Economic Cooperation and Development Review is a new semi-annual periodical of SESRIC targeting policy-makers, government officials, academicians and researchers in the members of the Organisation of the Islamic Conference (OIC) as well as in the other developing countries. In addition to summaries of selected papers, studies and reports of SESRIC, the materials of this periodical also include short articles by eminent researchers on socio-economic development issues, which are of immediate concern to the developing countries. The birth of this new initiative by SESRIC comes at a time where the world is facing an era of unprecedented global geopolitical and economic challenges, particularly when the current global financial crisis is widely predicted to have serious negative impacts on economic growth and employment in both the developed and developing countries. There is a strong need in all parts of the world to design and implement timely economic policies to hinder the adverse impacts of recessions, and in particular, to reduce the burden of unemployment on the societies by overcoming jobs lost by the economic downturn with the new employment opportunities.

In this context, the first issue of Economic Cooperation and Development Review, published in September 2008, has addressed these critical issues in an article titled “The Growth Report: Strategies for Sustained Growth and Inclusive Development” by the Commission on Growth and Development, which reflects the views of 19 well-known and experienced government and business leaders, including two Nobel Laureates renowned economists, namely Prof. Michael Spence and Prof. Robert Solow. The article includes valuable recommendations for the developing countries in different regions of the world to support their efforts in facing the new global challenges, especially in terms of boosting their economic growth, and so, employment opportunities. I am pleased to report that SESRIC continues its efforts to furnish and update the member countries with the necessary knowledge and experience that would make them better prepared to face the global economic challenges. In this connection and within the framework of this year’s programme, the Centre will organise in collaboration with the Central Bank of the Republic of Turkey, a consultative meeting for the Central Banks of the member countries to discuss possible means and ways of cooperation with a view to strengthening the economies of the member countries in the face of the global financial crises in Autumn 2009.

The first issue of the Review, which has been circulated widely within the OIC community and elsewhere, particularly at the highest levels of the governments of the OIC member countries, including the heads of states, ministers, senior officials, and academicians, has been very well received and highly appreciated at all levels and by all measures. This encouraging feedback will no doubt foster our enthusiasm to further developing this periodical as an effective means for enhancing the Centre’s efforts to provide the necessary and up-to-date information and knowledge that would make the member countries better informed of each other’s capacities and needs as well as challenges and potentials.

The second issue of the Economic Cooperation and Development Review includes an interview with
H.E. Abdullah Gül, President of the Republic of Turkey and Chairman of the Standing Committee for Economic and Commercial Cooperation of the Organisation of the Islamic Countries (COMCEC). Among other issues of concern to the OIC member countries and Islamic world as a whole, the interview focused mainly on President Gül’s views on the changes in the agenda and strategies of the OIC and COMCEC as well as the actions that are needed to be undertaken by the OIC and its member countries towards achieving more active role as partner in promoting international peace, security and development at both the Islamic world and the international levels considering the current geopolitical and economic challenges, particularly in the aftermath of the current unprecedented financial and economic crisis.

This issue also includes three articles on issues of immediate concern to the developing countries. The Director General of the FAO presents his views on “Food Crisis and Developing Countries” whereas the UNDP Resident Representative to Turkey on “Income Inequality and Growth”. Finally, the Governor of the Central Bank of the Republic of Turkey shares his very valuable views on the global financial crisis and policy recommendations in his article titled “The Impact of the Current Global Financial Crisis on the Economies of the Developing Countries and Policies of the Central Banks”.

I would like, at the end, to avail myself of the opportunity of publishing the second issue of the Economic Cooperation and Development Review to express our deep thanks and gratitude to all the contributors and our pleasing welcome, at SESRIC, for suggestions from economists, policymakers, government officials, academicians and researchers in the OIC community and elsewhere on enhancing the contribution of the Review to the development agenda of the member countries.

Dr. Savaş Alpay
Director General
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SESRIC CALENDAR

12-13 April 2009: Experts Group Meeting on Human Rights Commission; Jeddah, Saudi Arabia

14-16 April 2009: 25th General Assembly and 7th Board of Directors Meeting of the Islamic Chamber of Commerce and Industry (ICCI); Cairo, Egypt

18-19 April 2009: 12th Meeting of the Governmental Group of Experts on the Situation of Muslim Communities and Minorities; Jeddah, Saudi Arabia

28-29 April 2009: International Conference on Islamic Economics and Economies of the OIC Countries; Kuala Lumpur, Malaysia

28-30 April 2009: 2nd Forum of Tourism and 3rd International Conference on Investment and Privatization; Tehran, Iran

04-06 May 2009: Meeting of Senior Officials Preparatory to the 36th Session of the Council of Foreign Ministers (CFM); Jeddah, Saudi Arabia

10 May 2009: 2nd Project Committee Meeting on Cotton; Izmir, Turkey

13-14 May 2009: 1st Meeting of the Development and Cooperation Institutions (DCIs); Istanbul, Turkey

13 May 2009: 1st Meeting of the Monitoring and Advisory Committee (MAC) of the Vocational Education and Training Programme for OIC Member Countries (OIC-VET); Izmir, Turkey


23 - 25 May 2009: 36th Session of the Council of Foreign Ministers (CFM); Damascus, Syria

02-03 June 2009: 34th Annual Meeting of the Board of Governors of the Islamic Development Bank; Ashgabat, Turkmenistan
INTERVIEW WITH H.E. ABDULLAH GÜL, PRESIDENT OF THE REPUBLIC OF TURKEY AND CHAIRMAN OF THE COMCEC

Abdullah Gül was born in Kayseri on October 29, 1950. After he graduated from Kayseri High School, he continued his education at Istanbul University in the Department of Economics. He spent two years in London and Exeter for his academic studies while pursuing his PhD. He received his doctoral degree from Istanbul University in 1983.

Gül served in the establishment of the Department of Industrial Engineering at Sakarya University where he taught economics to engineering students for five years. He became an associate professor in international economics in 1991 at Istanbul University.

He worked as an economist at the headquarters of the Islamic Development Bank in Jeddah from 1983 to 1991.

He was elected from Kayseri as a Member of the Turkish Grand National Assembly (TBMM) for five consecutive terms between 1991 and 2007. He was a member of the Plan and Budget Committee of the TBMM from 1991 to 1995.

Gül worked as a member in the Committee on Culture, Science and Education, Committee on Economic Affairs and Development, and the Political Affairs Committee in the Parliamentary Assembly of the Council of Europe (PACE) from 1991 to 2001.

In 2002, upon completion of 10 consecutive years of service Abdullah Gül was awarded with the Pro merito medal and the title of Permanent Honorary Member by the PACE.

He served as a member of the Foreign Affairs Committee in the TBMM from 1995 to 2001. Gül was the Spokesman and the Minister of State in the 54th government formed in 1996. He led the Reformist Movement and competed for the Chairmanship of the Virtue Party in 2000. Gül was among the leading figures in the establishment of the Justice and Development Party (AK Party). He served as the Deputy Chairman in charge of Legal and Political Affairs.

He was a member of the NATO Parliamentary Assembly in 2001 and 2002.

Gül became the Prime Minister and formed the 58th Government on November 18, 2002. He served as the Deputy Prime Minister and the Foreign Minister in the 59th Government from 2003 to 2007. Abdullah Gül was elected by the TBMM as the eleventh President of the Republic of Turkey on August 28, 2007.

SESRIC: The Organisation of the Islamic Conference (OIC) has been established on 25th September, 1969 with 30 founding Member States and is now the second largest intergovernmental organisation after the United Nations. After 4 decades, the OIC has become the collective voice of the Muslim world with 57 Member States. Recently, many political, social and economic initiatives and programmes of action, including the new Charter of the Organisation, have been introduced and adopted, particularly since 2005 when Prof. Ekmeleddin İhsanoğlu was the first Secretary General in the history of the Organisation to be elected through actual voting by the Member States. Now, on the occasion of the 40th anniversary of the OIC, how do you view these changes and their reflections in the future operations and the overall functioning of the OIC? And considering the current geopolitical and economic challenges, how do you project the OIC as an effective partner in promoting international peace, security and development?

H.E. PRESIDENT GÜL: I am confident that the Organization of the Islamic Conference can have considerable influence in shaping various developments on the international arena.
In recent years, Turkey has assumed a more active role in the OIC and has been a strong advocate for reforms in the organization. As a result of the reform process, the OIC is increasingly becoming a more dynamic and effective international player. I commend the role played by Secretary General Ekmeleddin İhsanoğlu in strengthening the role of the OIC as the voice of the Islamic world.

During its membership of the Security Council, Turkey will seek to utilize its prominent role within the OIC to help facilitate consensus and cooperation among OIC members on important issues that preoccupy the Council.

The OIC must have an important role in finding solutions to the problems and conflicts in its area. The Palestinian issue, which very recently went through a new and tragic episode, being first and foremost, the OIC is acting with the understanding that political problems in the OIC area have severe human end economic repercussions. These must be dealt with and the OIC should continue to be a strong presence in efforts aimed at bringing just and sustainable solutions.

H.E. PRESIDENT GÜL - This year we will be celebrating the 25th anniversary of the establishment of COMCEC. I consider this event to be a significant opportunity which will enable us to take up in detail our future-oriented policies. In the last quarter of a century, we have been able to achieve considerable improvements and developments within the framework COMCEC. With its renewed agenda, COMCEC has strengthened its capacity as a platform for effective cooperation and exchange of views. It is now putting in place a better-established structure and offering solutions for addressing current issues, such as the financial crisis, energy security and food crisis.

But while dealing with pressing economic issues, we must never lose sight of other challenges that afflict the peoples of many OIC countries to some degree. Political and social reform, focusing on good governance and institutionalizing accountability are difficult but crucial reforms that will raise the standard of living of our populations. Greater transparency must be achieved so as to establish more efficient
economies, responsible utilization of resources and a fairer distribution of wealth and justice. Failing to record progress in these areas is certain to impede development and waste resources.

Returning to economic issues, as you know, at the 24th Session of the COMCEC, held in Istanbul on 20-24 October 2008, a Road Map for enhancing Intra-OIC Trade was adopted. Within this framework, joint action will be taken on five priority areas namely, trade financing, trade facilitation, capacity building, trade promotion and development of strategic commodities. In this connection, we attach special importance to the Preferential Trade System becoming operational rapidly. There is no doubt that, removal of barriers on trade and investments are not enough. Providing support to countries with inadequate production capacity is also of high importance.

In this context, strengthening intra-OIC cotton cooperation is deemed as a priority area. We believe the First Meeting of Cotton Research Centers and the First Project Committee Meeting on Cotton which Turkey has hosted in February 2009 in Menemen-Izmir, will be instrumental in paving the way for further cooperation in this field. Hence, to streamline all these policies and reaffirm our commitments at the highest level, I believe that it would be beneficial if the 25th anniversary celebrations culminate in an “Economy Summit” in Istanbul. Therefore we are looking forward to high level participation from the COMCEC member countries this year. Turkey, for its part, is committed to giving all necessary support to cooperation initiatives within the OIC and COMCEC.

SESRIC: The Republic of Turkey was one of the 30 founding members of the OIC in 1969. Over the last four decades, Turkey has been playing an active role and sparing no effort to strengthen the solidarity and cooperation among the OIC Member States in the spirit of promoting peace, dialogue and development globally. Recently, Turkey has not only intensified its diplomatic and political ties with many countries including the OIC Member States, but also increased its economic and technical support, particularly to the least-developed countries in Africa. Turkey launched many special development assistance programmes for African countries in recent years through the Turkish International Cooperation and Development Agency (TIKA), which together with some Turkish NGOs, has been undertaking various developmental projects and providing technical and financial support to many OIC members in Africa.

Given this state of affairs, and considering, on the one hand, the recent socio-economic reform experience of Turkey and its remarkable development performance record during the last 6 years, and given the current geopolitical and economic challenges on the other, how do you view the role of the Republic of Turkey as a member of the OIC in promoting peace, security and development at the OIC level?

H.E. PRESIDENT GÜL: Peace and security cannot exist without sustainable economic development. One of the pillars of strong diplomatic ties is cooperation in the area of economic and social development. Turkey has increased its efforts in that area by engaging economically in the OIC countries. One of the
aspects of this engagement is economic development assistance. Turkey’s contributions to some members of the OIC in 2007 amounted to $542 million. Of that total amount, $31 million was directed to Africa, close to $81 million was spent in Balkan countries, and $430 million went to OIC countries in Asia. This figure is expected to exceed $500 million for 2008. This clearly demonstrates Turkey’s commitment to cooperation for economic and social development in the OIC countries. Turkey will continue to maintain its engagement in the OIC countries with contributions in direct development assistance.

SESRIC: In the last two decades we are observing a strong divide between the ‘West’ and the ‘East’. Conflicts, tensions and desperation seem to supersede harmony, tolerance and hope in the international arena. In such a fragile state of affairs, Turkey’s accession process to the European Union is followed attentively in all parts of the world, and in particular in the OIC Member States. If the negotiations are completed successfully, Turkey will be the first EU member with a predominantly Muslim population. While this is mostly considered as a great opportunity for strengthening the efforts towards tolerance and dialogue among civilizations, there are also concerns in the minds of some people living in different OIC Member States in comprehending the membership process of Turkey to the EU essentially on the basis of cultural and religious differences. How do you project the accession process and the full membership of Turkey to the EU regarding the realization of a better world with more tolerance, harmony, dialogue and stability and how do you envisage the associated implications for the OIC?

H.E. PRESIDENT GÜL: The debate on where Europe begins or ends, whether the EU is about geography, culture or religion often resonates with prejudice. Turkey’s integration with the EU is a project that transcends the borders of our continent in its full political, economic, cultural and overall strategic implications. Turkish membership will give substance to the idea that diversity is richness and that unity in diversity is desirable and possible.

This new vision will demonstrate that diversity and differences may well be accommodated on the basis of common values and interests. It is not a coincidence that from the two ends of the Mediterranean, the Prime Ministers of Turkey and Spain have co-sponsored the Alliance of Civilizations Project launched by the UN Secretary General. This is a significant undertaking; in fact, Turkey’s accession to the EU will constitute an alliance of civilizations under the roof of the EU.

Europe is bound to be a global model of coexistence and diversity where experiences, traditions and cultures merge into each other. Turkey’s membership to the EU will also be a positive message to the 16 million Muslims who live and work in the EU countries. These people will feel that they are accepted in the societies in which they live and the EU in return will be able to demonstrate to the rest of the world that it is against a split based on religion.

Moreover, Turkey is the only country that is both a member of NATO and the OIC. With this status it helps obtain a better understanding of the OIC countries in the western institutions and also contributes to the development of the
relationship between the west and the OIC. As a member of the EU, Turkey would be even better placed to live up to this role. Turkey has an overwhelmingly Muslim population and is a member state of the OIC. However, Turkey has also embraced a Western orientation. In a way, Turkey constitutes solid proof that these two facts can very well be complementary and not contradictory. In such a picture, where Turkey has close contacts with both parts of the world, its membership to the EU will enhance Turkey’s constructive role in facilitating cross-cultural and inter-faith dialogue at a strategic junction between the East and the West. This is widely acknowledged as an important contribution towards building bridges in an international climate characterized by a growing cultural rift.

This approach is not just a choice we made in 1923 when the Republic was formed, but a natural consequence of our deep-rooted heritage of tolerance and peaceful co-existence. Turkey strongly believes that human beings, regardless of their differences in language, religion, status and wealth, are equal to each other. Therefore, they should treat each other with the respect, understanding and empathy this recognition entails. Based on this approach, Turkey strives to help forge effective channels of communication and dialogue between different cultures. In fact, our desire to help bring the best of both worlds together in harmony is reflected in Turkey’s co-sponsorship of the “Alliance of Civilizations” initiative, a fast growing project bringing together 76 United Nations member nations and 13 major international organizations under the auspices of the UN Secretary General, which seeks to address and remedy the polarization between the West and the Islamic World.

H.E. PRESIDENT GÜL: From the beginning, we highly appreciate the valuable contributions of SESRIC to the OIC countries and to the work of COMCEC through its reports, evaluations and recommendations. We feel privileged to host this Center in Ankara. SESRIC, in addition to working in its mandated areas, is the major research arm of the OIC and COMCEC. I was pleased to learn that currently, SESRIC is preparing a research document on enriching the COMCEC agenda that will take into consideration the needs of the OIC member countries and be presented to the 25th Session of the COMCEC. I also deem it of crucial importance that SESRIC continues to monitor world economic developments and their implications for the OIC Member States and report its policy recommendations to the COMCEC.

SESRIC: Thank you for your time, Your Excellency.
No one denies that the world today is in a crisis. The severe financial and economic crisis was preceded by a food crisis that disrupted the international agricultural economy and highlighted the fragility of world food security. It has also showed that reviving local food production, especially in low-income food-deficit countries, is the only viable and lasting solution to the fight against hunger. We must therefore invest more in agriculture.

The Global Food Crisis

The last three years have witnessed a rapid increase in food prices. The FAO Food Price Index initially rose by 9 percent between 2005 to 2006, then by 24 percent the next year, and by 40 percent during the first months of 2008. In July, good prospects for world production led to a decline in the prices of major cereals, but prices are still high by historical standards. For instance, the Food Price Index in October 2008 was still 30 percent higher than it was two years ago. Add to this, input prices have doubled, even tripled, and have become inaccessible to small farmers.

The food price crisis has had dramatic economic, social and political consequences. In 2007 alone, mainly because of high food prices, the number of hungry people in the world rose by 75 million instead of declining by 43 million to achieve the commitment of the 1996 World Food Summit. In 2008, a further increase of 40 million people is expected, bringing the total number of people suffering from chronic hunger to 963 million. This means that almost one billion people (or 15 percent) out of the 6.5 billion world population is undernourished.

The devastating effects of high food prices on the number of hungry people compound already worrisome long-term trends. The progress made by countries or regions towards the achievement of the internationally agreed goals of hunger reduction has been put in reverse because of high food and agricultural input prices.

International prices of major food commodities have come down since July 2008, but the crisis is far from being over. Reduced food consumption even for short periods can have long-term consequences. Furthermore, with un-replenished cereal stocks, unprecedented high levels of food prices in local markets, high input prices, the global credit crunch and the economic slowdown and uncertainty, food security continues to be under serious threat. In fact the downturn in prices, to which farmers respond, could lead to reduced production in 2009/10 and possibly another food crisis. This may be compounded by the financial crisis.
The impact has been stronger in the developing world, especially in poor countries, who do not have the supply response capacity to profit from the price increases. In response to more attractive prices, the developed countries, which have a higher elasticity of supply relative to demand, have increased their cereal production in 2008 by 11 percent, while developing countries only recorded a mere growth of 0.9 percent. In fact, if we exclude China, India and Brazil, production from this group of countries has actually fallen by 1.6 percent.

Lack of access to essential inputs, such as seeds, fertilizers and animal feed, whose prices increased by much more than output prices, have made it almost impossible for small farmers in developing countries to take advantage of higher prices. Structural constraints facing agriculture, such as poor rural infrastructure and lack of access to water, markets, technology and credit, hinder the expansion of production and productivity by small farmers and also their competitiveness and capacity to manage risks.

