOLD TO HUMAN GOLD?

Azerbaijani policy-makers understand that oil (*black gold*) can have both positive and negative effects. The former provides a Government with a savings surplus but also may, if policy is not imaginative, raise the exchange rate and/or costs in the non-oil sectors where 97 percent of the labour force is employed. This means that low skilled products will not be internationally

competitive and, consequently, unemployment and under-employment will result in the non-oil sector.

It will be difficult to promote employment in the non-oil private sector for a whole host of institutional and economic reasons. One of the main fears is that the price level will rise compared with Azerbaijan's neighbours (the so-called Dutch Disease). Consequently, the promotion of low-tech small and medium scale business, where normally in a growing economy most new employment is created, is a risky strategy.

However, because of Azerbaijan's inherited high levels of education, it will be possible to train Azerbaijanis in new, and advanced, skills (human gold). A massive injection of resources in human resources would, therefore, help to move Azerbaijan's non-oil sector up towards internationally competitive standards. Care, of course, has to be taken that use of oil funds for this purpose is not brought onshore too rapidly and therefore leads to exchange rate over-valuation. Consequently, oil receipts must be used for investment projects, as far as possible, with a large overseas component. This process has been encapsulated as moving from black gold to human gold.

1.3 AZERBAIJAN'S FUTURE VISION

The Government understands the above problems and, *inter alia*, has created an oil fund that, at time of writing, amounts to \$1.3 billion. The Government's original intention was to sterilize these monies offshore so as to prevent oil revenues leading to the Dutch Disease. More recently, the Government has brought some of these funds onshore so as to raise Government expenditures as well as public sector salaries. Even as this report is written, there is a boom in construction resulting as much as a result of expatriate transfers than oil revenues which have only just begun to arrive in large quantities in Azerbaijan.

As part of its efforts, the Government of Azerbaijan has laid out an ambitious and comprehensive plan for moving the economy and the social well-being of the Azerbaijani people to a much higher level of sustainable development. Following the early difficult years after independence, Azerbaijan has already made considerable strides in restoring economic growth, reducing the high levels of poverty, and tackling regional inequalities across the country. These considerable achievements have been made despite the significant burdens imposed by the unresolved conflict.

Through numerous pronouncements by the President of the Republic, the Parliament and high-level government officials, Azerbaijan's vision is clear. It calls for the country to achieve even more significant economic and social

advances that quickly propel Azerbaijan into the ranks of high middle-income countries and place Azerbaijan at the economic cross-roads between Europe and Asia, and, by implication, the rest of the world. While many countries around the world have also elaborated equivalent "national visions," only a very few countries have the added benefit – and potential risk – of windfall oil revenues, as does Azerbaijan. In this regard, the President's decree on the development of a "Long-Term Strategy on the Management of Oil and Gas Revenues" stipulates that in addition to saving at least 25% of all oil revenues, the remaining monies will be used for a range of economic and social goals. These include:

- Promoting the non-oil sector, encouraging regional growth, and facilitating the expansion of the small and medium enterprise sector;
- Investment in the country's core infrastructure base;
- Fulfillment of poverty reduction measures and the solution of other social problems;
- Stimulating the improvement of the intellectual, material, and technical base of the economy;
- Development of human capital to include training highly qualified specialists and improving the professional skills of employees;
- Executing projects relating to reconstruction activities in liberated territories and the return of internally displaced persons to their native lands.

A major theme of this report is that Azerbaijan cannot simply spend its way into sustained economic growth. Strategic investments are certainly necessary, but the overriding concern must be one of investment prudence, transparency and understanding the expected benefits, potential risks, and long-term implications of different kinds of investment decisions and spending alternatives. In this vein, this report places considerable emphasis on using oil revenues to significantly expand human capital development and

skills formation as a means to dampen the effects of Dutch disease, promote growth in the non-oil sectors, and reduce poverty and income inequality. Taken together, this component of Azerbaijan's oil revenue strategy can have major dividends in promoting Azerbaijan's fuller integration in the global economy over the medium and long term.

CHAPTER 2: LESSONS FROM OTHER SINGLE RESOURCE ECONOMIES

2.1 INTRODUCTION

Azerbaijan is only one of many countries around the world that primarily rely, or have relied, on a single export commodity for the bulk of their foreign exchange earnings. As Azerbaijan begins to see the first dramatic increase in oil revenue, it is important to keep in mind the historical record of other single resource economies. Azerbaijani policy-makers know that many of these single-resource countries have a very mixed record of economic performance despite the benefit of foreign exchange earnings from hydrocarbons, minerals and other commodities. There have been more failures than successes, and only a few single resource-economies are truly integrated into the global economy. The "resource curse" is thus often associated with single-resource economies, notably in the petroleum and mining sectors.

2.2. COMPARISONS WITH FORTY SINGLE-RESOURCE ECONOMIES

Single-resource economies are found in all regions – in Europe, Africa, Asia, North and South America, and the Middle East. Not all the countries have performed badly, but the comparisons clearly suggest that there have been a number of notable failures – Nigeria, Angola, Gabon, Libya, Saudi Arabia, Chad, Democratic Republic of Congo, Venezuela and Algeria. Comparing 1999 and 2005, ten of the 40 countries had both a lower GDP per capita and a lower UNDP HDI ranking (a composite indicator for social well-being).

Several countries have shown a considerable drop in their social indicators of more than 10 points as measured by their UNDP HDI ranking -- in some instances, even when GDP per capita increased. These include Cameroon, Chad, Democratic Republic of Congo, Ecuador, Nigeria, Suriname, Trinidad and Tobago, Venezuela and Zambia. The sharp declines may be a result of multiple factors political stability and civil war, regional economic recession, the HIV/AIDS pandemic (Botswana and Zambia), as well as inability in addressing underlying macro-economic distortions.

While there are fluctuations in the countries' economic and social performance, most observers often highlight certain countries – Norway, Chile, the Gulf States of Qatar and Dubai, Botswana, and Mexico – as having been successful in meeting the single-resource challenge. Chile and particularly Mexico are notable for their diversification away from dependence on a single-resource commodity for foreign exchange. Oil exports in Mexico

¹ Single resource does not necessarily mean only oil and gas. It includes minerals such as copper and diamonds, as well as agricultural commodities such as coffee and tea. This chapter looks primarily at hydrocarbon and mineral exporting countries.



now account for only 13.6 percent of foreign exchange earnings, while Chile's copper exports are down to 53.9 percent of export earnings.