The financial impacts were also profound. The total food import bill amounted to 827 billion US dollars in 2007 and is estimated at 1,020 billion US dollars in 2008. This represents a year-on-year increase in import costs of 23 percent at world level and 35 percent for the developing countries. The situation has put fiscal pressure on the national budgets of many countries worldwide.

**What is Needed to Solve the Crisis?**

To win the fight against hunger and poverty, we must not only solve the food insecurity problem for the 963 million hungry people, but also double food production to feed a world population of 6.5 billion that will reach 9 billion in 2050.

A comprehensive twin-track approach is needed to meet the challenges of food insecurity and the adverse impact of the financial crisis and economic slowdown on hunger. The twin-track approach to hunger reduction advocated by FAO and its development partners is key to addressing not only the threats to food security caused by high food prices but also the opportunities that may arise. The focus should be on: (i) enabling the agriculture sector, especially smallholders in developing countries, to overcome supply-side constraints and increase their production and productivity; and (ii) targeting safety nets and social protection programmes to the most needy and vulnerable.

In the short term, carefully targeted safety nets and social protection programmes should be strengthened to ensure that everyone is able to access adequate food for a healthy life. In parallel, the focus should be on helping producers, especially smallholder farmers, to boost food production, mainly by facilitating their access to seeds, fertilizers, animal feed and other modern inputs.

In the medium to long term, efforts should aim to strengthen the agricultural sector of developing countries and its resilience capacity. Boosting food production in low-income food deficit countries through enhanced productivity must constitute the cornerstone of policies, strategies and programmes seeking to attain a sustainable solution for food security. This is essential not only to overcome the current crisis, but also to be able to meet growing demand for
food, feed and biofuels and prevent the reoccurrence of crises in the future.

Urgent, broad-based and large-scale investments in developing countries’ agriculture are needed to address in a sustainable manner the growing food insecurity problems affecting the poor and hungry. In conformity with the commitments of Monterrey in 2002 and Doha in 2008, the World Food Summit of 1996 and the second Summit of 2002, Official Development Assistance should be boosted, and the downward trend in agriculture’s share of development aid should be reversed. Investment should be increased particularly in water control and irrigation systems, seed production and multiplication facilities, storage, roads and transport infrastructure, fishing ports, slaughter houses and marketing and rural credit services.

At the High-Level Conference on World Food Security, organized and hosted by FAO from 3 to 5 June 2008, the delegates of 181 countries – including 43 Heads of State and Government and more than 100 Ministers – reaffirmed the need to produce more. The Conference declaration made clear that investment in agricultural production was the only basis for a lasting solution to the food crisis and that adequate resources should be made available. The G-8 Summit in Hokkaido in July 2008 and the Special Session of the United Nations General Assembly in New York last September provided opportunities to continue discussions of the causes of the crisis and the necessary responses.

In the framework of the commitments made at the FAO High-Level Conference on World Food Security and the G-8 Summit in Japan, 30 billion US dollars should be invested each year in agriculture in order to combat hunger and to feed a growing population. This should be possible in a world where 365 billion US dollars were spent in 2007 on support to agriculture in the OECD countries and 1 340 billion US dollars on armaments in both the developed and the developing countries, and in which more than 3000 billion US dollars were mobilized in only a few weeks to deal with the global financial crisis.

**What is Required at the Global Level**

Besides boosting investment in water control, rural infrastructure and agricultural services in the developing countries, we must work together at the international stage to forge broad consensus on the final and rapid eradication of hunger from the world. While a lot has been achieved over the course of 2008, several fundamental issues still have to be addressed.

That is why there is an urgent need to convene this year a World Summit of Heads of State and Government on Food Security to ensure greater coherence in the governance of global food security. The Summit should lay the foundations of a new system of agricultural trade that offers farmers in developed and developing countries alike, the opportunity to earn a decent living. They should earn comparable incomes to their fellow citizens in the secondary and tertiary sectors, if they are to remain in agriculture. To this end, we must have the intelligence and the imagination to devise agricultural development policies, rules and mechanisms that will give us an international trade regime that is not only free, but also fair.
The Summit should also mobilize 30 billion US dollars per year to build rural infrastructure and increase agricultural productivity in the developing world. In the immediate term, an “Early Reaction Fund” should also be envisaged to revive local food production in the case of crisis, particularly in low-income and heavily food-importing countries.

**Conclusion**

The time for talk has long past, and now is the time for action. The events of the past two years have reminded us just how urgent a massive and sustained acceleration of investment in agriculture has become.

Substantial commitments have been made for increased financial support to developing countries to develop their agriculture and address the food insecurity threats they face. However, unless the donor pledges are honoured and the promises are turned into urgent and real actions, millions more will fall into deep poverty and chronic hunger.

Not only this, but the recent food crisis has proven to be a serious threat to world peace and security.

But we also must revisit the way we do business. We must correct the international system which results in hunger and poverty. Sustainable agricultural development policies need to be developed, together with rules and mechanisms that will ensure not only free but also fair international trade. We need to ensure that the funds needed to revive agriculture and eradicate hunger from our planet are effectively made available. We know what to do, but we lack the means and the right setting to do the work. A new system of world food security must be established.
GLOBAL FINANCIAL CRISIS, ITS IMPACTS ON THE EMERGING MARKETS AND THE RESPONSES OF THE CENTRAL BANKS

Durmuş Yılmaz, Governor Central Bank of The Republic of Turkey

1. Seeds of the Current Financial Turbulence

At the end of 2000, with the manifestation of a global economic slowdown, the central banks of developed countries embarked on an aggressive monetary easing program. Lax monetary policies implemented during this period encouraged banks to take long positions especially in the real estate loan business, by borrowing at shorter maturities and low interest rates. Consequently, the real growth rate of credit volume in the USA and the European Union reached double-digit levels. As for developing countries, expansion in private credit volume was more pronounced. For instance, in Eastern European and Baltic countries, the average real increase in total credit extended to the private sector reached approximately 40 percent.

Developments in the securitization business and competition among banks contributed to the slackening of credit standards. In this period, low real interest rates in developed countries, mainly the USA, led investors to shift to high leveraged transactions and risky instruments. The widespread use of complex instruments with the contribution of financial innovation and technological advancements made risk analysis and pricing extremely difficult, and in some cases impossible. Parties in the originate-to-distribute chain did not have incentives to seek and provide information on the quality of assets. Furthermore, public authorities were way behind in assessing and regulating the complex financial instruments created by financial engineers. One of the side effects was that these financial instruments introduced new risks and fragilities to the financial markets. This has distorted the risk appetite and caused excessive risk taking.

Starting from the second quarter of 2004, the FED raised its policy rates to control inflationary pressures. Due to the decline in housing demand, the increase in house prices started to slow down in the midst of 2005 and thereafter declined. The decline in property prices in the USA had an adverse effect on the consumption demand of households and brought about an increase in delinquent credits and foreclosures.

The sharp decline in the risk appetite and concerns about counter-party credit risk caused significant deterioration in the credit and money markets and has led to a major liquidity squeeze. Losses of financial institutions have exceeded USD one trillion, consumer confidence has reached record low levels, house prices have been subject to free fall and personal income has declined markedly. All these factors have led to a major recession in the US economy.

Prospects for global growth have deteriorated over the past months, as financial sector deleveraging has continued, both producer and consumer confidence has fallen. In its latest forecast, the IMF sharply revised its growth projection downwards, stating that global activity is rapidly slowing down. According to this projection, world output is likely to expand by 2.2 percent in 2009, down by some 0.75
percentage points relative to projections in the previous World Economic Outlook report. Similarly, the OECD announced that 21 out of 31 member country economies would go into recession in 2009.

2. Measures Taken by the Central Banks

Record high global energy and food prices put considerable upward pressure on inflation rates starting from mid-2007. In addition, aggregate demand pressures played a significant role in raising inflation rates around the globe. In response to the threat of increased inflation, the majority of central banks in emerging economies have tightened their monetary policies in order to constrain aggregate demand growth and anchor inflation expectations. For example, between January 2007 and October 2008, when rates reached their maximum, the average increase in policy rates of emerging economies was 180 basis points. However, there were differences in the timing and tightening efforts of emerging economies. Reasons contributing to this discrepancy can be attributed to the relative exchange rate regimes, monetary policy frameworks, differences in the weights of food and energy in the consumption baskets, and differences in factors driving up the inflation rate. For instance, in Russia, where the fixed peg exchange rate arrangement is being implemented, the Central Bank did not change its policy stance between mid-2007 and January 2008, but started monetary policy tightening as of February 2008, and increased policy rates by 75 basis points between April-July 2008. On the other hand, inflation targeting (IT) central banks of emerging economies increased their policy rates starting from August, 2007 and the average change in policy rates between October 2008 and August 2007 reached approximately 120 basis points.

In addition to regular monetary tightening via short-term interest rates some countries implemented complementary measures to contain inflation expectations. These measures include credit controls and a rise in reserve requirements.

The measures undertaken by central banks during the recent period of financial turmoil can be categorized under three headings: reductions in policy rates, measures to stabilize the markets and measures to support corporate financing.

i. Reductions in the Policy Rates

It is inevitable that the current financial turbulence has had effects on growth and employment performance. High losses posted by financial institutions owing to financial turbulence led banks to tighten their conditions for lending. Coupled with reduced external demand, industrial production in both developed and developing economies has declined to the lowest levels since the second quarter of 2002. Parallel to the adverse developments in industrial production and export performance, economic growth rates have declined substantially. As of the second quarter of 2008, economic growth rates of advanced and emerging countries decelerated from 1.6 and 7.6 percent to 0.8 and 6.3, respectively. Furthermore, international organizations, governments and central banks expect economic activity to slow down further in 2009.
The evident deterioration in global growth prospects imminently drove down commodity demand. As a result, commodity prices bounced back from record high levels in the second quarter of 2008. Coupled with the decline in commodity prices, the fall in the domestic and external demand have brought about a significant decline in inflation rates. Similarly, inflation expectations have displayed a downward trend, too. Due to the unfavorable global economic outlook and expectation of decline in level of inflation, central banks changed their monetary policy stances. 8 out of 21 major emerging economies slashed policy rates by an average of 50 basis points in November, whereas the number of countries that lowered policy rates in December reached 11 and the average policy rate change increased to 71 basis points. Looking ahead, analysts expect the monetary easing in emerging markets to be prolonged in the upcoming period.

**ii. Measures to Stabilize the Financial Markets**

The intensification of financial market turmoil has brought about a high degree of uncertainty surrounding price stability and the outlook for economic growth, which threatened global macroeconomic and financial stability. This uncertainty became more pronounced after the filing for bankruptcy of Lehman Brothers, as another bout of risk-aversion was sparked. To avert the likely damage of the turmoil on their domestic economies, central banks have taken several measures. Depending on the conditions of the credit and money markets, measures aimed at stabilizing financial markets have varied among central banks. However, in general, central banks tried to keep the money market rates in line with their policy rates through reserve management, repo-reverse repo transactions, open market operations and other liquidity management instruments. Moreover, some of the central banks diversified the types of eligible collaterals, and broadened the range of counter parties in order to relieve the pressure on the broader funding markets.

The apparent fragile structure of the global financial system required cooperative action. To this end, the FED increased the size of the temporary reciprocal currency arrangements by USD 330 billion to reach USD 620 billion in order to provide resources for the USD liquidity transactions of the European Central Bank, the Bank of England, the Bank of Japan (BoJ) and the Swiss National Bank. Afterwards, the mentioned limit was completely lifted. To follow this, the FED added the central banks of emerging economies like Banco Central do Brasil, Banco de Mexico, Bank of Korea, and the Monetary Authority of Singapore to the temporary reciprocal currency arrangement list.

**iii. Support Corporate Funding**

Financial turmoil has hindered the link between financial institutions and the borrowers. As a result, financial institutions have curtailed the availability of credit to the borrowers or increased the cost of borrowing, and consequently the credit markets dried up and private credit growth both in developed and emerging economies slowed down sharply. For instance, the year-over-year decline in the outstanding commercial paper volume in the US reached 18 percent in July 2008. Also, bank
lending in the US has fallen by over $200bn - roughly a 10% annualized rate - since the series peak in the week of the 22nd October 2008. Moreover, US banks hold over $1.000 billion of cash as assets, which are over 5 times the typical holdings over the last 40 years.

Since corporate funding plays one of the key roles in economic growth, securing the effective functioning of the credit markets is of vital importance for every economy. Central banks can indirectly support credit extension by providing the required liquidity through the money markets and by accepting corporate bonds as collateral. Bearing this fact in mind, along with money market stabilization measures, some central banks like the FED and the BoJ have introduced steps that would support corporate financing. To this end, the BoJ increased the range of corporate bonds accepted as eligible collateral. On the other hand, the FED introduced the Commercial Paper Funding Facility to increase the availability of credit to businesses and households. However, it should be kept in mind that central banks should not implement measures that would take on the credit risks of individual firms since this would create a crowding out effect on financial institutions.

3. Effects of the Turmoil on the Turkish Economy

The effects of the sub-prime crisis on the Turkish financial markets did not materialize until the end of 2007. While bond yields did not change significantly, the Istanbul Stock Exchange 100 Index (ISE-100) maintained its historically high levels and the New Turkish Lira (TRY) was somewhat stable. Money and bond market interest rates also displayed less volatility than the markets of developed countries. In sum, the first effects of global turbulence on the Turkish economy were modest due to the strong macroeconomic fundamentals with prudent fiscal and monetary policy, and positive expectations regarding the ongoing structural transformation of the Turkish economy.

The Turkish economy started to experience difficult times in early 2008 as the global financial crisis started to exert adverse affects on global financial markets due to concerns about the stability of the US economy, spill over effects of financial turbulence on developing economies, transformation of liquidity risk into credit risk in advanced markets and decline in the investors’ risk appetite towards emerging markets. Coupled with the increasing risk premium, rapidly increasing food and energy prices in the international markets caused inflation to display an upward trend on a global scale, led to a rise in the general level of interest rates and distorted inflation expectations. In addition, the filing for bankruptcy by Lehman Brothers further increased tension in the markets in September 2008 and proved that there are no financial institutions to be described as "too big to fail". Nevertheless, economic indicators show that the Turkish economy’s resilience to these fluctuations in global markets has solidified considerably, compared to previous episodes of turbulences. For instance, Turkey’s risk premium, which followed a volatile path after the start of the financial turbulence, has outperformed the average risk premium of emerging markets for the last couple of months and the difference between the
EMBI+ Turkey and EMBI+ declined sharply. Moreover, the increase in Turkey’s 5 year credit default swap (CDS) premium was limited when compared to the changes in other emerging markets’ CDS premiums, even those with higher credit ratings.

4. The Measures Taken by the Central Bank of Turkey

As the problems in global financial markets unfolded and intensified greatly, governments and central banks have taken several measures to prevent or at least contain the adverse effects of global financial turmoil on their economies and the financial markets. Governments that have fiscal space initiated economic stimulus packages including tax cuts, increasing public spending and purchasing troubled assets to alleviate the pressure on the balance sheets of financial institutions. In an effort to eliminate the credit crunch in their own money markets, central banks put liquidity operations into practice and loosened monetary policies substantially. In spite of these measures the strains in the markets could not be eliminated. Therefore, in the second round of the rally, governments as well as central banks have recommenced alleviating ongoing problems in the economy by taking additional measures. For example, recently the UK government announced that it would allow banks to insure themselves against high losses and guarantee their debt to stop the credit crunch pushing the economy into a deep slump.

We appreciate the measures that authorities of developed countries have taken so far to prevent the systemic meltdown of the financial system, to restore confidence in the system and to give economies a shot in the arm. Although there are some critics of the adequacy of these measures, I think that in the long run jitters in the financial markets will settle down and markets will eventually begin to function normally. In parallel with these measures in developed economies, most of the developing countries' authorities have acted proactively and taken a number of steps including executing foreign exchange swaps, lowering tax rates on several accounts and cutting the cash reserve requirements of the banking system.

During the recent period of heightened risk aversion and rising volatility, the Central Bank of Turkey (CBT) took immediate actions to contain likely damage on the markets and the economy. First of all, the CBT resumed its activities as an intermediary in the foreign exchange deposit markets in the Foreign Exchange and Banknotes Markets on October 9, 2008, with a view to contributing to the enhancement of the mobilization of foreign exchange liquidity in the Interbank Foreign Exchange Market. In addition to the flow ensured through the Foreign Exchange Deposit Market, foreign exchange buying auctions were suspended starting from October 16, 2008 in order to further enhance the liquidity conditions of Turkish banks. The aim was to keep the liquidity in the system, which was permanently being withdrawn from the foreign exchange market through foreign exchange buying auctions. Within this framework, starting from October

On October 24, 2008 the CBT decided to inject foreign exchange liquidity into the market through foreign exchange selling auctions under the basic principles of the floating exchange rate regime, as unhealthy fluctuations were witnessed.
recently in the foreign exchange market due to a decrease in the depth of the market parallel to these measures, transaction limits of the Foreign Exchange and Banknotes Markets were doubled starting from October 24, 2008 for each institution reaching a total of USD 10.8 billion, in order to ensure that the system would meet its possible foreign exchange liquidity needs smoothly in the upcoming months. On the other hand, favorable developments in global markets eased concerns pertaining to the depth of the foreign exchange market; hence foreign exchange selling auctions were suspended on October 30, 2008. Along with the abovementioned measures, in order to ensure orderly liquidity flow in the financial system and efficient functioning of the credit markets by stimulating the increased flow of foreign exchange liquidity in the Interbank foreign exchange market, the maturity of the FX deposit borrowed within the predetermined borrowing limits by banks from the Foreign Exchange and Banknotes Markets- Foreign Exchange Deposit Markets in terms of USD and Euro was extended from one week to one month and in the said market, the lending rate that was previously set as 10 percent was reduced to 7 percent for USD and 9 percent for Euro. To alleviate the impact of the problems experienced in global credit markets on the local economy, the FX required reserves ratio, which at that time stood at 11 percent, was reduced by 2 percentage points to 9 percent on December 5, 2008. With this reduction in the FX required reserves ratio, additional foreign currency liquidity that is equivalent to approximately USD 2.5 billion was provided to the banking system. To lessen the adverse affects of the financial crisis on the real sector, the export credit discount program limit was increased to USD 1 billion from USD 500 million on 5 December 2008. Moreover, lending conditions for export credit discount were eased considerably.

Recent developments and macroeconomic data indicate that the slowdown in domestic economic activity has intensified. Ongoing problems in the international credit markets and the global economy are expected to continue to restrain both domestic and external demand for an extended period, putting downward pressure on inflation. We expect a more significant deceleration in the underlying inflation as services inflation eases in the forthcoming period. The developments in oil and other commodity prices are having a favorable impact on disinflation. Looking ahead, energy and food prices are expected to continue to contribute to the disinflation process.