Still other countries have what might be called "uncertain outcomes" with respect to how their economies will benefit or not. In this group, we include Ecuador, Peru, Equatorial Guinea, Kazakhstan and Azerbaijan because the longer term economic and social ramifications from their single-resource dependence are still not clear. For Azerbaijan, Kazakhstan and Equatorial Guinea, income inequality remains a significant problem, despite significant improvements in per capita GDP growth.

2.3 IN-DEPTH COUNTRY PROFILES

The report examined more closely five specific countries as a way of pinpointing useful lessons that might be of relevance for Azerbaijani policymakers.

The five countries are Norway and Chile (successes), Trinidad and Tobago (promising), Nigeria (failure) and Kazakhstan, a neighbouring country with similar challenges as those facing Azerbaijan. Briefly, the policy lessons found for Azerbaijan were:

Policy Lessons from Norway for Azerbaijan

Azerbaijan can learn from Norway's strong observance of law, transparency and its economic management of oil revenues, but Azerbaijan will no doubt have to use a higher portion of its oil revenues for current development challenges, rather than investing for the future. It is clear, however, that Norway protected its economy by sequestering a large percentage of its oil revenues in the Government Pension Fund and protecting it from short-term government temptation to withdraw from the Fund.

Policy Lessons from Chile for Azerbaijan

Chile's message for Azerbaijan is to note the long-term commitment that Chilean policy-makers have made to using investments wisely so as to encourage the non-oil sectors and improve social capital, and to promote sound macro-economic and governance policies, a process that is still ongoing.

Policy Lessons from Trinidad and Tobago for Azerbaijan

Trinidad and Tobago is still in transition to the level of sustainable economic and social development that Norway and Chile have achieved, but its policy challenges mirror many of the problems facing Azerbaijan and it is a single-resource economy certainly worth monitoring.

Policy Lessons from Nigeria for Azerbaijan

Perhaps the most significant lesson for Azerbaijan from Nigeria's experiences relate to the added difficulties of tackling major policy changes if they are not addressed transparently at a very early stage and if the rule of law is corrupted. By not addressing underlying policy and governance issues early on, Nigeria faced the much more difficult task of making the same kinds of policy changes at a later stage.

Policy Lessons from Kazakhstan for Azerbaijan

Like Azerbaijan, it is early days to draw policy lessons from oil wealth. Kazakhstan inherited significant amounts of infrastructure and assets from the Soviet era and has a well educated population. And, like Azerbaijan. Kazakhstan faces the challenge of addressing regional imbalances and preventing a further erosion of human capital and infrastructure. The challenge for both countries is less one of availability of resources, as one of effectiveness, transparency and efficiency in the use of public and other resources to, among other things, rehabilitate and expand the infrastructure base and adapt the education system to the needs of a modern and fast-evolving market economy.

2.4 MAIN FINDINGS OF SINGLE RESOURCE ECONOMIES

The following three issues can be deduced from our global analysis of 40 countries, and more detailed analysis of five countries:

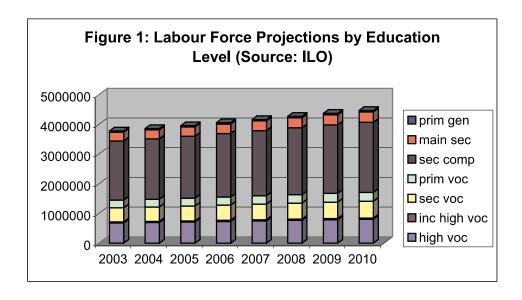
- 1. Single-resource economies face considerable risks in assuring sustainable economic and social development. Prudent investments and vigilant attention to sound macro-economic and governance policies are common threads found in successful countries. This is particularly notable in our short overview of Norway and Chile.
- 2. Even successful single-resource economies, however, must continually adjust and calibrate their policies in the face of changing international market prices for their commodity exports.
- 3. An important lesson from some of the failed single resource economies is the dangers of not confronting the difficult economic and structural barriers and impediments to more efficient and equitable growth. By not addressing these underlying issues early in the boom years, these issues became more entrenched and more difficult to forcefully address in later years. This often leads to increasing social inequality and the marginalization of the non-oil sectors.

CHAPTER 3: AZERBAIJAN'S CHALLENGES AHEAD

3.1 THE LABOUR MARKET CHALLENGE

Based upon forecasts of labour supply and GDP, we have examined the future prospects of employment and unemployment by level of education.

Figure 1 shows the labour force of Azerbaijan over the period 2003-2010. Starting from 3.78mn in 2003 (based upon the 2003 Labour Force Survey, LFS), the labour force is expected to rise to 4.47mn by 2010. The results show, as expected, that the numbers in the labour force with secondary completed education continue to grow, and remain at 52% of the labour force until 2010. We could expect, given recent changes in educational policy, and we hope helped by this project so far, that the numbers with skills would increase much more rapidly than those projected.



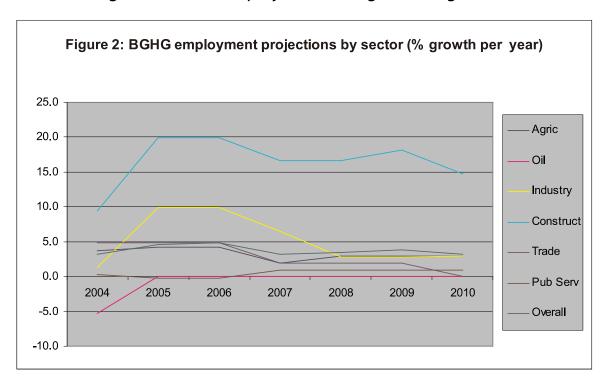
We have forecasted the demand for labour by economic sector and education level, based upon a number of projections of real GDP growth. These GDP numbers are given in Table 1. The remarkable GDP growth of Azerbaijan can be seen rising from 6.7% in 2004 to 22% and 26% in 2005 and 2006 respectively – all economic sectors have grown with the sharpest growth seen at a huge 52% in the oil sector in 2006, followed by construction (29.5%) and industry (26.4%).