Inflation expectations have recently shown signs of easing as the deceleration in headline inflation becomes more significant. In this respect, we should put more emphasis on our own inflation forecasts. We predict that inflation will be close to the target by mid-2009, and that the probability of undershooting the target by the end of the year has increased. In addition to the policy rate reduction by a total of 175 basis points in the November and December 2008 meetings, further intensification of the slowdown in the domestic economy has necessitated moving a sizeable portion of the rate cuts envisaged for the coming months forward to help offset the tightening in financial conditions. Hence, short-term interest rates were decreased by 200 basis points from 15 percent to 13 percent at the first policy meeting of 2009.
Provided that they do not conflict with the price stability objective, the CBT will continue to take the necessary measures to contain the adverse effects of problems in the international markets on the Turkish economy. If unhealthy fluctuations are witnessed in the foreign exchange market due to a decrease in the depth of the market the CBT will start foreign exchange selling auctions. Other measures include the further increase of transaction limits of the Foreign Exchange and Banknotes Markets for each institution and a limited reduction in the FX required reserve ratio.

There are several measures that may be considered to support the TRY liquidity of the system. In case of an increase in liquidity shortage in the upcoming period, the CBT will consider changing the operational framework by bringing the technical interest rate reduction forward. Depending on the development of the liquidity shortage, the CBT may extend the maturity of its funds to the banks through repo transactions and it may initiate direct purchases of government securities in the secondary market. Finally, if the liquidity shortage happens to increase permanently and other measures taken turn out to be insufficient the TRY required reserves ratio may be reduced by a limited amount.

5. What Needs to be Done: Global Response to the Current Crisis

In my opinion, the most important lesson that we should take from what has been happening is the need for a global lender of last resort mechanism. In addition, with the cooperation of local and international authorities an early warning system should be created so that fragilities in the international financial system would be identified and the necessary and adequate measures to fix them would be taken in advance. In this context, I believe that effective and efficient risk management and re-regulation will be the cornerstones of the new global financial architecture where financial intermediation should not allow the direct relationship between the lender and borrower to be cut completely under various forms of effective risk diversification and securitization. Last but not least, counter-cyclical instruments and policies should be developed in order to prevent future bubbles, bringing rational limitations to leveraging with no harm to the economic infrastructure.

As a final word, the biggest mistake would be to attribute the problem to the free market model. Unfortunately, we often witness such comments. The market economy is not a miracle nor has it got magical powers. However, it is a good mechanism for achieving effective and efficient allocation of economic resources. Although there may be some temporary inadequacies and inefficiencies, it is always better to solve them within the market mechanism to establish a stable and sustainable equilibrium in the long run.

Once the acute phase of financial turbulence is over, the authorities will have to focus on the impacts of the crisis on the real sector. Because, if the balance sheets of corporate sector are eroded, a second wave of turmoil may emerge due to the materialization of credit risk. If such a balance-sheet effect arises, there may be a need for non-performing loans to be taken away from the banking sector through asset management facilities. Another secondary concern is related to the sterilization of the liquidity that has been...
provided by the central banks of developed economies, since it may be not easy to withdraw the liquidity, using collaterals against which it has been supplied.

The CBT will continue to take the necessary measures to contain the adverse effects of global financial turmoil on the domestic economy, provided that they do not conflict with the price stability objective. Prudent monetary policy is necessary but not sufficient to maintain the resilience of the economy against global financial turmoil. Preserving the fiscal discipline and strengthening the structural reform agenda would also help to mitigate the adverse effects of the ongoing shocks on the domestic economy. In this respect, the European Union accession process and the implementation of structural reforms envisaged in the economic program remain to be of the utmost importance. In particular, advances in structural reforms, which would improve the quality of fiscal discipline and enhance productivity gains, are monitored closely by the CBT with regard to their implications on macroeconomic and price stability.
Introduction

One of the key challenges for policy makers worldwide is how to devise policies and programs that would ensure growth with equity. This entails a sound knowledge of the linkage between growth and income inequality. The debate has moved beyond the simplistic Kuznets curve hypothesis under which growth is invariably accompanied by rising inequalities up to a certain point in the form of an inverse U-shaped curve.

There is no longer much debate on the importance of high and sustained economic growth for poverty alleviation. However, there is also a broad consensus that growth by itself is not sufficient if it is not accompanied by job creation, especially for the poor. Experience of countries with diverse growth patterns indicates that welfare gains are far more significant when growth and distribution move in the same direction.

Different Growth Experiences

Growth episodes of different countries in this regard are instructive for drawing conclusions. We can briefly review the experience of East Asian countries; China and India; and Brazil to assess the patterns of growth and inequality.

Although a great deal of debate still surrounds the exceptional growth of East Asian countries (World Bank, 1993; Krugman, 1994), it is widely accepted that these countries successfully focused policies on broad-based and equitable growth. While each country’s growth experience has been unique, East Asian countries had a number of common policy fundamentals that allowed them to grow with equity: strong focus on human development; outward orientation of the economy; and macroeconomic stability. Focus on these basics was key to Asian successes in the second half of the twentieth century. Policy-making was marked by fiscal prudence and flexibility. There was focus on capital accumulation, high savings and a sound financial sector. There was a strong emphasis on exports, driven by both macroeconomic stability and complementary export incentives. Regional disparities were limited through policies that encouraged increased rural incomes and agricultural productivity. At the institutional level, land reforms, universal education and the building of a competent civil servant all played a role in shared growth.

The experience of China during the past three decades has been both similar to, and different from, the East Asian early globalizers such as Japan, Korea, Singapore and Taiwan (China). Its phenomenal growth over the past three decades is of course well-known. It has dramatically changed the Chinese society and has lifted more than 400 million people out of poverty over the past 25 years. However, income inequality in China between coastal and inland regions has been increasing (Thomas, 2008). Policy focus on the development of heavy industry in certain provinces, trade openness and government investments in coastal regions are leading to greater interregional inequality. The country’s current growth pattern relies heavily on...
manufacturing and external demand, and is based on increasing capital accumulation. This focus on urban industry has led to widened productivity differences with rural areas, resulting in large income inequalities. Incredibly, with a Gini coefficient of more than 0.45, China is now less equal than the United States (Thomas, 2008).

India’s remarkable growth since the early 1980s has also been accompanied by rising income inequality. At the same time, poverty reduction has been rather slow, and its human development indicators remain weak by international standards. According to the 2007/2008 Human Development Report of UNDP, India ranked 128 out of 177 countries on the Human Development Index. Part of the explanation lies in the fact that the country’s growth has not been broad based but narrowly focused in high-tech and skill-intensive sectors. These sectors have generated rapid growth but not sufficient employment, especially for the poorer segments of society. India has also witnessed much more rapid growth in richer states than the poorer ones, accentuating regional and inter-states differences. Income inequality increased in urban areas, with the Gini coefficient rising from 0.34 in 1983-84 to 0.38 in 2004-05 (Thomas, 2008).

The experience of Brazil, on the other hand, is different. Brazil’s historically high income inequality has been largely a reflection of disparities among regions: the richest area—the Federal District—has a per capita income seven times greater than the poorest state of Maranhao (Thomas, 2008). However, the recent growth experience of Brazil demonstrates that the disparities across states and regions have been reduced, since the poorer Brazilian states have grown faster than the national average, while the richer ones have grown slower than the average. This is in sharp contrast to the experience of China and India, even though the Brazilian growth rate has been more modest than that of those two countries.

The growth experience of Turkey is also instructive. Prior to the recent global financial and economic crisis, the country averaged an annual growth rate of around 7 percent during 2002-2006. This growth has been accompanied by reduction of poverty and even some improvement in income equality. The main factors seem to have been a more balanced regional economic growth (with greater emphasis on the growth of the poorer Southeast Anatolian provinces); growth in productivity of unskilled labor, and some well-targeted conditional cash transfers.

Table 1 shows the inequality levels across regions based on Gini index in the past four decades. Figure 1 summarizes the changes in inequality for a selected number of countries, roughly for the period between 1985 and 2005, using the Gini index.
Figure 2 also illustrates the country wise Gini Coefficient levels around the globe.

**Does the Kuznets Hypothesis Always Hold?**

The Kuznets hypothesis asserts that inequality increases in the early stages of growth in a developing country, but begins to fall after a certain point, in an inverted U-shape pattern. An important conclusion from research related to growth, poverty and inequality is that this hypothesis does not necessarily hold. Economic growth is as likely to be associated with higher inequality as with reduced inequality.

The initial condition of inequality in a country is important. If there are wide initial disparities in personal or regional incomes, the situation can get worse with growth. Proportionally increasing the incomes of both the rich and the poor do not necessarily imply that the rich and the poor would gain equally from growth in the presence of initial inequality. For example, the gains from growth with constant income shares would be four times higher for the richest 10 percent of India’s population than the gains to the poorest 20 percent (Thomas, 2008). In such situations, the need is for more inclusive growth, defined as growth that favors the poorer segments of society more than the richer ones, and which has the participation of the poor in terms of decisions on outcomes that will affect them.

**Impact of Inequality on Growth**

Too often academicians and policy makers focus on the impact of growth on inequality. But what about the reverse? What is the impact of inequality on growth?

At a most basic level, high inequality leads to social tensions and an unstable socio-political environment. This, in turn, weakens the business climate, thereby reducing investment (domestic and foreign) and puts downward pressure on growth. Second, where inequality is high, there are pressures on governments for redistributive tax policies which, at least initially, may hamper growth. Third, when income distribution improves leading to a larger middle class, the demand for goods and services increases, and growth rate tends to increase. Finally, where imperfect credit markets resulting from high inequality create barriers to productive investments in physical and human capital, growth rate is negatively affected.
How can policy makers assure that economies can grow at a rapid pace with greater equality? This is a key challenge for the future. Evidence indicates that inequalities that serve as barriers to investments in physical and human capital, or those that prevent individuals from connecting to markets place the sustainability of growth in countries like China and India at risk in the coming years (Chaudhury and Ravallion, 2006).

What is needed is a set of policies that create incentives for innovation, dynamism and investment while also reducing the scope for inequalities that interfere with human development and inclusive growth. Elements of a successful policy package typical include action in the areas of trade, financial sector reform, infrastructure investments, and focus on human development.

There has been much discussion on the role of trade in enhancing growth and equality. The experience of high-performing Asian economies illustrates the importance of openness in promoting growth through exports, import and capital flows. Exports lead to more efficient allocation of resources within an economy and improve competitiveness. Trade liberalization coupled with relative productivity increases in the agricultural sector has significantly reduced inequality in many developing countries during the past two decades. For example in Latin America, Brazil and Nicaragua, which have large shares of the labor force in agriculture, have witnessed rising shares of agricultural export and falling inequality (IMF, 2007).

However, by itself trade liberalization is not enough. Trade policy is especially growth- and equality-enhancing when it is accompanied by investment in infrastructure, especially rural infrastructure. Again the experience of East Asian countries demonstrates the importance of putting in place the necessary infrastructure, giving preferential access to capital for targeted industries, developing export markets and creating quality brand recognition (Stiglitz, 1996). Indeed, countries such as Senegal or Zambia did as much as China and India over the past 15 years in terms of trade liberalization, but their inadequate regulatory reforms and infrastructure investments prevented them from expanding exports (Thomas, 2008).

Greater emphasis on human development is another factor leading to higher growth with
equity. There is sufficient empirical evidence to indicate that for any given level of income and inequality, growth translates more efficiently into poverty reduction in countries with high literacy rates, low regulatory burdens and easier access to credit for the private sector (Chhibber and Nayyar, 2006). Quite simply, higher literacy rate increases the share of the population that can take advantage of better employment opportunities created by growth.

Well designed social protection mechanisms can also reduce growing inequalities during the growth process. Conditional cash transfer programs are a relatively new form of social assistance that has proven successful in reducing inequalities. These well-targeted instruments take advantage of the synergies between health and education outcomes to influence the intergenerational impact of poverty transmission (Rawlings and Rubio, 2005). These transfer programs typically provide cash assistance to poor families in exchange for responsibility to take certain human development actions, such as school attendance by children who would otherwise not attend school, or participation in health programs. These programs are particularly useful because they stress the gender aspects of growth: the emphasis is on girls’ education and the funding is provided typically (as in Turkey) to the mother in the family. The Opportunities program in Mexico is a good example of intervention that has reduced child labor and increased secondary education rates. Similarly the Bolsa Familia program in Brazil has so far reached 11 million families -- or 46 million people-- the majority of the country’s very poor. Studies indicate that almost 95% of the funds reach the poorest 40% of the population.

Finally since almost 75% of the assets of the poor come in the form of natural resources, protecting these assets is both good for growth and for distribution. Focus on sustainable use of natural resource is also good for inter-generational distribution of benefits. Unfortunately this is also the area where policies are the weakest in ensuring a growth pattern that influences global assets for long term human welfare.

Policy Implications

There is now sufficient evidence to conclude that while growth is important for reducing poverty and inequality, growth alone is not enough. A recent evaluation by the World Bank’s Independent Evaluation group (IEG) indicates that World Bank strategies designed solely to boost overall growth often missed opportunities to reduce poverty most effectively: (Thomas, 2006). What is important is not just the rate of growth but also the pattern of growth. The ability of the poor to participate in growth (“inclusive growth”) depends on several factors:

- How much growth is driven by productivity increases in sectors where the poor work.
- How much growth translates into job creation.
- How equipped the poor are to take advantage of the resulting job growth.
- How effective policies and instruments are for greater sustainability in the use of natural resources.

References:


2. Chhibber, Ajay and Gaurav Nayyar. 2006. “Explaining the Cross-Country Variation in the Growth Elasticity of
Poverty”. Independent Evaluation Group, World Bank, Washington D.C.


The views expressed in this article are those of the author, and do not necessarily reflect the official position of UNDP.
Scientific research and innovation remains as one of the features that distinguish developed and developing economies of the world of the 21st century. In the golden age of Islam, Muslim world was at the forefront of science, philosophy, culture and economic development. However, the contemporary conditions of the member countries present a contrite state in their contributions to science and technology and the circumstances of their scientific and technological infrastructures. Yet, the accomplishments of some East Asian, European and Central Asian countries provide some hope for optimism with their rapid economic growth and achievements in higher education.

It is widely accepted that investment in education at primary and secondary levels and quality research at universities and private laboratories of the corporate sector is vital in achieving higher economic growth. This in turn is an instrument to alleviate poverty and reduce inequality. Quality education generates benefits to the society that go beyond the gains secured by the individuals involved. There is overwhelming evidence that education improves personal health, encourages stronger national identity and promotes peace and stability. One of the Millennium Development Goals makes specific reference to the rights of individuals to free primary education with an international consensus on the issue. Primary education is therefore considered as the minimum that countries should ensure for their children. The benefits from investing in human capital, however, are not necessarily linked with attaining higher enrolment ratios, since poor quality may decrease returns of education and lead to high dropout rates. With a comprehensive approach to education in the twenty first century, it is important that the education policy should provide people with learning opportunities that will assist them in developing skills to embark on new undertakings.

Investment In Education: An Overview

There are a number of measures to evaluate a country’s effort in increasing the level of human capital and to examine the progress achieved towards the second Millennium Development Goal, i.e., universal primary education. These include the net enrolment in primary and secondary education, primary completion rate, progression to secondary education, literacy rate and public spending on education. This section presents a brief review of some of the key education indicators of OIC member countries at the aggregate and regional levels.

School Enrolment

In order to ensure that children complete their primary schooling, first they need to have access to it. The net enrolment in primary education and secondary education for OIC member countries and the regional averages are reported in Table 1. The average of net primary enrolment for the OIC as a whole has increased from 69.56% to 76.25% from 1990s to 2000s. It is significantly lower than the world average and is comparable only to the average of the low income countries. However, the member...
countries in East Asia, and Europe and Central Asia have achieved high access rates at the beginning of this decade. Meanwhile, the average access rates to primary education are the lowest in the Sub-Saharan Africa at 47.26%.

Similar trends are observed for the net enrolment in secondary education for the overall OIC. The member countries in Europe and Central Asia have maintained very high net enrolment ratios (NER) close to those of high income group of countries for secondary education. The NER in secondary education has been very low in South Asia and Sub-Saharan regions. Comparison of the trends in primary and secondary enrolment among various income groups suggests that most of the OIC member countries in various income groups have been able to achieve fairly good stable progress. However, the averages of the lower income group, both for the primary and secondary NER, is significantly lower than the average for the non-OIC countries in the same group.

Completion at Primary and Progress to Secondary

Completion rate in primary and progression to secondary level are two other measures of progress towards achieving universal education. At the regional level, except for the Sub-Saharan Africa, the completion rate in primary education has been fairly comparable to rates achieved by non-OIC regions. In 2000s, the member countries in the Sub-Saharan region reported a 7 points lower completion rate in primary education than the non-OIC countries in the same group (see Table 1). The comparisons of progression to secondary education, due to unavailability of data for several regions, were not possible.

At the regional level, most of the OIC countries belonging to Sub-Saharan Africa and South Asia regions have been lagging behind. The average rate of progression to secondary level stayed stable around 77% at the beginning of this decade. Evaluation of the progression rate of various income groups indicates similar trends. The member countries in the lower income group could record an average progression rate of 64.66% as compared to 80.12% for the non-OIC countries in this group.

Literacy Rates

The OIC average of adult literacy rates have been approximately 15 points lower than the world average. Only the member countries in East Asia and Europe and Central Asia could achieve significantly higher average literacy rates when compared to the world average. The performance of the MENA region has been fairly at par with the world average, while both South Asia and Sub-Saharan regions recorded low literacy rates of 55% and 46%, respectively (see Table 1).

At the regional level, there have been some improvements in the average literacy rates for most of the regions. The average literacy rates for the members in the South Asian region, however, show a decline of 3.5 points. The averages for East Asia and Europe and Central Asian countries are significantly higher than both the world average and the average of the OIC as a whole.

Public Spending on Education

Two ratios, the percentage of GDP allocated to education and the percentage of government spending on education, are generally employed to make an overall assessment of the efforts of the government to achieve universal access to education at various levels (see Table 1).
<table>
<thead>
<tr>
<th>Region</th>
<th>1990s</th>
<th>2000s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Spending as % of GDP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World</td>
<td>83.13</td>
<td>84.26</td>
</tr>
<tr>
<td>OIC</td>
<td>76.36</td>
<td>82.38</td>
</tr>
<tr>
<td>East Asia-OIC</td>
<td>96.48</td>
<td>85.62</td>
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<td>Europe and Central Asia - OIC</td>
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<td>84.88</td>
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<td>Latin America &amp; Caribbean - OIC</td>
<td>91.32</td>
<td>87.77</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>83.13</td>
<td>84.49</td>
</tr>
<tr>
<td>South Asia - OIC</td>
<td>79.50</td>
<td>84.75</td>
</tr>
<tr>
<td>Sub-Saharan Africa - OIC</td>
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<td>64.95</td>
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<td>High Income</td>
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</tr>
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<td>Upper Middle Income - OIC</td>
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<td>87.74</td>
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<td>Lower Middle Income - OIC</td>
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<td>88.58</td>
</tr>
<tr>
<td>Low Income</td>
<td>94.62</td>
<td>89.91</td>
</tr>
</tbody>
</table>

* NER: Net Enrolment Ratio
The percentage of GDP allocated to education for the OIC as a whole is reasonably comparable to the world average of 4.43%. At the regional level, the member countries in the MENA and East Asia have been allocating fairly high percentages of the GDP on education, namely 5.39% and 4.53%, respectively. Similar trends are being observed for the averages of the percentage of government spending allocated to the education. This ratio is highest for the member countries in the MENA region with an average of 21.82% between 2000 and 2005.