Table 1: Real GDP projections by sector [base 2003, real manat bn] in growth rates

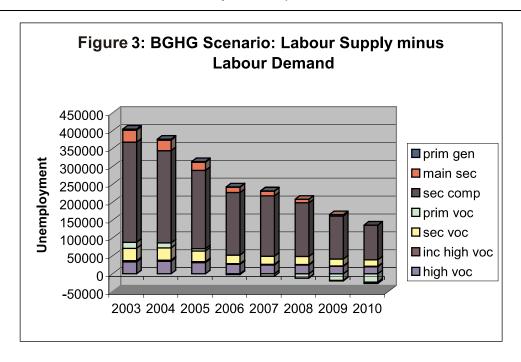
	2003	2004	2005	2006	2007	2008	2009	2010
Agricu l ture	4833.5	106.8	112.6	112.6	106	106	106	106
Oil	9093.6	99.4	141	152	140	140	140	140
Industry	10995.2	104.3	126.4	126.4	115	110	110	105
Construction	3345.1	114.9	129.5	129.5	140	140	130	125
Trade	6026.4	108	108	108	105	103	103	103
Pub Service	4910.4	118.3	102.8	102.8	105	105	105	105
Overall		106.7	122.0	126.2	122.0	122.3	123.2	123.4

The growth rates projections assume, over 2007-2010, that the oil sector will continue to grow strongly at around 40% a year in real terms and that construction will also rise sharply before dropping off toward the end of the projection period. It is assumed that industry starts to become crowded out because of the oil boom coupled with Dutch Disease, as is trade. Public services are assumed to grow reasonably.

To obtain labour demand from these projected economic growth rates, we have made a number of assumptions about the growth in labour productivity. The resulting labour demand projections are given in Figure 2.



Comparing labour supply with labour demand by educational level gives us the pattern observed in Figure 3. The sharp rise in economic growth has a substantial impact on employment. In fact the economy is projected to run out of skilled labour by 2007. Yet, nevertheless, it seems very difficult to absorb all those with completed secondary education, and unemployment persists albeit at lower levels than those seen in 2003.



Finally, in Figure 4, we juxtapose results from two scenarios – one based upon the employment projections done by the MoED in the early part of 2006 (Government Scenario in

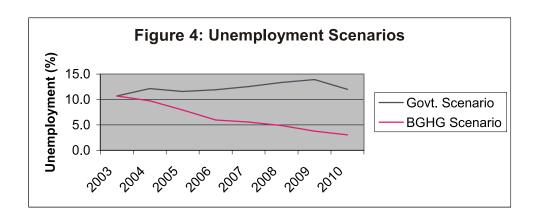


Figure 4) and one based upon the very high growth rates seen in the early part of 2006 (BGHG Scenario in Figure 4). The 'Government' employment scenario 1 continues to show unemployment, while the BGHG scenario 2 does show a decline in overall unemployment to around 3% by 2010. Striking, therefore, is that even with rapid growth unemployment will still remain simply because the unemployed do not have the skills demanded.

3.2. DUTCH DISEASE AND AZERBAIJAN

Dutch disease is a commonly used term and often used interchangeably with the term, "curse of oil." Azerbaijani policy-makers are well aware and have been taking steps to address the problem. The danger signs to look out for are presented in Text Box 1, - worryingly some of these are already appearing in Azerbaijan.

Text Box 1

Danger Signs of Dutch Disease in Azerbaijan

Some common economic symptoms of Dutch disease include:

- Significant currency appreciation of the manat
- Uncontrolled inflation
- Output declines in agriculture and manufacturing
- Bottlenecks for skilled labour, infrastructure, utilities and real estate

With significant increased public investment, the quality of public investment deteriorates rapidly – government's inability to spend effectively (results) and effectively (least cost).

Exaggerated role of government in addressing problems at the expense of using policy and market mechanisms.

Increasing difficulties in changing expenditure patterns over time if the mechanisms and policies for adjusting expenditures are not put in place at the outset.

3.3 AZERBAIJAN: OIL AND GLOBALIZATION

Being a major petroleum exporter does not mean that the Azerbaijan is fully integrated into the global economy. At best, having oil revenues only gets Azerbaijan "one foot in the door" of globalization. Bluntly stated, exporting oil does not mean integration into the global economy. In fact, most emerging market countries that have done well in the global economy — such as China, India, Malaysia, Singapore, Taiwan, Hungary, Poland, and the Baltic states — have not had the benefit of significant foreign exchange earnings from natural resources to jumpstart their economies. Azerbaijan can be an intelligent exception by using its oil resources in a prudent and strategic manner to win what is the real "end game."

The underlying theme of this report is that government policy must strive to facilitate the non-oil sector's entry into the global economy by making it competitive internationally. For it is in the non-oil sector where the vast majority of the Azerbaijan population lives and works, and those who must have the skills and opportunities to compete in the international economy.

It is perhaps useful to underscore what are some of the characteristics of those emerging-market economies that have successfully integrated into the global economy.

The enabling environment includes:

- "Connectivity" lies at the heart of globalized economies the free flow of investment capital and information back and forth across borders with minimal transaction costs.
- Capital investments are seen as secure and protected by financial, legal and regulatory systems – both for local and international investors
- International companies have minimal barriers to entry and operation.
- Competition is welcomed as a means to encourage investment, productivity gains and innovation.
- Foreign direct investment is not simply a source of capital but, more importantly, a means for technology and skills transfer.
- Global competitors have highly trained workforces with flexible arrangements for lifelong learning.
- Government policies help their globally focused companies ensure agility and speed in responding to new market conditions.
- Globalized economies don't just furnish commodities, but provide value-added goods and services.
- Globalized countries have forward and backward linkages in global supply chains, characterized by "speed to market."
- Good governance and transparency.

A common thread in these characteristics is that globalized economies have become, in effect, "knowledge-based" economies that encourage and facilitate rapid change and adaptation to changing international market conditions and place high priority on skills formation.

In looking at this range of characteristics, how does Azerbaijan stack up? It is no doubt safe to say that Azerbaijan's current economic environment does not demonstrate having many of these characteristics. To the contrary, significant policy and regulatory change is still required if Azerbaijan is to become a knowledge-based economy, if Azerbaijan is to fulfill its Vision and become the economic crossroads between Europe and Asia.

Clearly, the transition cannot happen overnight. At the same time, delaying the necessary policy changes and requisite investment decisions that are fundamental to the process will only become more difficult over time, as the flow of oil revenues picks up in the next few years. This is the double-edged sword of oil revenues. How oil revenues are used can either encourage the transition or, in fact, impede the transition. Paradoxically, Azerbaijan could technically succeed in avoiding the adverse effects of Dutch disease, but fail in the longer term goal of full integration in the global economy for its non-oil sector.



CHAPTER 4: A HUMAN RESOURCES DEVELOPMENT STRATEGY FOR AZERBAIJAN

4.1 HUMAN RESOURCES SITUATION

Occupational demand data from the 2003 Labour Force Survey (LFS) show the total of economically active persons to be 3.78m, with just over 400,000 unemployed (a rate of 10.7%). Almost half of the unemployed are in the 20-29 year old age group, i.e. at the start of their working lives. A more recent survey of temporary work in two urban areas by the State Statistical Committee found an unemployment rate almost twice as high (22.8%), and lower economic activity rates.

The problem is that the numbers in education decline notably as the level of education increases- particularly after the end of secondary education illustrating lack of access to opportunities at post-secondary levels. Moreover, education levels of the unemployed indicate the majority (69.2%) have completed secondary education, which gives great cause for concern. Furthermore, although educational reforms are clearly underway, there is much evidence of deterioration in the public education system, particularly in post-compulsory education physical not only plant in facilities/equipment, but also in quality. While the increase in test scores in higher education admission tests is encouraging, evidence suggests that teachers need more frequent opportunities for retraining. Moreover, equipment and methods (particularly more modern teaching aids) need to be improved for all, and not just some schools. In addition, pervasive corruption in the education system threatens reform efforts, and raises doubts in the minds of both students and employers as to the objective value of their education.

There is also a serious mismatch between labour market needs by employers and supply from educational institutions. The 2003 LFS found that only 10% of workers with written contracts had any vocational education or retraining.

Thus the focus of a Human Resource Development (HRD) Strategy must be on the interfaces between those coming into the workplace, and their qualifications, competencies and skills as a function of their educational experiences, with emphasis on public secondary and post-secondary vocational education and training.

It should be noted that teachers and administrators are often highly motivated, and many are doing an extraordinary job in difficult circumstances (e.g. outdated facilities and equipment). Young people, particularly females, are still training to be teachers (although many do not go on actually to teach despite a national teacher shortage), and there is a clear national commitment to education, illustrated for example by allocation of more than 15 billion AZM in 2003-4 for free textbooks in Grades I-V, the extension of this initiative to Grades I-XI in 2005, as well as upgrading of teaching plans and standards. The World Bank Education Reform Project is contributing to the overall reform effort in several areas, including curriculum, teacher training, textbooks and reading materials, financial management, student assessment, and information systems for planning/monitoring.

But the bottom line is, inescapably, that many young Azerbaijanis are still entering the labour force with inappropriate, or insufficient knowledge and skills. Moreover, employers demonstrate a lack of faith in educational/training qualifications gained in many Azerbaijani institutions. Addressing this will require a concerted strategy across all educational levels, but nowhere more importantly than in the vocational/technical domain.

4.2 A HUMAN RESOURCE DEVELOPMENT STRATEGY FOR AZERBAIJAN

A national HRD strategy should be structured as flexibly as possible, to maximize efficiency, and be accountable for clear actions across a specified timeframe. Key recommendations emerging from the BGHG assessments include new policy and action initiatives to be implemented immediately in line with current movements towards educational reform and meeting European standards. Overriding these however is the conclusion that fragmented 'quick-fix' projects are unlikely to build and sustain effective solutions over the longer term without institutional mechanisms in place to foster, manage, and monitor progress towards explicitly stated, targeted goals. Azerbaijan needs a cohesive, integrated HRD strategy that is:

- integrated and cross-sectoral, maximizing all the advantages of public/private cooperation already begun
- empirically-based, facilitating production of outputs, information and analyses from labour force and employer surveys as well as census data, arranged, classified and formatted in ways that education planners can respond to
- substantively relevant (information-based, building civic, economic, sociocultural and sustainability literacy)
- enhancing lifelong learning by making information publicly available on adult education and training, and by supporting institutional initiatives that open up opportunities for adult `recycling' through appropriate post-secondary institutions, both public and private
- well networked with regional and global labour markets and postsecondary educational institutions

- sustainable (cost effective, market orientated and built to provide continuity)
- socially assertive i.e. well supported at regional and local levels and `on the ground' with strong public outreach and accountability mechanisms
- fully linked to Azerbaijan's potential comparative advantage in Information and Communication Technology (ICT) through its new Ministry and national ICT strategy
- developing an accelerated skill development programme along the lines developed in the next chapter

Such a macro-framework is evidently workable, given the cross-sectoral experience of MoED with its SPPRED working groups and BGHG Advisory Board. Greater integration in the area of human resources development has been repeatedly called for, for example in the National Employment Strategy, as well as in the European Training Foundation's 2006 Country Report. The following chapter details selected priority initiatives to be considered in parallel with this strategy development as well as proposed next steps for the Government of Azerbaijan.

CHAPTER 5: ACCELERATED SKILL DEVELOPMENT

5.1 INTRODUCTION – THE NEED FOR AN EMPHASIS ON SKILLS

A key plank in the Government's plans is the development of skilled labour. The SPPRED ten year plan and the Employment Strategy both emphasize the key need for Azerbaijan to upgrade its skills. In fact, no country has become rich and stayed that way without two key dimensions. First, accountability, property rights and rule of law, which in combination provide low transaction costs so that markets can work effectively and efficiently. When these conditions are absent, a society faces corruption, instability and poor human rights. Investors, including domestic investors, flee such settings. The second part of the answer focuses on investing in the human skills needed to use modern technology. Taiwan and South Korea in the 1950s and 1960s, Indonesia and Thailand in the 1970s, Botswana in the 1980s, and Poland in the 1990s are all examples.

However, there are at least ten major problems in skill training in Azerbaijan today:

- 1. A lack of updated and comprehensive prospective information and analysis (and system) on the trends of the economic sectors, as well as of the labour market to help build a strategy for HRD in line with the options for economic development of the country.
- 2. Dialogue and partnership with market players is poor and non-systemic.
- 3. *Financing:* public funding in TVET (Technical and Vocational Education and Training) fell in the years of transition.
- 4. Curricula, methods and infrastructure in the TVET system didn't receive the innovation/revision needed to accompany the changing demands of the emerging firms/economy.
- 5. The development of the non-tertiary TVET system suffers from very low non-public sector participation in organized and recognized provision and remains rather monolithic in terms of conceptual approaches and rigid in pathways.
- 6. There is poor student attendance which is particularly serious in primary TVET schools, where students tend to belong to poorer families, a lack of adequate teaching materials including textbooks, and theoretical and memory based learning and assessment.
- 7. Guidance and information to help various target users' categories (youngsters, adults and enterprises) of the TVET system to consult,

- identify and make decisions concerning the value of various TVET options, are not available in a systematic and readily accessible way.
- 8. In recent years impulses and demand for TVET reform (institutional, structural, content and methods) originate outside the institutionally leading MoE; but face difficulties linked with poor co-operation and open dialogue among relevant bodies due to diverging interests.
- 9. *Institutional setting and policy making* in the leading Ministry (MoE) in the areas responding for preliminary and secondary TVET are divided, as are the TVET schools under their tutelage.
- 10.Institutional capacity: exposure of TVET sector decision makers and managers to new models and international practice have been very reduced due to the concentration of international technical assistance in the areas of general education and of higher education. A majority of leading staff in the TVET system are older generation persons, and not adaptable to a new vision of the system.