The education expenditure per student as a percentage of GDP per capita, both at the primary and the secondary levels (see Figures 1.1 and 1.2), has been plotted against GDP per capita to explore the existence of a systematic relationship between the two. Although one would expect a positive relationship between the two variables, in both cases a clear relationship in that direction could not be established. In the case of the primary education, there seems to be a high variation in expenditure per student among the low and upper middle income countries, namely between 6% and 25%. The ratio for the high income countries, at primary level, is fairly close to the average of low and upper middle income group countries. At the secondary level, a similar variation in the ratio is apparent. However, the ratio for the higher income countries is below the average ratios of the low and upper middle income countries.

Regional Comparisons

East Asia

The region as a whole has fairly high primary enrolment ratios but the enrolment ratios in the secondary education have been relatively low. According to UNESCO statistics, some 9.2 million children of the primary age, in the region, could not get enrolled into secondary school in 2005. The three OIC member countries in the region, Brunei, Indonesia and Malaysia, have been maintaining high NER of primary education. Although they did not achieve such remarkable net enrolment rates for secondary education, their average NER of secondary education have been significantly above the world and OIC averages. Moreover, Brunei and Indonesia could achieve significant increases with more than 10 points change, despite the fact that the world and OIC as a whole did not record significant increases in the average NER of secondary education from 1990s to 2000s. The data also show that the OIC member countries have been performing better than the average of the non-OIC members in East Asia region for this decade (see Figure 2.1).
The average literacy rate, in the region as a whole, has increased from 80.11% in 1990's to 90.77% in the recent years, showing that there has been a significant decrease in the total number of illiterates in the region as a whole. Among the member countries, Brunei could reach the top average literacy rate of 93%. The average literacy rates for all three members in the region not only exceeded the world and OIC averages, but all of them have shown noteworthy progress in increasing their literacy rates (see Figure 2.2).

The trend in public spending on education as a ratio of the GDP and the total government spending on education shows significant variation across the member countries in the region. Malaysia has been consistently spending significantly higher amounts according to the two measures. For example, the ratio of education spending to GDP in Malaysia reached 7.28% in recent years, which is the highest in the region and notably higher than the world and the OIC averages (see Figure 2.3). Indonesia, on the other hand, has the lowest ratio of education spending to GDP and there has not been a notable change in this ratio in recent years.

South Asia

The years since 2000 have witnessed sustained and accelerated economic growth in South Asia. However, extreme poverty remains widespread in the region and income inequality has been increasing. Overall progress towards universal primary education has accelerated (UNESCO 2005).

The new enrolments, between years 1999 and 2005, have grown by more than 10 points. All countries, with data reported, increased their primary NER with little progress. But Pakistan’s case should be highlighted as they have achieved a remarkable 30 points increase in its primary net enrolment ratio from 33% to 63% (see Figure 3.1). This upward trend has led to a primary
NER of 79.5% for the region and 82.13% for the OIC member countries in the region.

All the countries in the region have recorded some improvements in their literacy rates. Despite this increase in the rate, most of the member countries are still differentiated with low literacy rates below 50%, with the exception of Maldives which has maintained a very high literacy rate of 96% (see Figure 3.2).

Public spending on education by the member countries in the region again shows a significant variation. Pakistan and Bangladesh have very low spending/GDP ratios of around 2%. On the other hand, Maldives has been spending around 7% of the GDP on education, which is higher than the OIC and world averages. On the other hand, Bangladesh’s percentage of government spending on education out of total spending is comparable to Maldives.

All of the South Asia countries are below the OIC and world averages in terms of educational spending/public expenditure ratios. Pakistan is even significantly lower than the regional average (see Figure 3.3).

**Middle East and North Africa**

The average net enrolment ratios of the member countries show much variation in the region. The NER varies from 32% to 97% at the primary level and from 35% to 90% at the secondary level. Although Yemen has one of the lowest primary NER, the ratio has significantly improved recently, from a mere 52.8% to 68.9%.

Similarly, several other member countries have shown considerable improvements in the NER in 2000s as compared to the 1990s. These include Saudi Arabia, Morocco and Kuwait. Most of the other member countries, with NER higher than those of the world and the OIC, have maintained higher rates in recent years (see Figure 4.1).

The secondary NER shows steady progress for most of the member countries while Saudi Arabia could almost double its secondary NER from 35% to 66%. The average secondary net enrolment ratio of the region is higher than OIC and world averages (see Figure 4.2).
Literacy rates have improved in all of the member countries with available data. The recent statistics show that most of the member countries could increase their rates above the OIC average. Morocco and Yemen are the only two members who are lagging behind the OIC average, although their rates have improved in recent years. Kuwait and Palestine could achieve the highest literacy rates at 93.27% and 92.39%, respectively. Libya, Bahrain, UAE and Qatar could also attain literacy rates above the world average.

As could be gauged to the extent the data are available, public spending on education in most of the member countries of the region is close to the OIC and the world averages. While Djibouti could achieve significantly higher average ratios of education spending to GDP (8.68%), some members such as Kuwait, Morocco, Tunisia and Saudi Arabia have also been spending well above the world average in recent years (see Figure 4.3).

Sub-Saharan Africa

There has been a significant rise in the net primary enrolment ratio between 1999 and 2005 in the region as a whole (UNESCO 2005). Benin, Guinea, Mauritania and Mali were able to increase this rate by more than 20 points. This may reflect the impact of policy measures adopted by these countries, such as the abolition of school fees in the early 2000s. Despite the overall progress, there are nearly 33 million children of primary school age who could not get enrolled. Burkina Faso, Guinea-Bissau, Niger, Somalia and Sudan have primary NER below 50% (see Figure 5.1). Gabon and Togo are the only two member countries in the region who could realize primary NER averages above the OIC average.

Most of the governments in the region are cognizant of the importance of primary and secondary education. However, Burkina Faso, Cameroon, Guinea, Guinea-Bissau, Mozambique and Niger still fail to provide public support to their lower secondary education (UNESCO 2005). That is why most of these countries have recorded very poor secondary enrolment ratios. The average secondary NER for all the member countries is well below the world and the OIC averages. On the other hand, although Gambia, Guinea and Nigeria have low average NER, they have shown reasonable increases (more than 7 points change) in their enrolment ratios (see Figure 5.2).
Literacy rate remains a major challenge in the region as a whole. According to world statistics, about one in five of the world’s 774 million illiterates is in this region. Among the member countries, Burkina Faso, Mali, Chad, Guinea and Niger have recorded very low literacy rates (below 30%). Gabon is the only member country in the region that has achieved an average literacy rate above the world average.

The ratios of public spending on education to the GDP and to the total public expenditures, in the region as a whole, are well below the average ratios of the OIC. Despite this overall dismal scenario, some member countries have shown encouraging trends in their educational spending ratios as a percentage of their GDP. These include Burkina Faso, Mozambique, Sierra Leone and Côte d’Ivoire. While Burkina Faso and Mozambique have spent more than the OIC average on education, Sierra Leone and Côte d’Ivoire have recorded a spending ratio even higher than the world average in this decade. The average percentage of public spending on education to total public spending is comparable to the overall average of the OIC. Countries like Uganda, Mozambique and Côte d’Ivoire have shown noteworthy increases (more than 5 points change) in educational spending over time. Furthermore, Guinea and Comoros have allocated nearly one fourth of their public spending to education.

Europe and Central Asia

The primary NER has been fairly high in the region with an average above those of the OIC and the world. However, some member countries, such as Azerbaijan, Kyrgyzstan and Albania have recorded some decrease in this ratio (see Figure 6.1).

Most of the countries in the region have made good progress in the provision of secondary education during the period. The secondary net enrolment rates of Tajikistan and Turkey have increased by 14.26 and 24.04 points, respectively (see Figure 6.2).

All of the member countries in Europe and Central Asia have maintained the secondary NER above the OIC and world averages. The literacy rates are also seen to be very high in the region with Albania and Tajikistan having achieved average rates over 98% in 2000s.
The average public spending on education as a percentage of the GDP has been below the world average for most of the member countries in the region (see Figure 6.3). In fact, in most of the cases, the ratio has dropped in the recent years. Turkey is the only member country in the region that has shown an improvement in the ratio. Similar trends have also been observed for the education spending as a percent of total public spending. The recent trends show that the spending ratios of the countries other than Turkey have systematic declines which is reflected by a 1.76 point overall decrease in the regional average.

**Appraisals of Attainments and Accomplishments in Education**

This section discusses and evaluates the achievements and attainments of the member countries in developing a knowledge economy. The section also documents the research contributions of member countries at the higher education level, and identifies the fields of scientific research in which some of the leading member countries have specialized.

**Knowledge Index (KI) and Knowledge Economy Index (KEI)**

The World Bank initiated “The Knowledge for Development (K4D) Program” to assist countries identify the challenges and opportunities they face in making the transition to the knowledge economy (KE). An interactive benchmarking tool, Knowledge Assessment Methodology (KAM), has been developed to measure the comparative performances of 140 countries on 83 structural and qualitative variables that are normalized on a scale of 0 to 10 relative to other countries in the selected comparison groups.

KAM also presents two indices - the Knowledge Index (KI) and Knowledge Economy Index (KEI) – to track the overall level of preparedness of the countries towards a knowledge-based economy. While KEI is an aggregate index involving four KE pillars: Economic and Institutional Regime, Education and Human Resources, Innovation System, Information and Communication Technologies (ICTs), the simple averages of three pillars, excluding Economic and Institutional Regime, have been employed to calculate KI.

Regression Graphs – one of the 6 different display modes of KAM – have been drawn for different time periods. These graphs demonstrate the progress of countries on KE pillars and indexes (KEI) from 1995 to the most recent year. So the data points above the 45 degree line demonstrate an improvement in the KEI performance of the country throughout the period under consideration, while a decline is indicated by a point below the line. However, it should be noted that improvements may occur when the country has either actually gained in absolute terms over time or improved faster than the comparative group.

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1 Basic Scorecard, Custom Scorecard, KEI and KI indexes, Cross-Country Comparison, and World Map are the other five available display modes.
Following this methodology, an analysis has been undertaken on the performance of 40 OIC countries that are included in KEI methodology under six regional (Africa, East Asia and Pacific, Europe and Central Asia, Latin America, Middle East and North Africa, South Asia) and four income groups (High, Upper Middle, Lower Middle, Low).

Moreover, to better benchmark the place of each OIC member country relative to their groups, regional and income group averages have also been included for all the countries (see Figure 7).

2 17 OIC countries that are not included in KAM website are Afghanistan, Brunei, Chad, Comoros, Gabon, Gambia, Guinea, Guinea-Bissau, Iraq, Libya, Maldives, Niger, Palestine, Somalia, Suriname, Togo and Turkmenistan.
In the comparisons of regional averages, KEI progress has been observed only in Europe-Central Asia and South Asia, though the increase of the South Asia group was undiscernibly small. The East Asia-Pacific and the Africa regions, with scores 6.67 and 2.72, respectively, had lost approximately half a point on the average since 1995. Despite having recorded declines, the group averages of Middle East-North Africa and Latin America regions were still above 5 points.

In Africa, the regional average and the scores of Sierra Leone and Mali declined by nearly half a point since 1995. But Sudan, Uganda, Mauritania, Senegal, Mozambique and Burkina Faso, constituting half of the OIC countries in this region, were above the diagonal indicating improvements in their performances.

In Europe and Central Asia, although not achieving the regional average of 6.3, Turkey led the way among the OIC countries. Moreover, compared to the 1995 scores, the KE situation of Albania, Azerbaijan and Kazakhstan improved albeit the progress has been relatively moderate.

In the Middle East & North Africa (MENA), ten out of sixteen OIC countries have made progress. Furthermore, Kuwait, Qatar, UAE and Bahrain could succeed in surpassing the regional average of 5.30, but their scores have declined relative to 1995 values.

East Asia-Pacific, Latin America and South Asia are the regions where few OIC countries have been included in KAM (2007). In these regions, Malaysia and Bangladesh made progress, Guyana and Pakistan lost ground and Indonesia remained the same. The KE cases of Malaysia and Guyana were especially significant with their score changing by 0.77 and -0.84, respectively.

The averages of different income groups remained below the diagonal except for the upper middle income group, where a 0.12 increase was recorded since 1995. The performances of Malaysia, Oman and Turkey have shown improvements, while that of Lebanon deteriorated since 1995. The scores of these four OIC countries were still below the 2007 average of the upper middle income group, though Malaysia -with a score of 6.23- came very closer to the group average (see Figure 8).

According to KEI (2007), among the 14 lower middle income OIC countries, only Guyana, Kazakhstan, Tunisia and Jordan were above the lower middle income average of 4.16. However, it is a promising development that nine of these countries made progress and Indonesia remained at the 1995 level. On the other hand, the profile of low income countries has not been very encouraging, as only 7 out of 17 countries in the group were able to make some progress (see Figure 8). For the high income group, the situation of Qatar, Kuwait and Saudi Arabia changed positively. Meanwhile, United Arab Emirates and Bahrain regressed in terms of KEI scores since 1995. Bahrain moved back by the huge margin of 1.29 on a 10 point scale.
The higher education and research in OIC member countries are faced with a myriad of challenges such as lack of financing, underdevelopment, poor quality of teaching, and availability of limited provisions for the relevant research facilities. There have, however, been a few promising developments in recent years that attest to the efforts of some of the member countries to invest in the future. There are also indications of support in improving the key indicators of science and technological innovations at the OIC level. The OIC has decided to implement strategic plans on science and technology in 2005 in this regard; for example, it has proposed the allocation by the member countries of 1% of their GDP on R&D by 2015 (OIC Ten Year Plan of Action).

Unfortunately, only 19 out of 57 member countries report data on R&D expenditures. The comparison of the R&D expenditures as a percent of the GDP among the income groups is presented in Figure 9. In all the cases, the OIC expenditure ratios are lower than the world
averages. However, the difference in the ratio for the high income group is very prominent. Uganda, a low income country, is the only OIC member spending around 1% of its GDP on R&D. Malaysia and Turkey in the Upper Middle Income group and Morocco and Iran in the Lower Middle Income group have been spending around 0.60%.

Academic research and its productivity can be gauged by the number of scientific articles published in indexed and established journals. Indeed, these publications have been widely used in national science and technology statistics publications to measure scientific capacity and linkages to world science, and particularly in national and international rankings of universities. Moreover, the distribution of these articles across various scientific fields of research also reveals the fields of specialization of the institutions and countries in question.

Table 2 highlights the top 10 OIC member countries, using one of the measures of scientific and technological contributions, namely, the total publications in the established journals during the last five years. The top 10 member countries contributed around 80% of the total publications of the OIC. Indonesia and Bangladesh are absent from the top 10 list, although they contribute significantly to the total population of the member countries.

The number of articles per million people has also been calculated for the member counties. For the period 2003-2007, Lebanon, Kuwait and Turkey are the leading member countries with more than 1000 articles per million people. At regional level, Europe & Central Asia has the highest number of articles per million people (528) while South Asia has the lowest contribution of 27.56 articles per million. This ratio for OIC was 134.88 compared to 7,869 for Finland and 114.71 for India.

The ISI publications of Egypt, Iran and Turkey for the period 1980-2006 can also be seen in Figure 10. Turkey takes clear lead with Iran and Egypt to follow. In 2007, Turkey published 16355 articles followed by Iran with 7895 articles and Egypt with 3287 articles. Overall, these three countries contributed 58.73% of the total publications of the OIC in 2007.

The distribution of the articles according to the scientific fields also reveals differences both across member countries and through time, indicating the variation in the fields of specializations of countries in their scholarly research contributions.

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4 For example, Academic Ranking of World Universities by Shanghai Jiao Tong University (SJTU), World University Rankings by the Times Higher Education Supplement (THES), and also the OIC University Ranking make use of the research output as an important indicator in their ranking methodologies.

5 Articles published in journals indexed in Science Citation Index (SCI), Social Sciences Citation Index (SSCI), and Arts & Humanities Citation Index (A&HCI), maintained by the Institute for Scientific Information (ISI) Web of Science.
Considering the distribution under five categories – applied sciences, formal sciences, humanities, natural sciences and social sciences – for Turkey, Iran, and Egypt with comparisons between two periods of time; i.e. 1990-1999 (hereafter denoted as the first period) and 2000-2008 (hereafter denoted as the second period), the following patterns are revealed:

The articles in natural sciences and applied sciences together constitute more than 90% of the total articles, leaving less than 10% for social sciences, formal sciences, and humanities in all of the three countries.

The majority of articles of Egypt in the first period were in natural sciences (59.28%), most of which were in the field of chemistry (29.89%) and physics and space sciences (11.90%). Although the share of natural sciences was again highest in the second period, it decreased to 46.55% and while chemistry constituted the highest part of it, the share of physics and space sciences declined to 4.25%, leaving its former position to life sciences and biology (13.8%). Applied sciences took the second position after natural sciences in both periods and almost with the same share of 30%.

On the contrary, the development in Iran was towards the expansion of the share of natural sciences, but without relative change in the sub-disciplines. The share of natural sciences increased to 53.16% in the second period from 49.41% in the first period. This increase is mostly due to the changes in the field of chemistry, yet the relative position of the sub-disciplines under natural sciences remained the same. Similar to Egypt, the second important field was applied sciences, though its share decreased by 2.64 percentage points in the second period reaching down to 34.24%.

Turkey, on the other hand, presented a different structure from Egypt and Iran. Turkey specialized in applied sciences, and the shares of the scientific fields did not change significantly compared to the first period. The share of applied sciences increased by 2.84 percentage points in the second period, reaching up to 55.95% and almost all of this increase came from the expansion of articles in health sciences, as the share of other sub-disciplines remained almost at the same rate of 12%. Natural sciences took the second position in Turkey in both periods and its share decreased to 34.97% in the second period.

Finally, patent applications by countries present valuable information regarding the achievements of higher education system of the countries. With an average of 5527 applications by residents and non-residents, Malaysia is the leading country in terms of patent applications between 2000 and 2006. While Indonesia and Turkey followed Malaysia with an average of 3935 and 2937 applications, respectively, average patent applications were less than 1000 for this period in most of the OIC countries. Moreover, 17304 (average of 2000-2006) applications in OIC countries constituted only 1.18 percent of World total patent applications, which is quite lower than the shares of Japan, the US, Korea, and China (see Figure 11).

Figure 10: ISI Publications of Leading OIC Member Countries

![Graph showing ISI Publications of Leading OIC Member Countries](image)

Figure 11: Share in World Total Patent Applications (% Average 2000-2006)

![Graph showing Patent Applications by Countries](image)
In general, most of the member countries have made significant progress in increasing Net Enrolment Ratios in the primary and secondary education. The member countries in Central Asia and Europe have been maintaining fairly high ratios, higher than the world averages. Similarly, some member countries such as Malaysia in East Asia and Maldives in South Asia, have accomplished excellent results in most of the main education-related indicators. However, most of the South Asian member countries could not increase their literacy rates above the 50% mark and have been struggling with low secondary enrolment ratios. The situation in the MENA region has been encouraging. Many member countries could increase their primary and secondary ratios above the world average. The conditions in Sub-Saharan Africa, on the other hand, indicate some improvements in the primary enrolment ratios, but the secondary enrolment ratios are well below the OIC and world average.

The initial focus was establishing the necessary environment for mass education, and the results reviewed above on primary and secondary education show that this aim has been achieved for most of the OIC member countries. However, education does not merely consist of providing schooling for children. Hence, to improve the quality of education has to be the next and inevitable focus for the OIC member countries. In this respect, the organization of the existing education systems should change. Among the different aspects of this organization, pedagogy, structure, finance and management can be listed. For the pedagogical aspect, student-centred and competency-based learning can be suggested. In terms of the structural aspect, lifelong learning can be important. When financing is considered, diversification of funding is possible. Although providing and improving education is mainly the responsibility of governments, supporting civil organisms is also a must for better quality education. In terms of management, a coordinated decentralization can help to a large extent.

Building a knowledge-based economy is one of the major challenges faced by most of the member countries in the 21st century. It warrants a strategic vision aiming at reformation and restructuring of policies to create a general awareness around which such a knowledge-economy can evolve. Giving importance to knowledge and its linkage to human development is fundamental in developing an economy open for such a vision. This would require developing a scientific culture that supports and encourages the contributions of the scientist and attaches importance to higher education. It would also require the implementation of policies to ensure good quality education for all at the primary and secondary level.

In general, the transition process of OIC member countries to Knowledge Economy has followed a slow but promisingly upward trend as the rank of 27 out of 40 OIC countries increased in 2008. However, the overall situation in the OIC countries, in implementing policies to build such a knowledge-based economy, appears to be discouraging. Most of the member countries in the high income group have been spending, on average, a mere 0.16% of their GDP on R&D as compared to the 2.43% spent by the non-OIC countries in the same group. Nevertheless, some countries, such as Turkey, Iran, Egypt and Malaysia, have successfully implemented policies to encourage research at the university level. The publications statistics in the world-renowned journals indicate that Turkey, Iran and Egypt alone contribute more than 58% of the total OIC publications.

It is against such a background that the OIC Ten Year Programme of Action adopted in December 2005 has outlined an elaborate set of recommendations and policy prescriptions
related to education and R&D in the member countries. The “New Vision” of OIC calls for a system-wide education reform in the member countries. In this respect, the specific recommendations for education policy, under the Programme of Action, have been reiterated as follows:

- Effectively improve and reform higher education institutions and curricula, link postgraduate studies to the comprehensive development plans of the Islamic world.

- At the same time, priority should be given to science and technology and facilitating academic interaction and exchange of knowledge among the academic institutions of the member countries.

- Urge the member countries to strive for quality education that promotes creativity, innovation, and R&D.

- Assimilate highly-qualified Muslims within the Muslim world, develop a comprehensive strategy in order to utilize their competencies and prevent the brain migration phenomenon.

- Call upon Islamic countries to encourage R&D programs, taking into account that the global percentage of this activity is 2% of the Gross Domestic Product (GDP), and request member countries to ensure that their individual contribution is not inferior to half of this percentage.

- Study the feasibility of creating an OIC Award for Outstanding Scientific Achievements by Muslim scientists.

- Encourage public and private national research institutions to invest on technology capacity-building.

- Review the performance of the OIC-affiliated universities so as to improve their effectiveness and efficiency.

One final word is that higher investment in education should be associated with faster economic growth. Most OIC member countries have committed substantial resources to expand and improve their education systems, but these investments in education have not generated the maximal benefits for the individuals and the societies because of the lack of associated economic growth. Improvements in education without a corresponding increase in new job opportunities in the more dynamic sectors of the economy would mean a better educated, but still unemployed labour force. So, the link between the improvements in the level and quality of education and economic growth should be strong.

Reference

Microfinance Institutions in the OIC Member Countries

Developed over the last two decades, microfinance is a term used to refer to the activity of provision of financial services to clients who are excluded from the traditional or conventional financial system; i.e. the poor and low-income people. These services are most commonly provided through programmes that extend small loans to very poor people for self-employment with a view to generate income and allowing them to care for themselves and their families. In addition to micro-lending programmes, many microfinance institutions (MFIs) offer other types of financial services to the poor clients; such as, micro-savings, micro-insurance and money transfer services.

Historically credit needs of the poor used to be met through various sources including money lender, provided the poor could offer collateral. However, these traditional forms of lending have been exploitative in nature and limited in their scope. In contrast to the traditional financial system, microfinance provides loans which are of smaller sizes, mature earlier and rely on character and trust rather than collateral as a guarantee. Unlike the traditional financial institutions, most of the MFIs are non-profit organizations in the form of decentralised set of small units with less documentation and more labour intensive working in areas with weak infrastructure. It introduced the “joint liability” concept, where a group of poor individuals, almost always women, forms an association to apply for loans. Loans to individuals within the group are approved by its other members, and the group is likewise jointly responsible for its repayment.

It is estimated that there are over 10,000 MFIs providing financial services to millions of clients around the globe. They are made up of different types, such as, Credit Unions, Non-Governmental Organizations (NGOs), Cooperatives, Rural Banks and Banks. Although there has been significant expansion in the Microfinance Industry in recent years, the industry could only cater a small portion of the today’s potential demand for their services. It is therefore very obvious that there is a significant funding gap and there is an urgent need to find solutions to improve the scale, outreach and sustainability of these institutions.

The impact of microfinance programs on poor people has been well documented. Murdoch and Haley (2002), leading experts in the study of microfinance and its effect on poverty alleviation, conducted an extensive study to document the impact of microfinance in reducing poverty. They concluded that “There is ample evidence to support the positive impact of microfinance on poverty reduction...” Clients who participated in microfinance programs have enjoyed higher income, improved nutrition and health, better access to education and in some cases these programs have enabled poor to completely lift their families out of poverty.

Microfinance on its own may not achieve its full potential in lifting poor out of extreme poverty unless it is also complemented by other policy initiatives. It would require implementation of integrated microfinance approach. United Nation Children’s Fund (UNICEF), in one of its reports, concluded that in order to reduce poverty there has to be simultaneous advancement in income generation, nutrition, and public health and education programs. Another study by Save the
Children concluded that “…programmes tackling some of the broader aspects of poverty and powerlessness, such as illiteracy or poor health, as well providing financial services are more effective in assisting the poorest people than minimalist programmes. An important conclusion is that microfinance has a greater impact on poorer, a more disadvantaged people, on social relations and on children when it is combined with other activities. Typically these activities try to address the root causes of their disadvantage…”

Impact Assessment of Microfinance

Success stories of many MFIs, particularly in developing and least developed countries, such as the Grameen Bank in Bangladesh, FINCA in Latin American countries and the Bank Rakyat Indonesia have provided evidence that the provision of micro-credit and savings services for poor people can be a powerful tool to expand their consumption choices and reduce their vulnerability. The experience of these institutions showed that micro-loans could be effective in bringing poor families out of poverty through raising their incomes and improving their quality of life through increased expenditures on health, nutrition, education and shelter.

Today, there is a huge record of evidence showing that the sustainable provision of financial services for poor households “microfinance” is a critical factor with strong impact on poverty alleviation and achievement of the Millennium Development Goals (MDGs). Access to microfinance services enabled poor people to increase their income and smooth their consumption flows, and thus expanding their asset base and increasing their ability to respond to crises. Various empirical and impact studies on the experience of many MFIs in developing and least developed countries show that those, among the poor, who participated in microfinance programmes were able to improve their living standards, both at individual and household level, much better than those without any access to financial services.

For example, a detailed impact assessment study of BRAC (the Bangladesh Rural Advancement Committee) suggests that member clients who stayed in the programme for more than four years increased household expenditures by 28% and assets by 112%. Another analysis of household level data demonstrated that access to financial services enabled BRAC clients to reduce their vulnerability through smoothing consumption, building assets and receiving services during natural disasters. An earlier study of the Grameen Bank found statistical evidence of economic welfare. The incomes of Grameen members were 43% higher than incomes of control groups in non-programme villages and 28% higher than non-members in Grameen villages. Grameen members were also able to rely more on savings and their own funds to cope with crises rather than borrow from moneylenders.

A comprehensive study of microfinance conducted by the World Bank in late 1990s on three of the largest programmes in Bangladesh (Grameen Bank, BRAC and RD-12) found that 5% of clients graduated out of poverty each year by borrowing and participating in microfinance programmes and women clients increased household consumption by 18 takas for every 100 takas borrowed. More important, households were able to sustain these gains over time with spill-over effects in the village economy in terms of increases in self-employment. The study also showed that the children of Grameen Bank’s clients have much higher levels of schooling compared to those of the non-clients. Almost all children, including girls, in Grameen client households had some schooling compared to 60% of non-client households.

Microfinance services enable poor people, particularly women, to become economic agents of change by increasing their income and
productivity, accessing markets and information, and decision-making power. The ability to borrow (even small loans typically $50 to $300) reduces economic vulnerability for poor women and their households. A study on the clients of Bank Rakyat Indonesia (BRI) reported that the average incomes of borrowers in the island of Lombok had increased by 112% and that 90% of households had moved out of poverty. Female clients were more likely than non-clients to make joint decisions with their husbands regarding allocation of household money, children’s education and participation in community events.

A survey of 1300 clients and non-clients in Bangladesh showed that the participants, particularly the women, in micro-credit programmes were significantly more empowered than non-clients on the basis of their physical mobility, ownership and control of productive assets, including homestead land, involvement in decision making and political and legal awareness. The results of the survey also showed that this empowerment increased with duration of membership, suggesting strong influence of these programmes.

Nonetheless, microfinance is not a panacea. Today, the ongoing debate on the link between microfinance and poverty alleviation is whether microfinance services have reached and benefited the poorest of the poor. In many cases, microfinance has been shown to benefit the moderately poor more than the truly destitute people at the very bottom of the socioeconomic scale (the poorest). Many early impact studies on microfinance showed increased income levels, but more recent and better-designed studies have shown that the impact can vary per income group. In most cases the better-off in terms of income benefit more from micro-credit, due to their higher skill levels, better market contacts, and higher initial resource base. In contrast, lower income groups may be at more risk, but benefit more from micro-savings and micro-

insurance. Therefore, today, the real challenge facing microfinance, as a unique tool for poverty alleviation, is the sustainable provision of financial services to reach the estimated 1 billion poor people in developing countries who still lack access to conventional financial services.

The report of the Secretary-General of the United Nations (UN) on the implementation of the first UN decade for the eradication of poverty concluded that micro-credit finance targeting the poor “can succeed provided that it is accompanied by other services, especially training, information and access to land ... and appropriate technology”, which requires “strong support from the public sector”. In this context, the year 2005 has been declared by the UN General Assembly as the International Year of Micro-credit, where governments, UN agencies, non-governmental organisations (NGOs) and private sector have been urged to contribute to building capacity in the microfinance sector. Meanwhile, all parties involved in poverty reduction have been called to take additional steps to strengthen existing and start-up new MFIs, so that they can effectively provide services for self-employment and income generation to the poor people in their countries.

To sum-up, microfinance is not only finance; it is an essential development tool to fight poverty and social exclusion. Successful MFIs have proven that providing micro-financial services to the poor can be an effective means of poverty reduction and a profitable business. Many of these institutions have proven that financial services for poor people can cover their costs strict focus on efficiency and aggressive enforcement of repayment. A large and growing proportion of today’s microfinance services are being provided by institutions that are profitable. Microfinance industry has recently expanded to include between 10,000 and 15,000 institutions worldwide that consistently reach an estimated 80 million poor people.
In practice, the term “microfinance” is usually used to refer to institutions whose goals include both profitability and reducing the poverty of their clients. The term “microfinance institutions” (MFIs) refers to the broad range of organisations that provide such financial services to the poor. Since microfinance services are needed everywhere, MFIs are existing in many countries worldwide, even in the developed world. However, in contrast to the developing countries, intense competition within the financial sector in developed countries, combined with a diverse mix of different types of financial institutions with different missions, ensures that most people have access to some financial services.

Major developments have occurred in the field of Microfinance within the past decade. As a result of these developments, microfinance evolved as a viable industry with great client outreach and social and economic impact in many countries. Today the microfinance sector has expanded to include globally more than 10,000 institutions that consistently reach more than 80 million poor people.

Recently, the number of MFIs members in the MIX-Market Network (a global web-based microfinance information platform) stands at 1158 around the globe in 103 countries.

These are only the MFIs where microfinance activity represents more than 91% of their total operations and almost all of them are operating in developing countries in different regions. MFIs are grouped under 6 different institution types. Table 1 shows the total number of MFIs around the global scale along with their institutional classification. It is clearly seen that NGOs are the most widely present type of MFIs followed by Non-Bank Financial Institutions. The classification “Other” is the least available institution type. The microfinance industry has become a huge industry with a total of USD 31.11 billion spread out to 65.3 million borrowers around the globe.

According to the regional classification that exists on the MIX-Market website Table 2 contains the figures for all 7 regions for MFIs. The classification of institution types shows that Latin America tops the regional classification with 281 MFIs while North America has only 1 MFI.

Table 2 also contains all figures for institution types on regional basis. Accordingly, NGOs dominate in Latin America and South Asia. Non-Bank Financial Institutions are prominent in Eastern Europe and Central Asia. In Africa; Cooperative/Credit Unions, Non-Bank Financial Institutions, NGOs are prominent.
Financial Institutions and NGOs are more common types of institutions providing financial services to the poor.

Figure 1 shows the distribution of Gross Loan Portfolio (GLP) between regions. Latin America has the highest share of GLP in the world (41.9%) followed by Eastern Europe and Central Asia. MENA has the lowest share in GLP of 3.2%.

Figure 2 shows the distribution of number of active borrowers in different regions. South Asia with a share of 52.3% has the highest share of borrowers on the global scale. In contrast, MENA and EECA have the lowest share of 3.1% each.

Microfinance Institutions in the OIC Countries

Overview

There are 430 MFIs in 36 OIC member countries that have been reported in the Mix Market global profiles. In 2007 these MFIs served 33.769 million borrowers with USD 8.272 billion in loans. These are categorized by type and region (See Table 3).

Table 3: Number of MFIs by type and by region in OIC member countries

<table>
<thead>
<tr>
<th>Type</th>
<th>Asia</th>
<th>EECA</th>
<th>MENA</th>
<th>SSA</th>
<th>Total</th>
<th>As a % of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGO</td>
<td>91</td>
<td>15</td>
<td>28</td>
<td>37</td>
<td>171</td>
<td>39.77</td>
</tr>
<tr>
<td>NBFI</td>
<td>10</td>
<td>65</td>
<td>6</td>
<td>28</td>
<td>109</td>
<td>25.35</td>
</tr>
<tr>
<td>CU</td>
<td>3</td>
<td>24</td>
<td>0</td>
<td>66</td>
<td>93</td>
<td>21.63</td>
</tr>
<tr>
<td>Bank</td>
<td>5</td>
<td>10</td>
<td>1</td>
<td>6</td>
<td>22</td>
<td>5.12</td>
</tr>
<tr>
<td>Rural Bank</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>19</td>
<td>4.42</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>6</td>
<td>16</td>
<td>3.72</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>114</td>
<td>41</td>
<td>144</td>
<td>430</td>
<td>100.0</td>
</tr>
<tr>
<td>As a % of Total</td>
<td>30.5</td>
<td>26.5</td>
<td>9.5</td>
<td>33.5</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Most of the MFIs are fairly distributed in three regions, Asia, East Europe and Central Asia (EECA) and Sub-Saharan Africa (SSA). Banks and Rural Banks constitute less than 10% of the total number. NGOs take a significant share of around 40%, while Non-Bank Financial Institutions and Cooperatives/Credit Unions account for 47% of MFIs.

The distribution of gross loan portfolio (GLP) and number of active borrowers, according to the regions is shown in Figure 3. The MFIs in Asia dominate in terms of their scale and gross loan portfolio, taking a major share of 62% in GLP. Similarly they also have an overwhelming share in the outreach, as 86% of the all active borrowers are in the region.
Regional Review of OIC-MFIs

Asia

Microfinance Institutions in Asia continue to lead the global market. In 2006, Asian MFIs served over 35 million clients with a gross loan portfolio of USD 6.97 billion. Top ten MFIs, in terms of scale, accounted for four-fifth of total borrowers in the region.

Table 4: Performance Indicators of OIC-MFIs (Asia)

<table>
<thead>
<tr>
<th></th>
<th>Overall Percentile</th>
<th>Outreach Percentile</th>
<th>Efficiency Percentile</th>
<th>Transparency Percentile</th>
<th>Operating Self-Sufficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASIA</td>
<td>0.67</td>
<td>0.67</td>
<td>0.61</td>
<td>0.74</td>
<td>130.38</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>0.39</td>
<td>0.43</td>
<td>0.53</td>
<td>0.20</td>
<td>100.00</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>0.65</td>
<td>0.65</td>
<td>0.61</td>
<td>0.68</td>
<td>130.80</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.77</td>
<td>0.64</td>
<td>0.68</td>
<td>1.00</td>
<td>123.00</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.78</td>
<td>0.78</td>
<td>0.56</td>
<td>1.00</td>
<td>131.00</td>
</tr>
<tr>
<td>OIC</td>
<td>0.58</td>
<td>0.51</td>
<td>0.46</td>
<td>0.79</td>
<td>137.40</td>
</tr>
</tbody>
</table>

The performance of OIC-MFIs in the region, based on a sample of 134 MFIs in the Mix Market, is provided in Table 4. The overall percentile average of OIC-MFIs in the region is 0.67, higher than the OIC average. Pakistan and Indonesia have the highest average value of overall percentile. Except for transparency percentile, the average percentiles of outreach and efficiency are higher than the OIC averages. The average OSS, operating self-sufficiency, is fairly high at 130. Which shows that on the average OIC-MFIs in the regions are 30% more self-sufficient.

In Table 5 averages of some other key indicators are being reported. In this sub-sample of OIC-MFIs, both the market penetration and growth in borrowers are much higher than the OIC averages. Bangladesh having the highest market penetration rate of 1.35 and Pakistan has the highest growth in borrowers. The region also has much lower cost per borrower as a percent of the GNI per capita. Indonesia and Bangladesh have the lowest ratio. The two risks related variables, portfolio at risk and write-off ratio, are also on the lower side compared to the OIC average. The region, however, has low average return on assets of 0.05 compared to 0.22 for the OIC MFIs.

Microfinance Institutions in the OIC Member Countries
Due to low population density and relatively high income levels of the EECA countries, the MFI’s in EECA region are characterized by low outreach and large loan balances.