One the most visible findings of the 2003 Labour Force Survey concerns the extremely high unemployment rate of the active Azerbaijanis with secondary general education, across age groups, as well as the small number going on to post-secondary education and training. This gap concerns various levels of competences: production operators, maintenance services, technologists, middle management; restaurant service skills, cooks, hotel service competences.

We can further note that, of the \$3 billion State Budget in 2006, there was \$0.5 billion for targeted for education of which only \$22 million was for TVET i.e. only 5% of the Government's education budget was allocated for skill training which is less than 1% of the Government's overall budget for an area critical for the future of Azerbaijan's non-oil sector and employment.

In the previous chapter we looked at an overall strategy for the education sector. Reforms of technical education are clearly needed yet these will take a decade or more simply because there is always inertia in a system that worked well before but, today, appears to be difficult to change rapidly. Our suggestions, therefore, are to use oil money not only to reform the public education sector but to use it to help the existing population to gain needed skills as rapidly as possible. The use of the oil money must be made offshore as far as is possible to avoid Dutch Disease. We have six main suggestions how this can be done – scholarships abroad, private sector skills training, education park, ICT online skills training, community colleges and an educational radar system. These form an integral part of our suggested accelerated skills

development programme. All these components can be assisted by a *HUman CApital DEvelopment Fund (HUCADEF)*². Each component is discussed next.

5.2 SCHOLARSHIPS ABROAD

A major impetus to implementing this part of the HUCADEF was given on 20 October 2006 when President Aliyev signed a decree on a State program for Azerbaijani youths to get an education abroad. In brief, it stated that the Ministry of Economic Development, Ministry of Education and other appropriate institutions must 'prepare the State program on Azerbaijani youths getting education abroad and present to the President within 3 months, for ensuring Azerbaijani youths education in popular foreign universities, and strengthening them for development of independent Azerbaijan'

Such a Scholarship Programme (SP), as part of the HUCADEF, will provide Azerbaijanis with the opportunity to study abroad and gain a world-class education. On completion, these scholarship holders return home to fill jobs and also to create jobs for others since they make the country's economy more internationally competitive. A Scholarship Programme also provides a mechanism for investing the country's rapidly growing oil revenues in education and training without contributing to Dutch Disease since the money will be spent offshore to enable Azerbaijanis to study in accredited foreign Universities, technical training institutions and higher education institutions.

Consequently, a Scholarship Programme is one of the best ways of converting 'black gold into human gold'. How, though, can Azerbaijan ensure that people who obtain these skills return to Azerbaijan? Whatever scheme is devised will, inevitably, lead to leakages. For instance, BP's scholarship programme for highly skilled engineers led to 25% staying abroad.

But these leakages i.e. Azerbaijani's who stay abroad, are certainly not negative. First, Azerbaijan will benefit by having an increased world Diaspora who, as many other countries have shown, will send remittances back home. Second, Azerbaijan will benefit through having well educated ambassadors located abroad. Third, when these Azerbaijani's eventually return to Azerbaijan, as many eventually will, they will bring the skills that can only be obtained through the type of on-the-job training that many will receive.

² Terminology kindly suggested by the SPPRED Secretariat.



How to ensure return?

The best way is to use a system of incentives – the carrot rather than the stick. Each student could sign a contract, or bond, with the Government that simply states that they would return to Azerbaijan once their studies are completed for at least two years.

Who?

The scholarship scheme should be open to all Azerbaijani's irrespective of age or sex. Care must be taken that it is not only the elite who benefit since the idea is to improve the skills of Azerbaijanis right across the board. The Scholarship Programme should not prioritize specific skills. To enable good decisions, the Government should provide information to potential students of future job prospects - the system used by Canada known as 'Job Futures' is a good model (details below).

However, a totally liberal scheme is likely to swamp the fund with applications. Hence there must be a selection procedure. Again, this should not be too cumbersome nor penalize the less articulate Azerbaijanis whose future skills will be, nevertheless, required. The most efficient way would be to organize a transparent lottery scheme through regular, say quarterly, competitions.

What?

The objective of the Scholarship Programme should be to provide training opportunities abroad to give people the education and skills they need to maximize the sustainable development of Azerbaijan.

Scholarships could be provided for one or more of the following categories:

- Undergraduate degree programmes (two to three years)
- Post-graduate degree programmes (one to two years)
- Doctoral programmes (subject to time limits)
- Longer term technical training
- Short-term skill formation courses (less than a year)

A scholarship will be comprised of the following components:

- Tuition fee
- Living expenses (e.g. accommodation, meals, local transport, etc.)
- Textbooks and equipment allowance (e.g. computer)
- Travel expenses (one economy-class return ticket a year)

Living expenses are generally estimated by the university or higher education institution. In case the living expenses are not specified, the UN stipend for fellowship can be considered.

How many and how much?

There is no easy answer to this question. However, numbers should be significant in order to ensure a critical mass of new skills in the country that will encourage future growth. So we are talking about thousands rather than hundreds. The main economic rationale, of course, is how much the country thinks it can afford and how this money will be allocated among different types of courses – a US University would cost something like \$30-50,000 a year in fees, travel and living costs, while a shorter two week course at, say, ILO's Turin Training Centre in Italy would cost around \$3-5000 per week. The table below gives a rough idea of annual investment costs plus 13% overhead for administration.

Table: Scholarship Fund Estimates (\$US/year)

Course									
Length	Investment	Numbe	rs of st	tudents		Investment			
(weeks)		Α	В	С	D	A	В	С	D
52	50 000	500	1 500	5 000	10 000	25 000 000	75 000 000	250 000 000	500 000 000
26	35 000	500	1 500	5 000	8 000	17 500 000	52 500 000	175 000 000	280 000 000
13	20 000	500	1 500	5 000	3 000	10 000 000	30 000 000	100 000 000	60 000 000
6	15 000	500	2 000	4 000	2 000	7 500 000	30 000 000	60 000 000	30 000 000
3	9 000	1 000	3 000	6 000	2 000	9 000 000	27 000 000	54 000 000	18 000 000
	Total	3 000	9 500	25 000	25 000	69 000 000	214 500 000	639 000 000	888 000 000
	Overhead (1	3%)				8 970 000	27 885 000	83 070 000	115 440 000
	Grand Total					77 970 000	242 385 000	722 070 000	1 003 440 000

[Note: A,B,C and D are possible patterns of numbers and types of courses]

The total investment, as the table illustrates, depends on the total number of students and the composition of the course selected in numbers of weeks. The unit costs in the table are based upon published figures from US Universities and the ILO training costs noted above. Both these latter costs could be smaller through choosing cheaper educational establishments in cheaper countries, but it is likely that cost reflects quality.