Table 5: Outreach and Efficiency Indicators of OIC-MFIs (Asia)

<table>
<thead>
<tr>
<th></th>
<th>Gross Loan Portfolio</th>
<th>Market Penetration (%)</th>
<th>Growth in Borrowers (%)</th>
<th>Cost per Borrower/GNI per capita (%)</th>
<th>Portfolio at Risk &gt; 30 days (%)</th>
<th>Write-off ratio (%)</th>
<th>Return on Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASIA</td>
<td>834,905,673</td>
<td>1.04</td>
<td>46.78</td>
<td>3.72</td>
<td>4.26</td>
<td>0.67</td>
<td>0.05</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>795,334,547</td>
<td>1.35</td>
<td>24.10</td>
<td>2.24</td>
<td>5.27</td>
<td>0.84</td>
<td>0.06</td>
</tr>
<tr>
<td>Pakistan</td>
<td>36,180,386</td>
<td>0.18</td>
<td>144.53</td>
<td>6.54</td>
<td>0.44</td>
<td>0.37</td>
<td>0.04</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2,546,131</td>
<td>0.05</td>
<td>121.91</td>
<td>0.99</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Afghanistan</td>
<td>844,609</td>
<td>0.01</td>
<td>48.22</td>
<td>18.55</td>
<td>4.02</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>OIC</td>
<td>1,976,532,994</td>
<td>0.52</td>
<td>28.13</td>
<td>8.44</td>
<td>4.28</td>
<td>1.45</td>
<td>0.22</td>
</tr>
</tbody>
</table>

East Europe and Central Asia (EECA)

The percentages of borrowers served and percentage of loan portfolio, in the world, are 3.1% and 22.6% respectively.

Table 6: Performance Indicators of OIC-MFIs (EECA)

<table>
<thead>
<tr>
<th></th>
<th>Overall Percentile</th>
<th>Outreach Percentile</th>
<th>Efficiency Percentile</th>
<th>Transparency Percentile</th>
<th>Operating Self-Sufficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECA</td>
<td>0.50</td>
<td>0.40</td>
<td>0.40</td>
<td>0.70</td>
<td>153.00</td>
</tr>
<tr>
<td>Albania</td>
<td>0.67</td>
<td>0.61</td>
<td>0.47</td>
<td>0.93</td>
<td>128.80</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>0.64</td>
<td>0.50</td>
<td>0.49</td>
<td>0.94</td>
<td>152.30</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>0.50</td>
<td>0.34</td>
<td>0.49</td>
<td>0.67</td>
<td>140.00</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>0.50</td>
<td>0.38</td>
<td>0.34</td>
<td>0.77</td>
<td>169.30</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>0.47</td>
<td>0.38</td>
<td>0.37</td>
<td>0.67</td>
<td>151.00</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>0.45</td>
<td>0.35</td>
<td>0.31</td>
<td>0.70</td>
<td>181.70</td>
</tr>
<tr>
<td>OIC</td>
<td>0.58</td>
<td>0.51</td>
<td>0.46</td>
<td>0.79</td>
<td>137.40</td>
</tr>
</tbody>
</table>

The performance of OIC-MFIs in the region, based on a sample of 134 ranked OIC-MFIs in the Mix Market is reported in Table 6 and Table 7. Most of the average percentiles are below the average values attained by OIC-MFIs. However, in Operational Self Sufficiency the region seems to be performing better than the OIC-MFIs.

Most of the countries in the region could achieve high growth in borrowers with low market penetration. The return on assets is also fairly high. For example, the MFIs in Uzbekistan, Tajikistan and Azerbaijan could achieve a Return on Assets higher than 10%. Cost per borrower was significantly high, with an average of 19.81% compared to OIC average of 8.44%.

Table 7: Outreach and Efficiency Indicators of OIC-MFIs (EECA)

<table>
<thead>
<tr>
<th></th>
<th>Gross Loan Portfolio</th>
<th>Market Penetration (%)</th>
<th>Growth in Borrowers (%)</th>
<th>Cost per Borrower/GNI per capita (%)</th>
<th>Portfolio at Risk &gt; 30 days (%)</th>
<th>Write-off ratio (%)</th>
<th>Return on Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECA</td>
<td>215,277,297</td>
<td>0.20</td>
<td>28.49</td>
<td>19.81</td>
<td>2.45</td>
<td>1.27</td>
<td>0.11</td>
</tr>
<tr>
<td>Albania</td>
<td>61,100,429</td>
<td>1.05</td>
<td>24.60</td>
<td>10.35</td>
<td>5.52</td>
<td>0.76</td>
<td>0.05</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>47,060,850</td>
<td>0.22</td>
<td>46.44</td>
<td>6.39</td>
<td>0.59</td>
<td>0.32</td>
<td>0.12</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>47,974,089</td>
<td>0.04</td>
<td>48.87</td>
<td>17.51</td>
<td>1.86</td>
<td>0.09</td>
<td>0.07</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>41,306,422</td>
<td>0.31</td>
<td>15.17</td>
<td>24.87</td>
<td>2.61</td>
<td>2.29</td>
<td>0.10</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>15,172,670</td>
<td>0.10</td>
<td>17.71</td>
<td>34.30</td>
<td>1.28</td>
<td>2.87</td>
<td>0.14</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>2,662,837</td>
<td>0.04</td>
<td>-4.60</td>
<td>13.88</td>
<td>7.05</td>
<td>1.04</td>
<td>0.23</td>
</tr>
<tr>
<td>OIC</td>
<td>1,976,532,994</td>
<td>0.52</td>
<td>28.13</td>
<td>8.44</td>
<td>4.28</td>
<td>1.45</td>
<td>0.22</td>
</tr>
</tbody>
</table>
Middle East and North Africa (MENA)

Despite regulatory limitations faced by the MFIs in the region, the region achieved high growth in outreach and scale in 2006. The MFIs employed both individual and group lending methodologies and achieved high market penetration and a significant growth in borrowers. Tunisia, Morocco and Jordan attained very high market penetration rates. The outreach was concentrated in Morocco and Jordan.

<table>
<thead>
<tr>
<th></th>
<th>Overall Percentile</th>
<th>Outreach Percentile</th>
<th>Efficiency Percentile</th>
<th>Transparency Percentile</th>
<th>Operating Self-Sufficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENA</td>
<td>0.70</td>
<td>0.60</td>
<td>0.60</td>
<td>0.90</td>
<td>135.10</td>
</tr>
<tr>
<td>Egypt</td>
<td>0.63</td>
<td>0.62</td>
<td>0.63</td>
<td>0.76</td>
<td>131.50</td>
</tr>
<tr>
<td>Jordan</td>
<td>0.71</td>
<td>0.67</td>
<td>0.47</td>
<td>1.00</td>
<td>136.30</td>
</tr>
<tr>
<td>Lebanon</td>
<td>0.66</td>
<td>0.49</td>
<td>0.48</td>
<td>1.00</td>
<td>113.00</td>
</tr>
<tr>
<td>Morocco</td>
<td>0.72</td>
<td>0.66</td>
<td>0.56</td>
<td>0.96</td>
<td>143.30</td>
</tr>
<tr>
<td>Tunisia</td>
<td>0.77</td>
<td>0.78</td>
<td>0.53</td>
<td>1.00</td>
<td>156.00</td>
</tr>
<tr>
<td>Yemen</td>
<td>0.67</td>
<td>0.49</td>
<td>0.65</td>
<td>0.86</td>
<td>107.50</td>
</tr>
<tr>
<td>OIC</td>
<td>0.58</td>
<td>0.51</td>
<td>0.46</td>
<td>0.79</td>
<td>137.40</td>
</tr>
</tbody>
</table>

The performance of OIC-MFIs in the region, based on a sample of 134 ranked OIC-MFIs in the Mix Market is reported in Table 8 and Table 9. The overall performance of the MFIs in the MENA region has been better than the ones in all other regions. The region also has the lowest average of cost per borrower and write-off ratios.

<table>
<thead>
<tr>
<th></th>
<th>Gross Loan Portfolio</th>
<th>Market Penetration (%)</th>
<th>Growth in Borrowers (%)</th>
<th>Cost per Borrower/ GNI per capita (%)</th>
<th>Portfolio at Risk &gt; 30 days (%)</th>
<th>Write-off ratio (%)</th>
<th>Return on Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENA</td>
<td>518,475,464</td>
<td>1.40</td>
<td>32.63</td>
<td>3.17</td>
<td>4.21</td>
<td>0.45</td>
<td>0.07</td>
</tr>
<tr>
<td>Egypt</td>
<td>54,195,099</td>
<td>0.40</td>
<td>19.50</td>
<td>1.96</td>
<td>6.85</td>
<td>0.18</td>
<td>0.04</td>
</tr>
<tr>
<td>Jordan</td>
<td>23,659,648</td>
<td>1.85</td>
<td>45.32</td>
<td>6.18</td>
<td>3.45</td>
<td>0.32</td>
<td>0.07</td>
</tr>
<tr>
<td>Lebanon</td>
<td>5,308,259</td>
<td>0.54</td>
<td>3.05</td>
<td>3.36</td>
<td>24.43</td>
<td>1.60</td>
<td>0.03</td>
</tr>
<tr>
<td>Morocco</td>
<td>412,295,313</td>
<td>1.90</td>
<td>37.99</td>
<td>2.91</td>
<td>1.07</td>
<td>0.65</td>
<td>0.09</td>
</tr>
<tr>
<td>Tunisia</td>
<td>21,761,697</td>
<td>5.11</td>
<td>56.65</td>
<td>2.22</td>
<td>0.38</td>
<td>0.35</td>
<td>0.14</td>
</tr>
<tr>
<td>Yemen</td>
<td>1,255,448</td>
<td>0.08</td>
<td>31.69</td>
<td>3.84</td>
<td>3.42</td>
<td>0.00</td>
<td>0.02</td>
</tr>
<tr>
<td>OIC</td>
<td>1,976,532,994</td>
<td>0.52</td>
<td>28.13</td>
<td>8.44</td>
<td>4.28</td>
<td>1.45</td>
<td>0.22</td>
</tr>
</tbody>
</table>

Sub-Saharan Africa (SSA)

The microfinance sector in Africa has the distinction that most of the MFIs in the region provide deposit services to its clients much more than any other region in the world. For example, the credit services grew on the average by a third but the savings services were doubled in 12 months. So deposit mobilization is one of the most important services offered by MFIs in the region.
Table 10: Performance Indicators of OIC-MFIs (SSA)

<table>
<thead>
<tr>
<th></th>
<th>Overall Percentile</th>
<th>Outreach Percentile</th>
<th>Efficiency Percentile</th>
<th>Transparency Percentile</th>
<th>Operating Self-Sufficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSA</td>
<td>0.60</td>
<td>0.50</td>
<td>0.40</td>
<td>0.80</td>
<td>117.90</td>
</tr>
<tr>
<td>Benin</td>
<td>0.60</td>
<td>0.46</td>
<td>0.34</td>
<td>1.00</td>
<td>96.00</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>0.71</td>
<td>0.68</td>
<td>0.59</td>
<td>0.86</td>
<td>114.00</td>
</tr>
<tr>
<td>Cameroon</td>
<td>0.74</td>
<td>0.68</td>
<td>0.54</td>
<td>1.00</td>
<td>106.00</td>
</tr>
<tr>
<td>Chad</td>
<td>0.53</td>
<td>0.51</td>
<td>0.49</td>
<td>0.60</td>
<td>117.00</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>0.78</td>
<td>0.58</td>
<td>0.77</td>
<td>1.00</td>
<td>106.00</td>
</tr>
<tr>
<td>Mali</td>
<td>0.57</td>
<td>0.52</td>
<td>0.45</td>
<td>0.80</td>
<td>104.40</td>
</tr>
<tr>
<td>Mozambique</td>
<td>0.47</td>
<td>0.35</td>
<td>0.28</td>
<td>0.90</td>
<td>114.00</td>
</tr>
<tr>
<td>Niger</td>
<td>0.55</td>
<td>0.39</td>
<td>0.26</td>
<td>1.00</td>
<td>146.00</td>
</tr>
<tr>
<td>Nigeria</td>
<td>0.56</td>
<td>0.47</td>
<td>0.45</td>
<td>0.76</td>
<td>140.80</td>
</tr>
<tr>
<td>Senegal</td>
<td>0.60</td>
<td>0.61</td>
<td>0.38</td>
<td>0.82</td>
<td>135.70</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>0.36</td>
<td>0.50</td>
<td>0.38</td>
<td>0.20</td>
<td>101.00</td>
</tr>
<tr>
<td>Sudan</td>
<td>0.34</td>
<td>0.45</td>
<td>0.27</td>
<td>0.31</td>
<td>114.00</td>
</tr>
<tr>
<td>Togo</td>
<td>0.47</td>
<td>0.55</td>
<td>0.29</td>
<td>0.56</td>
<td>117.00</td>
</tr>
<tr>
<td>Uganda</td>
<td>0.56</td>
<td>0.55</td>
<td>0.30</td>
<td>0.84</td>
<td>108.70</td>
</tr>
<tr>
<td>OIC</td>
<td>0.58</td>
<td>0.51</td>
<td>0.46</td>
<td>0.79</td>
<td>137.40</td>
</tr>
</tbody>
</table>

The performance of OIC-MFIs in the region, based on a sample of 134 ranked MFIs in the Mix Market is reported in Table 10 and Table 11. The overall performance of OIC-MFIs has been satisfactory. But the market penetration of the region and most of the countries has been very low. The cost per borrower ratio is also on the high side, 30.75 compared to the OIC average of 8.44. The quality of loans, measured by portfolio at risk and write-off ratio, is the poorest in the region.

Table 11: Outreach and Efficiency Indicators of OIC-MFIs (SSA)

<table>
<thead>
<tr>
<th></th>
<th>Gross Loan Portfolio</th>
<th>Market Penetration (%)</th>
<th>Growth in Borrowers (%)</th>
<th>Cost per Borrower/GNI per capita (%)</th>
<th>Portfolio at Risk &gt; 30 days (%)</th>
<th>Write-off ratio (%)</th>
<th>Return on Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSA</td>
<td>407,874,560</td>
<td>0.30</td>
<td>17.13</td>
<td>30.75</td>
<td>7.12</td>
<td>2.62</td>
<td>0.22</td>
</tr>
<tr>
<td>Benin</td>
<td>7,130,680</td>
<td>0.40</td>
<td>-13.82</td>
<td>31.43</td>
<td>23.66</td>
<td>11.82</td>
<td>-0.01</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>64,013,632</td>
<td>0.89</td>
<td>13.81</td>
<td>12.87</td>
<td>2.11</td>
<td>0.17</td>
<td>0.02</td>
</tr>
<tr>
<td>Cameroon</td>
<td>9,746,463</td>
<td>0.34</td>
<td>15.20</td>
<td>7.79</td>
<td>14.39</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Chad</td>
<td>393,339</td>
<td>0.04</td>
<td>72.81</td>
<td>5.23</td>
<td>3.00</td>
<td>0.26</td>
<td></td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>199,910</td>
<td>0.06</td>
<td>63.41</td>
<td>2.03</td>
<td>0.71</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>Mali</td>
<td>68,964,788</td>
<td>0.25</td>
<td>5.43</td>
<td>50.31</td>
<td>8.98</td>
<td>1.87</td>
<td>0.00</td>
</tr>
<tr>
<td>Mozambique</td>
<td>1,555,442</td>
<td>0.02</td>
<td>11.77</td>
<td>36.08</td>
<td>3.57</td>
<td>1.36</td>
<td>0.02</td>
</tr>
<tr>
<td>Niger</td>
<td>1,353,889</td>
<td>0.04</td>
<td>-14.66</td>
<td>21.21</td>
<td>5.07</td>
<td>0.51</td>
<td>0.05</td>
</tr>
<tr>
<td>Nigeria</td>
<td>10,108,856</td>
<td>0.07</td>
<td>42.39</td>
<td>3.99</td>
<td>3.50</td>
<td>2.65</td>
<td>0.05</td>
</tr>
<tr>
<td>Senegal</td>
<td>156,441,243</td>
<td>0.68</td>
<td>6.73</td>
<td>12.71</td>
<td>5.74</td>
<td>2.90</td>
<td>0.04</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>381,644</td>
<td>0.11</td>
<td>32.64</td>
<td>16.57</td>
<td>10.02</td>
<td>12.66</td>
<td>0.00</td>
</tr>
<tr>
<td>Sudan</td>
<td>1,258,061</td>
<td>0.03</td>
<td>33.67</td>
<td>10.96</td>
<td>15.00</td>
<td>8.46</td>
<td></td>
</tr>
<tr>
<td>Togo</td>
<td>47,332,244</td>
<td>0.44</td>
<td>26.35</td>
<td>51.51</td>
<td>12.80</td>
<td>2.30</td>
<td>0.04</td>
</tr>
<tr>
<td>Uganda</td>
<td>38,994,369</td>
<td>0.18</td>
<td>16.76</td>
<td>56.59</td>
<td>6.08</td>
<td>2.64</td>
<td>0.01</td>
</tr>
<tr>
<td>OIC</td>
<td>1,976,532,994</td>
<td>0.52</td>
<td>28.13</td>
<td>8.44</td>
<td>4.28</td>
<td>1.45</td>
<td>0.22</td>
</tr>
</tbody>
</table>
Performance of the Leading MFIs in OIC Member Countries

Mix Global Composite Rankings of MFIs employs various measures such as outreach, efficiency, transparency and profitability to the leading MFIs around the world. Based on this ranking, the top 25 MFIs in OIC member countries, in all the ranked MFIs in the world, have been reported in Table 12 that also includes the global ranking of these MFIs. The 22 of these top 25 OIC MFIs are also among the top 100 MFIs of the world. Ten of the top 25 MFIs belong to the MENA region and majority of them operate in Morocco. Rapid growth rate of borrowers and higher market share have been important factors that explain the high rankings of these MFIs. The average growth rate of borrowers is around 56% of these top 25 MFIs compared to 22% rate of the rest of the MFIs. Similarly, the market penetration, percentage of clients below poverty line, was 1.72% compared to 0.25%.

Table 12: Top 25 OIC-MFIs (All Types)

<table>
<thead>
<tr>
<th>Rank</th>
<th>MFI Name</th>
<th>Type of Institution</th>
<th>Country</th>
<th>Region</th>
<th>Rank (Global)</th>
<th>Overall Percentile</th>
<th>Outreach Percentile</th>
<th>Efficiency Percentile</th>
<th>Transparency Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Zakoura</td>
<td>NGO</td>
<td>Morocco</td>
<td>MENA</td>
<td>1</td>
<td>84.37%</td>
<td>83.73%</td>
<td>69.38%</td>
<td>100%</td>
</tr>
<tr>
<td>2</td>
<td>Al Amana</td>
<td>NGO</td>
<td>Morocco</td>
<td>MENA</td>
<td>3</td>
<td>83.38%</td>
<td>84.60%</td>
<td>65.53%</td>
<td>100%</td>
</tr>
<tr>
<td>3</td>
<td>JKCC</td>
<td>NBFI</td>
<td>Jordan</td>
<td>MENA</td>
<td>10</td>
<td>79.59%</td>
<td>74.35%</td>
<td>64.43%</td>
<td>100%</td>
</tr>
<tr>
<td>4</td>
<td>ASA</td>
<td>NGO</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>13</td>
<td>78.42%</td>
<td>81.46%</td>
<td>53.80%</td>
<td>100%</td>
</tr>
<tr>
<td>5</td>
<td>FMFB-Pakistan</td>
<td>NBFI</td>
<td>Pakistan</td>
<td>Asia</td>
<td>14</td>
<td>78.21%</td>
<td>77.55%</td>
<td>57.08%</td>
<td>100%</td>
</tr>
<tr>
<td>6</td>
<td>ASC Union</td>
<td>CU</td>
<td>Albania</td>
<td>EECA</td>
<td>15</td>
<td>78.12%</td>
<td>62.94%</td>
<td>71.42%</td>
<td>100%</td>
</tr>
<tr>
<td>7</td>
<td>AE&amp;I</td>
<td>NGO</td>
<td>Côte d’Ivoire</td>
<td>SSA</td>
<td>16</td>
<td>78.09%</td>
<td>57.63%</td>
<td>76.65%</td>
<td>100%</td>
</tr>
<tr>
<td>8</td>
<td>FBPMC</td>
<td>NGO</td>
<td>Morocco</td>
<td>MENA</td>
<td>19</td>
<td>77.88%</td>
<td>81.33%</td>
<td>52.32%</td>
<td>100%</td>
</tr>
<tr>
<td>9</td>
<td>Kashf</td>
<td>NGO</td>
<td>Pakistan</td>
<td>Asia</td>
<td>22</td>
<td>77.60%</td>
<td>78.41%</td>
<td>54.38%</td>
<td>100%</td>
</tr>
<tr>
<td>10</td>
<td>MBK Ventura</td>
<td>NBFI</td>
<td>Indonesia</td>
<td>Asia</td>
<td>25</td>
<td>77.39%</td>
<td>64.10%</td>
<td>68.07%</td>
<td>100%</td>
</tr>
<tr>
<td>11</td>
<td>Enda</td>
<td>NGO</td>
<td>Tunisia</td>
<td>MENA</td>
<td>30</td>
<td>77.20%</td>
<td>78.23%</td>
<td>53.38%</td>
<td>100%</td>
</tr>
<tr>
<td>12</td>
<td>DBACD</td>
<td>NGO</td>
<td>Egypt</td>
<td>MENA</td>
<td>45</td>
<td>75.95%</td>
<td>68.03%</td>
<td>59.83%</td>
<td>100%</td>
</tr>
<tr>
<td>13</td>
<td>FONDEP</td>
<td>NGO</td>
<td>Morocco</td>
<td>MENA</td>
<td>52</td>
<td>75.46%</td>
<td>80.30%</td>
<td>46.07%</td>
<td>100%</td>
</tr>
<tr>
<td>14</td>
<td>MFW</td>
<td>NBFI</td>
<td>Jordan</td>
<td>MENA</td>
<td>65</td>
<td>74.47%</td>
<td>72.15%</td>
<td>51.27%</td>
<td>100%</td>
</tr>
<tr>
<td>15</td>
<td>RCPB</td>
<td>CU</td>
<td>Burkina Faso</td>
<td>SSA</td>
<td>68</td>
<td>74.08%</td>
<td>80.49%</td>
<td>41.77%</td>
<td>100%</td>
</tr>
<tr>
<td>16</td>
<td>AMSSS/MC</td>
<td>NGO</td>
<td>Morocco</td>
<td>MENA</td>
<td>69</td>
<td>74.00%</td>
<td>61.88%</td>
<td>60.12%</td>
<td>100%</td>
</tr>
<tr>
<td>17</td>
<td>CDS</td>
<td>CU</td>
<td>Cameroon</td>
<td>SSA</td>
<td>72</td>
<td>73.90%</td>
<td>67.56%</td>
<td>54.13%</td>
<td>100%</td>
</tr>
<tr>
<td>18</td>
<td>LAPO</td>
<td>NGO</td>
<td>Nigeria</td>
<td>SSA</td>
<td>82</td>
<td>73.42%</td>
<td>76.51%</td>
<td>43.73%</td>
<td>100%</td>
</tr>
<tr>
<td>19</td>
<td>FINCA-AZE</td>
<td>NBFI</td>
<td>Azerbaijan</td>
<td>EECA</td>
<td>87</td>
<td>73.11%</td>
<td>77.78%</td>
<td>41.57%</td>
<td>100%</td>
</tr>
<tr>
<td>20</td>
<td>ICF</td>
<td>NGO</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>91</td>
<td>72.88%</td>
<td>78.08%</td>
<td>69.52%</td>
<td>71%</td>
</tr>
<tr>
<td>21</td>
<td>Kano</td>
<td>CU</td>
<td>Mali</td>
<td>SSA</td>
<td>97</td>
<td>72.53%</td>
<td>69.29%</td>
<td>48.30%</td>
<td>100%</td>
</tr>
<tr>
<td>22</td>
<td>KLF</td>
<td>NBFI</td>
<td>Kazakhstan</td>
<td>EECA</td>
<td>100</td>
<td>72.37%</td>
<td>66.78%</td>
<td>50.33%</td>
<td>100%</td>
</tr>
<tr>
<td>23</td>
<td>CMS</td>
<td>CU</td>
<td>Senegal</td>
<td>SSA</td>
<td>128</td>
<td>70.83%</td>
<td>85.79%</td>
<td>26.72%</td>
<td>100%</td>
</tr>
<tr>
<td>24</td>
<td>NMF</td>
<td>NGO</td>
<td>Yemen</td>
<td>MENA</td>
<td>131</td>
<td>70.66%</td>
<td>57.40%</td>
<td>54.57%</td>
<td>100%</td>
</tr>
<tr>
<td>25</td>
<td>Azercredit</td>
<td>NBFI</td>
<td>Azerbaijan</td>
<td>EECA</td>
<td>134</td>
<td>70.49%</td>
<td>59.10%</td>
<td>52.38%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The average rank of all OIC-MFIs is around 325 out of 614 reported MFIs in the world. MENA and Asia are better ranked compared to the other regions of OIC. By type of institutions, NGOs, on the average, have secured high ranks. These ranks, as it has been indicated earlier, depend on the overall percentiles of the MFIs which, in turn, depend on percentile scores of Outreach, Efficiency and Transparency.

---

6 A low value of the average of the ranks would indicate higher rank.
Among the top ranked 614 MFIs in the world, 165 MFIs operate in the OIC member countries. After excluding the banks and rural banks, data on 135 OIC-MFIs has been tabulated and analyzed. The OIC-MFIs have first been ordered according to their respective global composite ranking.

By type of institutions, NGOs take more leading spots relative to the other two types of MFIs, over 40% in the top 100, followed by the non-financial institutions with around 38% in the top 100. By region, MENA has the highest share of 40% among the top 25 MFIs while EECA occupies the largest share of 36% in the top 100.

**Outreach and Scale**

The 135 OIC-MFIs, in the sample, served around 14.2 million borrowers in the year 2006. The ten leading MFIs in terms of their outreach (number of borrowers) are reported in Table 13. Eight of the top ten MFIs in terms of outreach are from Asia, seven in Bangladesh.

Data on market penetration and growth in borrowers are also reported in the table. Market penetration shows the percentage of borrowers who are below the national poverty line. ASA and BRAC in Bangladesh and Al Amana in Morocco have very high market penetration rates of more than 6%, which are quite higher than the average rate for all the MFIs in the sample of 135 (0.24%).

<table>
<thead>
<tr>
<th>Microfinance Institution</th>
<th>Type</th>
<th>Country</th>
<th>Region</th>
<th>Borrowers (nb)</th>
<th>Market Penetration (%)</th>
<th>Growth in Borrowers (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASA</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>5,163,279</td>
<td>7.20</td>
<td>23.48</td>
</tr>
<tr>
<td>BRAC</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>4,550,855</td>
<td>6.35</td>
<td>9.40</td>
</tr>
<tr>
<td>TMSS</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>513,055</td>
<td>0.72</td>
<td>17.64</td>
</tr>
<tr>
<td>Al Amana</td>
<td>Non-Profit (NGO)</td>
<td>Morocco</td>
<td>MENA</td>
<td>405,558</td>
<td>7.00</td>
<td>62.53</td>
</tr>
<tr>
<td>Zakoura</td>
<td>Non-Profit (NGO)</td>
<td>Morocco</td>
<td>MENA</td>
<td>316,177</td>
<td>5.46</td>
<td>59.44</td>
</tr>
<tr>
<td>RDRS</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>307,482</td>
<td>0.43</td>
<td>19.60</td>
</tr>
<tr>
<td>JCF</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>274,899</td>
<td>0.38</td>
<td>50.27</td>
</tr>
<tr>
<td>BUIRO</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>263,503</td>
<td>0.37</td>
<td>25.59</td>
</tr>
<tr>
<td>Shakti</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>162,219</td>
<td>0.23</td>
<td>12.85</td>
</tr>
<tr>
<td>Kashf</td>
<td>Non-Profit (NGO)</td>
<td>Pakistan</td>
<td>Asia</td>
<td>136,215</td>
<td>0.26</td>
<td>82.10</td>
</tr>
</tbody>
</table>

The 134 OIC-MFIs managed around USD 1.96 billion loan portfolio. Data on top 10 MFIs is reported in Table 14. BRAC and ASA from Bangladesh and Al Amana and Zakoura from Morocco have the highest loan portfolio. BRAC is also ranked among top 10 leading MFIs in term of loan portfolio in the world.
Table 14: Gross Loan Portfolio (Top 10)

<table>
<thead>
<tr>
<th>Microfinance Institution</th>
<th>Type</th>
<th>Country</th>
<th>Region</th>
<th>GLP</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRAC</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>350,160,812</td>
</tr>
<tr>
<td>ASA</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>305,268,840</td>
</tr>
<tr>
<td>Al Amana</td>
<td>Non-Profit (NGO)</td>
<td>Morocco</td>
<td>MENA</td>
<td>219,047,933</td>
</tr>
<tr>
<td>Zakoura</td>
<td>Non-Profit (NGO)</td>
<td>Morocco</td>
<td>MENA</td>
<td>83,375,046</td>
</tr>
<tr>
<td>CMS</td>
<td>Cooperative/Credit Union</td>
<td>Senegal</td>
<td>Sub-Saharan Africa</td>
<td>74,867,599</td>
</tr>
<tr>
<td>FBPMC</td>
<td>Non-Profit (NGO)</td>
<td>Morocco</td>
<td>MENA</td>
<td>70,130,454</td>
</tr>
<tr>
<td>RCPB</td>
<td>Cooperative/Credit Union</td>
<td>Burkina Faso</td>
<td>Sub-Saharan Africa</td>
<td>62,563,478</td>
</tr>
<tr>
<td>ACEP</td>
<td>Cooperative/Credit Union</td>
<td>Senegal</td>
<td>Sub-Saharan Africa</td>
<td>42,136,405</td>
</tr>
<tr>
<td>FUCEC Togo</td>
<td>Cooperative/Credit Union</td>
<td>Togo</td>
<td>Sub-Saharan Africa</td>
<td>39,803,111</td>
</tr>
<tr>
<td>TMSS</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>38,555,615</td>
</tr>
</tbody>
</table>

Productivity

Most of the efficient MFIs in the world rankings have better performance on borrowers per staff ratios. All the top 100 MFIs in the world served, on average, more than 230 borrowers per staff member. The top 10 OIC-MFIs ranked in terms of their productivity, measured by borrowers per staff member, are reported in Table 15.

Table 15: Productivity (Top 10)

<table>
<thead>
<tr>
<th>Microfinance Institution</th>
<th>Type</th>
<th>Country</th>
<th>Region</th>
<th>Borrowers / Staff Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRAINE sarl</td>
<td>Non-Bank Financial Institution</td>
<td>Burkina Faso</td>
<td>Sub-Saharan Africa</td>
<td>565</td>
</tr>
<tr>
<td>U-IMCEC</td>
<td>Cooperative/Credit Union</td>
<td>Senegal</td>
<td>Sub-Saharan Africa</td>
<td>385</td>
</tr>
<tr>
<td>Miselini</td>
<td>Non-Profit (NGO)</td>
<td>Mali</td>
<td>Sub-Saharan Africa</td>
<td>300</td>
</tr>
<tr>
<td>ASA</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>281</td>
</tr>
<tr>
<td>RDRS</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>261</td>
</tr>
<tr>
<td>Zakoura</td>
<td>Non-Profit (NGO)</td>
<td>Morocco</td>
<td>MENA</td>
<td>255</td>
</tr>
<tr>
<td>FBPMC</td>
<td>Non-Profit (NGO)</td>
<td>Morocco</td>
<td>MENA</td>
<td>247</td>
</tr>
<tr>
<td>ARDI</td>
<td>Non-Profit (NGO)</td>
<td>Morocco</td>
<td>MENA</td>
<td>244</td>
</tr>
<tr>
<td>MFW</td>
<td>Non-Bank Financial Institution</td>
<td>Jordan</td>
<td>MENA</td>
<td>230</td>
</tr>
<tr>
<td>FONDEP</td>
<td>Non-Profit (NGO)</td>
<td>Morocco</td>
<td>MENA</td>
<td>223</td>
</tr>
</tbody>
</table>

Efficiency

One of the new variables introduced in measuring the efficiency of the MFIs by Mix Market is the Cost per Borrower/GNI per capita. It measures the borrower transaction cost relative to the income levels for better comparisons across different countries. The top 30 MFIs in the world spent less than 1% per borrower relative to the local income levels. The top 10 OIC-MFIs in terms of the average Cost per Borrower/GNI per capita are reported in Table 16.
Table 16: Efficiency (Top 10)

<table>
<thead>
<tr>
<th>Microfinance Institution</th>
<th>Type</th>
<th>Country</th>
<th>Region</th>
<th>Cost per Borrower / GNI per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADE</td>
<td>Non-Profit (NGO)</td>
<td>Egypt</td>
<td>MENA</td>
<td>0.4844</td>
</tr>
<tr>
<td>MBK Ventura</td>
<td>Non-Bank Financial Institution</td>
<td>Indonesia</td>
<td>Asia</td>
<td>0.9876</td>
</tr>
<tr>
<td>RDRS</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>1.0538</td>
</tr>
<tr>
<td>ASA</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>1.1676</td>
</tr>
<tr>
<td>DBACD</td>
<td>Non-Profit (NGO)</td>
<td>Egypt</td>
<td>MENA</td>
<td>1.4295</td>
</tr>
<tr>
<td>ARDI</td>
<td>Non-Profit (NGO)</td>
<td>Morocco</td>
<td>MENA</td>
<td>1.4367</td>
</tr>
<tr>
<td>BRAC</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>1.9111</td>
</tr>
<tr>
<td>AE&amp;I</td>
<td>Non-Bank Financial Institution</td>
<td>Côte d’Ivoire</td>
<td>Sub-Saharan Africa</td>
<td>2.0278</td>
</tr>
<tr>
<td>JCF</td>
<td>Non-Profit (NGO)</td>
<td>Bangladesh</td>
<td>Asia</td>
<td>2.0365</td>
</tr>
<tr>
<td>Zakoura</td>
<td>Non-Profit (NGO)</td>
<td>Morocco</td>
<td>MENA</td>
<td>2.0868</td>
</tr>
</tbody>
</table>

Portfolio Quality

One of the most important assets of an MFI is its loan portfolio. The risk of loan default, measured as write-off ratios, keeps track of the quality of portfolio. Higher risk of loan default reduces the revenue of the institution and thus its ability to increase outreach and affects the quality of services it provides to clients.

The average write-off ratio of all the OIC-MFIs is around 1.7%. 72% of them have the ratio below 1%.

Developing Sustainable Microfinance System

Despite the successes of many MFIs around the world, millions of low income individuals in developing countries still do not have the access to financial services. Lack of capital and high operating costs have been the key factors that prevented the industry from meeting the vast demand. Also, it has been shown that the demand for credit by poor is not inelastic. Therefore, the high interest rates may also impede the ability of MFIs to serve the poorer clients.

According to the life cycle theory of MFI development, the MFIs are classified into four broad groups in terms of their degree of maturity and level of commercialization.

This shows that the portfolio quality of these MFIs is very high. However, these ratios differ across the four regions and the three types of institutions. OIC-MFIs in MENA and Asia regions have the lowest average write-off ratios while those in SSA region have the highest ratios. Cooperatives/Credit Unions and NGOs have low ratios, below 1.4%, compared to Non-Bank Financial institutions.
These top MFIs constitute around 10% of the total world MFIs. These MFIs are profitable and have experienced management. The bulk of MFIs belong to the third and fourth categories, 20% and 70% of the MFIs respectively (see Figure 4). The NGO-type MFIs with stated social objectives are usually funded with grants and concessional loans by donors and international financial institutions. As the MFI matures, private debt capital is normally accessible with some restrictions. In the final stages of its evolution, equity financing becomes available.

Despite some support to the life cycle approach, there are other factors that are instrumental in shaping the funding sources and instruments available to MFIs. These are evident through considerable regional variations in the funding patterns (See Figure 5).

A recent survey conducted by The Tuck School of Business concludes that the shortage of human and financial capital is the most significant issues that are impeding and slowing down the growth in the microfinance industry. It also reports that Tier 1 and Tier 2 MFIs, the most mature and leading MFIs in the world, rank human capital as the primary constraint. On the other hand Tier 3 MFIs, that are profitable but are in the early stages of development, rank financial capital as major constraint.

Quasi-Equity as a Solution to the Problem of Outreach and Scale

Although the funding to microfinance has been on the rise through International Financial Institutions (IFIs) and other donor agencies, overwhelming majority of MFIs find it difficult to access funding. The CGAP states that much of the supply of funds is ineffective, narrowly targeted, and poorly structured. One of the reasons is that investors/IFIs prefer funding the established Tier 1 and sometimes Tier 2 MFIs, but not Tier 3 and Tier 4 MFIs.

One of the solutions to the current state of financing issues of MFIs is the introduction of alternative equity-like financial instruments, such as quasi-equity. According to David S. Gibbons and Jennifer Meehan (2002), quasi-equity alternative is an attractive solution for a number of reasons:

1) *Ability to absorb losses*: These funds should not be restricted to on-lending only. These should support the MFIs to finance its operating deficits prior to break-even.

2) *Legal Subordination*: The quasi-equity should be structured to make it legally subordinated to loans. So that there is greater certainty of repayment before the claims of the equity holders in case of a default.

3) *Repayments*: These instruments would be more attractive to investors and microfinance users because they will have a defined repayment schedule with flexible terms and conditions of lending. These flexible conditions may involve lending money on a long term basis and setting up a minimum rate of return equal to the inflation rate in the country concerned. This will make it sure that the funders can keep the value of their investment.
It is important to note that funding requirements differ at different stages of the development of MFIs. At the very early stage, grants and equity funding is vital to meet the operating expenditures. At this stage of operation, quasi-equity should be restricted to on-lending purposes only. As the MFI grows, quasi-equity can be employed to support both the deficit due to operational expenditures and on-lending requirements (see Figure 6). As the MFI matures and reaches operational self-sufficiency, it can find other sources of funding and reduce the need for quasi-equity.