With the pattern of student demand shown, then 3,000 students would need an investment of around \$78.0 million, 9,500 students \$242.4 million, and 25,000 students \$722.1 million. Should the pattern of student demand change to a preponderance of University and/or longer courses then 25,000 students studying abroad would need an investment of approximately \$1 billion (all figures include 13% management overhead).

Status

The scholarship fund could be managed similarly to the oil fund, with its own independent advisory board. The Director should be one of complete integrity, and well-known. He/she could even be a foreign national or assisted by one. Another location could be as part of the UN system in Baku because of its international reach and well-known probity. It is essential that the scholarship fund has high probity coupled with independent and publicly provided audits on a regular basis.

5.3 PRIVATE SKILL TRAINING

Private skill training is, of course, underway throughout Azerbaijan both informally and more formally through the large private companies such as BP. The fact that these training systems have been so well developed, in-country and on-site, by the private sector, illustrates that targeted skills development is possible, practical, and implementable. What is needed is public/private cooperation to bring these techniques into broader public institutions.

5.4 EDUCATION PARK IN AZERBAIJAN

The Scholarship Programme will be attractive to many Azerbaijanis. There will, however, be many who do not wish to travel abroad for family and/or cultural reasons. Therefore, another system to accelerate education and skill learning would be to attract overseas institutions to locate in Azerbaijan in, say, an educational park and award qualifications that are at the same level as in the host country. Some expenditure would be overseas while some would be onshore – mainly construction - with the overseas institutions and instructors being paid offshore. A useful experience to explore is Education City in Qatar – an educational park where top level foreign institutions set up and award the same qualifications as in their own country.

A major advantage to Azerbaijan is that a high quality education park will create competition in higher education that would, eventually, lead to increased skills in its own public education system. The education park could also be linked to 'twinning' whereby experienced educators and skill trainers are invited to Azerbaijan for short to long periods.

5.5 ICT ONLINE SKILLS TRAINING

Corporate HRD has now evolved to the point that increasingly, technical training programmes are conducted online. CISCO Systems for example has extensive Networking Academy Programs whereby global e-learning

opportunities are available for students worldwide to pursue IT curricula through online instructor-led training and hands-on lab exercises. Professional certification and re-certification is offered online for three levels of expert and technical specialties and associates. New and emerging occupational titles include internet work expert, security professional, and network associate among many others. Different tracks across these levels align with varying career needs. Azerbaijan has already started in this area with the support of UNDP – CISCO Systems are active and the Government has a multi-million dollar commitment to computerize the school system.

5.6 COMMUNITY COLLEGES

Community colleges have proved to be very successful in the USA in up to 2-year adult training and learning. During the 1960s, more than 450 community colleges were created as part academic, part vocational/technical post-secondary institutions. Although their titles, scope and purposes varied, the principles behind this overall movement were committed to:

- local accessibility: with sites being based in all geographic regions
- strong local community support and private sector and business links
- maintaining currency with technological change
- small student populations and high faculty/student ratios
- faculty devoted exclusively to teaching, without research obligations
- opportunities for `second-chance' learning to high-school equivalency for adults, and
- transfer programs to four year academic institutions.

The two year college provides many options for `catch-up' general education development for adults, technical and vocational training, or a potential university track. The vision behind the open enrollment community college initiative has focused on a target group of the largely (educationally) neglected majority of young people emerging from secondary schools, but without opportunities to take time or commit resources to go on to a four year academic degree. The college transfer programmes (through formal articulation with `twinned' four year degree programs at nearby universities) offer the chance for those wanting more than just a semi-professional or associate degree.

The model has been adopted in several developing economies. Modalities include extensions of US colleges overseas, or independent institutes functioning as national or local entities (e.g. Russia, Indonesia, Korea, South Africa, Korea, Yemen and Jordan). In addition, collaborative virtual programming is now widespread between post-secondary institutions. Azerbaijan could initiate a `community college pilot' experiment in either a

newly constructed facility, or in an adapted, existing one. It could be standalone, or part of the education park. Eventually, community colleges could be established throughout the country with close ties to the private sector in that region.

5.7 A SKILL RADAR SYSTEM

The basic idea is to create a nation-wide system of knowledge-based decision data on educational output, job openings and requirements. Such data would be:

- for employers seeking either specific skills (outputs) or information inputs (on new skills needs) into education and training programmes,
- as career information for individuals making livelihood decisions regarding education or job choices
- for education and training planners and policymakers
- for teachers, instructors and administrators, and counsellors, and as support for comprehensive career development programmes through services, products and training, and
- for legislators as evaluative evidence of public expenditures on education and training at all levels.

The value-added of this kind of systematic approach is analogous to a radar facility at a major airport. Routine periodic 'scans' of the labour market (demand) and educational output (supply) are detected, and interpreted by trained analysts, and disseminated in different formats for each constituency. Changes in occupational movement, characteristics, and mass can be traced, and as with individual aircraft which make up the 'pattern', specific sectors are identified and the system can track their trajectories. Employment data from several sources provide a rich variety of occupational information, such as average wages, job requirements, and regional disparities in work opportunities by economic sector. Educational program offerings (academic and vocational) are also made available, by institution and programme type, and where appropriate (e.g. professional certification, or TVET) can be linked to occupational requirements. Career guidance in high schools and universities can benefit also from these kinds of data.

A useful radar scanning model is the one used by Canada and known as Job Futures (JF). JF aims to improve Government policy and provide students, training institutes, career guidance specialists with internet based information on available, and future, educational and occupational choices. Such information, also known as labour market signals, would contain for each main occupation and field of study: earnings by age group (highest, average, lowest); work prospects currently and in five years time (good, fair, or limited);

past unemployment rates with comparison to the overall level. The aim of this information will be to increase labour market efficiency in the countries selected. An unusual aspect of JF is that it brings labour market information directly to the grassroots level thereby enabling individuals to increase their own choices in the labour market.

JF would provide Azerbaijanis with information on current and future market conditions to make effective and informed career and education choices. Being aware of current or future labour market conditions is a crucial exercise required at various intervals throughout a person's life. The use of timely and reliable labour market information (LMI) is a key step to improving the efficiency of the decision-making process for the Government, educational institutions, vocational training establishments, employment services, students, new entrants into the job market, existing workers, and private and public businesses and corporations.

But, any programme is only as good as the information on which it is based. The labour market in Azerbaijan is likely to change considerably in the future and keeping abreast of these changes from a wide array of sources is critical to ensure that Azerbaijanis have the right set of skills and knowledge required to compete effectively in the labour market. The Labour Force Survey, carried out with UNDP support in 2003 and 2006, is particularly useful for labour market analysis and needs, like advanced countries who conduct a labour survey every month, to be carried out much more frequently.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

The preceding chapters have sought to explore some of the issues associated with the Government of Azerbaijan using its new oil revenues to successfully achieve long-term sustainable economic growth in ways which benefit all segments of Azerbaijani society. The chapters have explored the broad strategic landscape in which policy and investment decisions must be understood and implemented to ensure that Azerbaijan can achieve sustainable and equitable growth.

The report places considerable emphasis on using oil revenues to significantly expand human capital development and skills formation as a means to dampen the effects of Dutch disease, promote growth in the non-oil sectors, and reduce poverty and income inequality. Taken together, this component of Azerbaijan's oil revenue strategy can have major dividends in achieving the country's future vision and promoting Azerbaijan's fuller integration in the global economy over the medium and long term.

In addition to these broad conclusions, six specific observations drawn from our analyses are:

- 1. For the immediate future, as much of the new oil revenue monies as possible should be allocated to the State Oil Fund until the Government is clear on how it wants to use these revenues and can ensure that deployed revenues will be used in a cost-effective manner.
- 2. The public education system is creating a large number of secondary educated young people who find it very difficult to obtain jobs. They lack the necessary skills, but at the same time they cannot easily find jobs even with the skills they do have. More coordination, information and analysis are required to better understand and address the supply of educated labour and its current and anticipated demand.
- 3. There is a need for more strategic, inter-ministerial cooperation and coordination, particularly between Ministries involved in skills formation, and between public and private sectors, parents and students in charting a new course for human resources development for Azerbaijan.
- 4. There is general consensus that skill development has been subsumed into a discredited public vocational education system.

The Government has realized that much more must be done to achieve a more integrated response requiring public/private cooperation, supply and demand analyses, in addition to more flexible TVET to rapidly raise skills so as to make the non-oil sector competitive internationally.

- 5. Human resource development can play a leading role in creating self-sustaining economic development (a virtuous circle). The experience of countries who have successfully employed such a strategy, such as the Republic of Ireland, strongly suggests that creating a skilled work force is a necessary pre-condition. However, human resource development alone is *not* sufficient for success. It is necessary to ensure that competitive export industries are to able to spring up and ensure the employment of the skilled workers that have been created. This requires creating economic conditions where potential investors are not deterred by, for example, lack of access to export markets, entrenched monopolies or governance problems. Of course, failure to ensure a suitable environment for such employment to be generated could result in the creation of a skilled work force with only poor prospects of employment.
- 6. The Government, through its acceptance of the scholarship idea has seen the need to use oil revenues offshore so as to raise the quality of domestic human capital. They have also seen that skill development, i.e. the supply side of the labour market, is a necessary but not a sufficient condition to develop the non-oil sector. Prudent economic management is also required on the demand side. We recommend that a much wider fund be considered to cover the main aspects of skill development while using funds offshore as much as possible the HUCADEF. It should also be used to reach a large target population and a wide set of skills.

In exploring potential next steps, we have sought to limit our recommendations to four inter-related component areas that touch the central question of converting "black gold into human gold." These areas represent what we call the "BGHG Principles" which serve as the framework for defining next steps. To date the BGHG work has been coordinated by an interministerial and inter-sectoral Advisory Board. We recommend that this Advisory Board be continued into the future to oversee some, or possibly all, of the recommendations made in this report.

The components embody two longer term macro goals associated with economic policy management and the formulation of a human resource

development strategy. The other two areas entail more tactical goals to address current needs and lacunae.

The four component areas are listed in the 'BGHG Strategic Principles: Programme of Action' matrix below as:

- Human Resource Development Strategy
- Macro-economic Issues
- BGHG Tools
- Cross-Country Learning and Cooperation

The second column in the matrix, 'Diagnosis,' pinpoints some key issues that give rise to the Key Component. The third column, 'Actions,' suggest a number of conclusions which imply actions that the Government could take to give momentum to the BGHG Principles. The fourth column then suggests a number of immediate next steps that would start the process of implementing concrete actions to address the component. We have put these next steps into a 12-month timeframe.

The fifth and last column notes the outcomes that we believe will occur if the identified next steps are carried out.

BGHG Strategic Principles Programme of Action

COMPONENT	DIAGNOSIS	ACTIONS	NEXT STEPS	OUTCOMES
			(1/1/07 - 31/12/07)	
Human Resource Development	Black gold multiplies opportunities for	Prepare National HRD Strategy	Identify agency responsibilities and management structure for design and	 Improved Skills Match
Strategy (HRD))	enhancing human gold		implementation of HRD strategy	
		Set up HUCADEF fund	Prepare support programme to assist the	 Reduced Dutch
			lund	disease, rocket Azerbaijan into list of
				successful nations
	Using as much oil	Undertake Accelerated	Create task force on ASD. Task force to	 More responsive HRD
	revenue offshore as	Skill Development (ASD)	examine options related to:	system
	possible for HRD will	programme as part of		
	have very important	overall HRD Strategy to	In the Public Sector:	
	macro-economic	meet urgent labour	 Upgrading technical education and 	
	benefits	market requirements	link it more to empirical indicators of	
			demand	
	Skills gap must be		In the Public-Private Sector	Much improved
	closed quickly		 Extending Scholarship Programme to 	labour market (eg
			widen target population	high productivity,
	Managing effective HRD		 Creating Education Park 	high efficiency,
	will require		 Twining Azerbaijani Institutions with 	flexible, highly
	unprecedented		Reputable Foreign Institutions	motivated, highly
	public/private sector		 Using ICT for training 	skilled)
	cooperation		 Exploring feasibility of community 	
			college model	

allocation mechanisms processes are in place Establish independent on the President to monitor effectiveness of oil revenue investment similar to UK OFT on Invest in ASD urgently roce Surveys and associated analysis (immediate decisions required) Link data and analysis to users (students, HRD based upon Canadian Job Futures Model Futures Model	Macro-economic Issues	Government mechanisms to efficiently allocate oil	Increase disbursement to State Oil Fund until	Establish task force within Office of President to examine options for improving all revenue allocation	Balanced and equitable growth
Sector Need improved social modeling tools need to molified modeling tools need to move government institutions was fundated and sets simplified be harmonized and simplified agovernment institutions was a strength of the president to monitor governmence levels invest in ASD urgently competitive non-oil sector Need improved social force Surveys and associated analysis to be harmonized and based upon Canadian Job Futures model, or simplified simplified in the president to monitor agovernment institution on the present investment simplified in the president to monitor of the President to monitor agovernment institution of the President to monitor and analysis to agovernment institution of the President to monitor and analysis to adventure and analysis to a perform feasibility study of applying is implified in the president to monitor and analysis to adventure and analysis to be harmonized and analysis to a president to adventure and analysis to adventure and analysis to a perform feasibility study of applying and associated analysis to a perform feasibility study of applying and associated analysis to a perform feasibility study of applying and associated analysis to a perform feasibility study of applying and associated analysis to a perform feasibility study of applying and a performance and analysis to		revenues need considerable	allocation mechanisms are in place	processes	
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to advanced country the President to monitor governance governance performance levels similar to UK OFT Danger of creating non- competitive non-oil sector Need improved social Agta sets Ago urgently Socio-economic Competitive non-oil sector Need improved social Agta sets Agreed in ASD urgently Socio-economic Competitive non-oil sector Need improved social Force Surveys Surveys and associated analysis (immediate decisions required) Socio-economic Carry out bi-annual labour force surveys and associated analysis (immediate decisions required) Socio-economic Link data and analysis to modeling tools need to planners, job seekers etc.) be harmonized and based upon Canadian Job Futures Model • Link to HRD above carry out bi-annual labour force surveys and associated analysis (immediate decisions required) Canadian Job Futures model, or simplified Futures Model		government institutions	M&E unit within Office of		allocations
performance levels revenue investment similar to UK OFT Danger of creating non-competitive non-oil sector Need improved social Perform regular Labour earry out bi-annual labour force Surveys data sets Socio-economic Curre Socio-economic be harmonized and beased upon Canadian Job Futures model, or simplified beavers etc.) Similar to UK OFT • Link to HRD above • Create statute/decree to enable SSC to carry out bi-annual labour force surveys and associated analysis (immediate decisions required)) Socio-economic Canadian Job Futures model, or simplified based upon Canadian Job Futures Model Futures Model		to advanced country	the President to monitor		
Danger of creating non- competitive non-oil sector Need improved social Again sets Need improved social Again sets Socio-economic modeling tools need to be harmonized and based upon Canadian Job Futures Model Futures Model Limk data and analysis to simplified Socio-economic based upon Canadian Job Futures Model Link data and analysis to simplified Socio-economic based upon Canadian Job Futures Model Link data and analysis to similar, to Azerbaijan Socio-economic based upon Canadian Job Futures Model		performance levels	revenue investment		
competitive non-oil sector Need improved social Adta sets Socio-economic modeling tools need to blanners, job seekers etc.) Socio-economic be harmonized and simplified Futures Model		Danger of creating non-	Similar to UK OF I Invest in ASD urgently	● Link to HBD above	lio-gon exiting
Need improved social Perform regular Labour data sets data sets Acary out bi-annual labour force surveys and associated analysis (immediate decisions required) Socio-economic Link data and analysis to modeling tools need to planners, job seekers etc.) Socio-economic Link data and analysis to modeling tools need to planners, job seekers etc.) Similar, to Azerbaijan Futures Model Futures Model		competitive non-oil	()		sector
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Need improved social Perform regular Labour data sets data sets Force Surveys Socio-economic Modeling tools need to planners, job seekers etc.) simplified Futures Model Canadian Job Futures model, or similar, to Azerbaijan Sectionary out bi-annual labour force surveys and associated analysis (immediate decisions required) Canadian Job Futures model, or similar, to Azerbaijan Futures Model					
Link data and analysis to users (students, Job seekers etc.) based upon Canadian Job Futures Model Lorce Surveys and associated analysis (immediate decisions required) Perform feasibility study of applying Canadian Job Futures model, or similar, to Azerbaijan Futures Model	BGHG Tools	Need improved social	Perform regular Labour	 Create statute/decree to enable SSC to 	 Much improved
Link data and analysis (immediate decisions required) Link data and analysis to users (students, HRD canadian Job Futures Model Eutures Model		data sets	Force Surveys	carry out bi-annual labour force	understanding of
Link data and analysis to users (students, HRD planners, job seekers etc.) based upon Canadian Job Futures Model Futures Model				surveys and associated analysis	labour market and its
Link data and analysis to users (students, HRD canadian Job Futures Model based upon Canadian Job Futures Model				(immediate decisions required)	trends
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users (students, HRD Canadian Job Futures model, or planners, job seekers etc.) similar, to Azerbaijan based upon Canadian Job Futures Model		Socio-economic	Link data and analysis to	 Perform feasibility study of applying 	 Improved technical
nized and planners, job seekers etc.) similar, to Azerbaijan based upon Canadian Job Futures Model		modeling tools need to	users (students, HRD	Canadian Job Futures model, or	training based upon
based upon Canadian Job Futures Model		be harmonized and	planners, job seekers etc.)	similar, to Azerbaijan	identified market
•		simplified	based upon Canadian Job		needs
			במנמו בא ואוסמבו		
					More efficient
					allocation of lesources

				informed of opportunities
		Harmonise existing economic modeling work	 Create inter-agency technical task force on modeling (immediately then 	 Improved understanding of
		Use modeling frameworks to identify data gaps	to meet every six months)	socio-economic policies and their impact on future living conditions of all the Azerbaijani
		Use modeling for policy analysis		population
Cross-Country Learnina and	Azerbaijan could benefit from	Identification of component elements or	 Inter-Ministerial team to assess target 	 Improved oil sector management and
Cooperation	experiences of other oil-	topics where cross-	Azerbaijan and deduce lessons learned	human resources
	exporting countries that have previously	country experiences would be beneficial		development garnered from other
	addressed similar policy			countries' experiences
	Azerbaijan could share its 'lessons learned' with	Explore options for sharing Azerbaijani	 Prepare and host international conference for oil comprises to chare 	 Azerbaijan achieves biok visibility with
	newer, less experienced	experiences with newer	experiences	newer oil-producing
	oil-producing states	oil-producing states		states based on its
				willingness to share its
				lessons learned

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