Figure 6: Microfinance Social Development Fund

Other Innovative Financing Mechanisms

Besides the proposed “quasi-equity” option to increase the outreach of MFIs, several other innovative financing mechanisms have been suggested in the literature and have been in use since 1996. Among others, these mechanisms include:

1) **Credit Guarantees**: It encourages financial institutions to lend to MFIs that have good prospects but do not have sufficient collateral to borrow (Bass 2000). The guarantor provides guarantee to the lender that in the event of a default, the guarantor will repay to the lender. It is possible that the guarantor can also set up a fee structure, to be paid by the MFI, to cover its costs of monitoring and collection of data.

2) **Developing Reliable Rating System of MFIs**: Development of reliable rating system and database of MFIs can provide a useful platform for the donors, private investors and banks to support MFIs in the developing countries. It will help increasing the flow of funds to the microfinance sector and will improve the quality and performance of MFIs. Inter-American Bank and CGAP have launched such a project, Microfinance Rating and Assessment Fund that will support organizations that can provide quality assessments.

Conclusion and Policy Recommendations

Many MFIs around the world have shown that it is possible to deliver financial services to poor that otherwise would not have access to these services. Success stories of many MFIs, such as Grameen...
Bank in Bangladesh, the Bank Rakyat in Indonesia and Zakoura in Morocco have demonstrated that provision of micro-credit and financial services to poor can improve the consumption choices and reduce the vulnerability. Various empirical studies in the developing countries, based on micro sample data, have also shown that microfinance programs were able to improve the living standards of the poor. Furthermore, it has been shown that integrated microfinance programs are more effective improving the welfare of the poor.

Data on many MFIs in the OIC regions have been analyzed to examine the scale, outreach, sustainability and efficiency of these institutions. Following are some of the key findings based on this analysis:

1) In 2007, 430 MFIs in 36 OIC member countries - reported in the Mix-Market served 33.8 million borrowers with Gross Loan Portfolio of US$ 8.3 billion.

2) A significant number of OIC-MFIs have demonstrated that they have achieved operating self-sufficiency and are among the top ranking MFIs in the world.

3) The average loan portfolio quality of the OIC-MFIs registered with Mix-Market, in terms of write-off ratios and portfolio at risk, has been very satisfactory. For example, the average write-off ratios of OIC-MFIs in Asia and MENA regions are below 1%.

4) OIC-MFIs in Asia take a major share of loan portfolio and outreach.

5) The non-governmental organizations (NGOs) have better outreach, efficiency, transparency and world ranking.

6) Large and medium sized MFIs are both more productive (average borrowers per staff member) and efficient in terms of average cost per borrower. Large MFIs also have better write-off ratios.

7) Results of empirical models suggest that increasing the size of MFIs improves the efficiency and outreach. The MFIs in MENA and Asia have better efficiency and outreach scores.

Despite the success of many MFIs, millions of low income people in the OIC countries do not have access to these financial services. High operating costs and financial capital constraints have been identified as the major obstacles in preventing MFIs to meet the enormous demand. One of the recent survey reports of the Tuck School of Business concludes that the shortage of human and financial capital are the most significant issue that are impeding and slowing down the growth of the microfinance industry.

One of the solutions proposed in this paper to the current state of financing issues of MFIs is to employ quasi-equity as one of the financial instruments. The other instruments, such as Credit Guarantees and establishment of reliable rating system of OIC-MFIs may also help in improving the scale, outreach and sustainability of MFIs.

The experience of funding requirements of MFIs suggests that these requirements differ at different stages of the development of MFIs. It has been suggested that at the very early stage support in terms of grants and equity should be extended to meet the operating expenditures of MFIs. As the MFI further grows, quasi-equity can be employed to support both the deficit due to operational expenditures and on-lending requirements. As the MFI fully matures and reaches operational self-sufficiency, it can find other sources of funding and quasi-equity can further facilitate improving the scale and outreach.

The establishment of a reliable rating system and database of OIC-MFIs can also provide a framework for the donors and private investors to support the microfinance institutions. This will further ensure the improvement in the quality and performance of these institutions.

The core conclusion that emerges from this report is the establishment of a support system for MFIs in OIC countries to enhance their outreach, scale and sustainability. It requires formation of OIC Microfinance Institutions in the OIC Member Countries.
Microfinance Social Investment Fund to provide grants, quasi-equity and credit guarantees to these institutions. Relevant OIC institutions, in particular the Islamic Development Bank (IDB) can take a leading role within this framework. This task can be best accomplished through the enhanced cooperation between, especially, the IDB and the active NGOs in the member countries.

In order to overcome the bottlenecks that prevent the expansion of microfinance services and to promote sustainable microfinance sector in the OIC countries, governments, donor community, and microfinance institutions themselves are encouraged to consider the following recommendations:

**The Governments:**

- Facilitate an open and inclusive dialogue on microfinance in their countries and create conducive environments for microfinance institutions.
- Implement policies that are in line with international best practices to foster growth of microfinance industry.
- Promote the development of transparent and effective mechanisms to transfer state funds to MFIs. The independence of the disbursing institutions would be an important factor in ensuring good results. The involvement of international organizations and experts in the process can also help in accomplishing credibility and transparency of these institutions.
- Strengthen microfinance expertise of the staff in key ministries that work with microfinance projects. Encourage implementation of programmes that follow international practices and promote transparency in decision-making processes.

**The Donor Community:**

- Provide inputs to the governments to improve the design of their pro-poor policies and the microfinance strategy.
- Participate in government microfinance projects to assure transparency and effectiveness of the microfinance institutions.
- Disseminate information about best practices and sector standards and conduct new surveys to better assess the impact of microfinance on poverty eradication.

**Micro-Finance Institutions:**

- Facilitate making of national microfinance strategy and propose specific solutions to current challenges faced by the microfinance industry.
- Improve networking and adopt modern international microfinance management techniques, comply with international standards in accounting and reporting, and improve international ratings.
- Become proactive in their strategies by developing creative and innovative methodologies to expand their outreach, especially in rural areas, where the poor are concentrated.
- Facilitate knowledge sharing of best practices among MFIs in the OIC region and approach national and international commercial banks, as well as international private investors, to attract and increase their financial resources.

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**Reference**

SESRIC (2008), *Microfinance Institutions in the OIC Member Countries*, Ankara, Turkey.
Research and Scientific Development in OIC Countries

Esat Bakımlı, SESRIC

Research in science and technology is of great importance and key to progress towards a knowledge-based, or an innovation-driven economy. On one hand, it promotes better understanding on different aspects of life while, on the other hand, it helps to improve the standard of living by creating new knowledge and technological innovation.

Today, there is severe competition among countries to become the most competitive and knowledge-based economy in the world. In this respect, gaining a competitive advantage against other countries, which is of particular importance to the OIC member countries in catching-up within this competitive world of knowledge economy, depends mostly on how well they perform in research activities.

This brief report presents an overview of achievements by the OIC member countries in the field of research and development (R&D) and science & technology (S&T).

Human Resources in Research & Development

The availability of abundant and highly qualified researchers is an essential condition to foster innovation and promote the scientific and technological development of a country. However, figures indicate that OIC member countries, on average, fall well behind the world average in terms of researchers per million people: 402 vs. 1,492, respectively.1

Figure 1 illustrates the OIC map of distribution of researchers employed in R&D and reveals the following observations:

- Only 4 member countries have more than one thousand researchers per million people, two of which – Jordan and Tunisia – are above the world average.

Figure 1: Researchers per million people

Source: UNESCO Institute for Statistics, Data Centre. * Headcount data for the most recent year available.

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1 Figures are the weighted averages of countries for which data are available.
- 8 member countries have less than one hundred researchers per million people, most of which are in Sub-Saharan Africa.

- Great disparity exists among the member countries; Jordan has 3,052 researchers per million inhabitants while Niger has merely 10.

**Women in Research Activities**

In the last decades, women, with better access to training and education facilities thanks to the rising awareness on gender in/equality, have become more qualified and motivated to participate in the labour force. Nevertheless, the progress achieved so far in the field of R&D seems to be unsatisfactory neither globally nor at the OIC level. Women, in the OIC, represent around 30% of the total researchers, slightly higher than the world average of 28%.

With respect to the data demonstrated in Figure 2, the following observations can be drawn:

- According to regional averages, OIC members in Central and East Asia report higher rates of women researchers, often above the world average.

- Members in the Middle East report lower rates of women researchers than those in North Africa. The share of women researchers range from 45% in Tunisia to 17% in Saudi Arabia.

- Intra-regional difference is even higher in Sub-Saharan Africa: on one hand, there are countries like Sudan and Uganda where women represent more than 30% of researchers while, on the other hand, there also are countries where women’s share is less than 10% as in the case of Guinea and Gambia.

- Azerbaijan is the only member country to have more women researchers than men (52%). Kyrgyz Republic and Tunisia –both with 45% women researchers– are also very close to achieving gender parity.

**Figure 2: Women as a share of total researchers (%)**

Source: UNESCO Institute for Statistics, Data Centre.

* Headcount data for the most recent year available.

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2 Calculations are based on countries with available headcount data –for the most recent year available.
R&D intensity (Gross domestic expenditure on R&D –GERD– as a percentage of GDP) is a widely used indicator of S&T activities. It reflects the innovative capacity of a country in that a higher R&D intensity indicates that relatively more resources are devoted to the development of new products or production processes. Available data show that OIC member countries’ spending on R&D activities is significantly lower than the world average (Figure 3).

Among the few Sub-Saharan members that can provide data, Mozambique with 0.5% R&D intensity, is the only country to spend above the OIC average.

Figure 4 illustrates the change in R&D intensity between 1996 and 2006 for the OIC member countries for which data are available. Accordingly;

- In most of the member countries, R&D intensity remained relatively stable.
- Tunisia, Malaysia, Morocco, Pakistan, and Turkey managed to increase their R&D intensity. Except in Turkey, R&D intensity was more than doubled in these countries.
- Sudan, Uganda, and Algeria reported a significant decrease in their R&D intensity.

Regarding the R&D intensity in the OIC member countries, the situation can be summarized as below:

- Most of the member countries spend less than 0.5% of GDP on R&D.
- R&D intensity in all of the member countries, averaging 0.47% for the OIC, is lower than the world average.
- Tunisia reports the highest level of R&D intensity (1.03%), followed by Turkey (0.76%) and Morocco (0.66%), while the lowest spending level is recorded for Brunei (0.02%).

Source: World Bank, World Development Indicators, Online Database; UNESCO Institute for Statistics, Data Centre.

* Data for the most recent year available between 2000 and 2006.
Figure 4: Trends in R&D intensity

GERD as % of GDP, 2006 or latest available year

GERD as % of GDP, 1996 or earliest available year

Source: UNESCO Institute for Statistics, Data Centre.

R&D Expenditures by Sector

Given that the GERD is the sum of R&D expenditures of the performing sectors, it is useful to disaggregate it into individual sectors to see how much R&D each sector performs. This sectoral disaggregation is based on the United Nations classification that defines four major sectors of performance: Government, Business Enterprise, Higher Education, and Private Non-Profit. In this respect, Figure 5 presents the distribution of GERD among these sectors in the OIC member countries for which data are available. The figures are based on total available resources, regardless of their source of funds.

Considering the data illustrated in Figure 5, sectoral distribution of GERD can be summed up as below:

- In most of the OIC member countries (9 out of 15 with available data), more than 50% of GERD is spent by government sector.

Figure 5: Distribution of GERD by sector of performance (%)*

Source: UNESCO Institute for Statistics, Data Centre.

* Data for the most recent year available.
Despite having a share of less than 50%, government sector in Kazakhstan and Sudan is the dominant sector, spending more on R&D than the other sectors.

GERD in Burkina Faso is completely performed by government sector.

The share of Business Enterprise in GERD is highest in Malaysia and Pakistan, 71.5% and 67.6%, respectively. Moreover, in Kazakhstan, Kyrgyz Republic, and Turkey, Business Enterprise is responsible for more than one third of the GERD.

Higher Education is the leading sector in Senegal and Turkey, accounting respectively for 66.7% and 51.3%. Furthermore, around one third of the GERD in Brunei and Tunisia is also performed by this sector.

The share of R&D expenditures by the Private Non-Profit sector is at a negligible level.

**R&D Expenditures by Source of Funds**

Figure 6 presents information on the funding sources of R&D in OIC member countries.

Source distribution of the GERD has been made again on a sectoral basis as specified above, yet including additionally the funds from abroad.

Figure 6 illustrates the sectoral distribution of GERD by source of funds. Accordingly, the situation in OIC member countries can be summarized by the following observations:

- In most of the OIC member countries, R&D is mainly financed by the government sector. Out of 16 member countries, for which data are available, 10 countries are receiving more than 50% of R&D funds from the government.
- Despite having a share of less than 50%, government sector in Tunisia and Turkey is the dominant sector, providing more R&D funds than the other sectors.
- GERD in Burkina Faso and Senegal is completely funded by government sector.
- Funding of Business Enterprise is dominant only in Malaysia, accounting...
for 71.2% of the total R&D funds. Yet, in Turkey and Kyrgyz Republic, the share of Business funds is also at significant levels.

- Only in Morocco, the primary source of R&D funds is Higher Education sector, accounting for 47.4% of the total R&D funds.
- Mozambique and Uganda deserve special attention as their R&D funds mostly come from abroad, 65.3% and 56.9% respectively.

### High Technology Exports

High Technology Exports (HTE) are products with high R&D intensity, including aerospace, computers, software and related services, consumer electronics, semiconductors, pharmaceuticals, scientific instruments and electrical machinery, which mostly depend on an advanced technological infrastructure and inward FDI in high-tech industries. Confirming the lack of adequate infrastructure and FDI in most of the OIC member countries, data for the year 2006 shows that 26 of the member countries –for which data are available– account for only 4% of the world HTE.

Data for these countries are illustrated in Figure 7, which yield the following observations:

- Malaysia and Indonesia are, by far, the top ranking OIC member countries by high technology exports, together representing 95% of the total HTE of the OIC.
- With US$ 63.4 billion, Malaysia, on its own, accounts for about 87% of the total HTE of the OIC, and 3.5% of those of the world.
- HTE of the other good performing member countries ranges from US$ 100 million to US$ 1 billion.
- In Sub-Saharan Africa, Benin, Guinea, and Sudan records even less than US$ 30 thousand of HTE.
- Cote d’Ivoire, with more than US$ 500 million of HTE, gets far ahead of the other Sub-Saharan members.

![Figure 7: High technology exports (Million US$)*](source: World Bank, World Development Indicators, Online Database. * Data for 2006 or latest available year.)
For a better understanding of the importance of HTE to a country, it is useful to look at the share of these exports in its total manufactured exports. Figure 8 presents these shares for 42 member countries for which data are available in a comparative manner to reflect any change over time.

With respect to the data illustrated in Figure 8, the evolution of high technology exports in the OIC member countries can be summarized as below:

- **In 15 member countries listed at the bottom of the Figure, HTE continue to account for less than 2% of their manufactured exports. Though rather limited, there have been improvements in all of them except in Togo and Guinea.**

- **Largest improvements across the OIC are recorded by three Sub-Saharan members, namely Cote d'Ivoire, Uganda, and Gabon, which have managed to increase the share of HTE from below 7% to above 30% of their manufactured exports.**

- **Kazakhstan and Albania have also reported relatively high expansion rates in the share of HTE; 17.3 and 11.6 percentage points, respectively, to reach 20.8% and 12.6%.**

- **Decline in the share of HTE in manufactured exports has also been observed in many countries, particularly in Kyrgyz Republic and Mali with more than 10 percentage points, and in Mozambique and Jordan with about 7 percentage points.**

- **Representing 95% of the total HTE of the OIC, Malaysia and Indonesia have also witnessed a decrease in the share of HTE in their manufactured exports, 5.8 and 3.0 percentage points, respectively. Yet again, Malaysia continues to have the largest share of HTE in manufactured exports (53.8%).**
Academic research is an important component of all research activities conducted in a country. To a certain extent, the performance in academic research can be well reflected by the number of scientific articles published in indexed journals. In this regard, the quantity and the growth of the research output, i.e. articles, are common indicators used to measure the research performance of a given institution or country. Indeed, such bibliometric indicators have been widely used in national science and technology statistics publications to measure scientific capacity and linkages to world science and particularly in national and international rankings of universities.

Published Articles

In 2007, OIC member countries published 51,411 articles in journals that are covered by Science Citation Index Expanded (SCI-EXPANDED), Social Science Citation Index (SSCI), and Arts & Humanities Citation Index (A&HCI). Figure 9 presents information on the contribution of each member country to this output.

In this respect, the following observations outline the performance of the OIC member countries in publishing articles:

- Production of scientific publications – here articles – in the OIC is heavily concentrated in a few of the member countries.
- More than half of the articles (52.2%) originate from only two member countries, namely Turkey (34.8%) and Iran (17.4%).

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**Figure 9: Articles published in international journals, 2007**

Source: ISI Web of Knowledge, Online Database.

* Total number of articles published in journals covered by Science Citation Index Expanded (SCI-EXPANDED), Social Science Citation Index (SSCI), and Arts & Humanities Citation Index (A&HCI).

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2 For example, Academic Ranking of World Universities by Shanghai Jiao Tong University (SJTU), World University Rankings by the Times Higher Education Supplement (THES), and also the OIC University Ranking make use of the research output as an important indicator in their ranking methodologies.

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3 See ISI Web of Knowledge Online Database.
- Adding Egypt, Malaysia, and Pakistan, these five countries account for two-thirds of all published articles.
- Some other member countries in the Middle East & North Africa, South Asia, and East Asia & Pacific also perform well while those in Latin America, Sub-Saharan Africa, and Central Asia are generally lagging behind.
- Individually, there are 17 countries publishing less than 50 articles. These countries are not concentrated in one region but dispersed across regions: for example; from Albania in Europe to Somalia in Sub-Saharan Africa, and from Guyana in Latin America to Tajikistan in Central Asia.
- Nigeria stands out as the only Sub-Saharan member to produce more than one thousand articles.

**The Evolution of Publication Outcome**

The growth in the number of articles on a per-capita basis reflects a better indicator of productivity in scientific publications as it takes into account the relative size of the population in the countries compared. In this respect, Figure 10 presents data on articles per million people (pmp) in OIC member countries, comparing two periods of time: 1998-2002 and 2003-2007. Accordingly:

- On average, OIC member countries produced 17 articles (pmp) in the first period while this number increased only to 27 in the second period, which is still far below the world average.
- 44 out of 57 countries recorded an increase between these two periods, but

**Figure 10: Articles per million people: 1998-2002 vs. 2003-2007**

Source: ISI Web of Knowledge, Online Database.
this increase in 33 of them was no more than by 8 articles. This implies, in general, that the expansion recorded in countries with low number of articles (pmp) remained quite limited compared to those with high numbers.

- Doubling its articles (pmp), Turkey took the lead in boosting scientific productivity, followed by Lebanon, Qatar, Tunisia, and Iran, all of which recorded an increase of more than 50 articles (pmp).
- The remaining 13 out of 47 members, mostly in Central Asia and Sub Saharan Africa, recorded a decrease in their articles (pmp). Yet, the highest decreases were reported for Kuwait (-35.8), Brunei (-10.8), and Saudi Arabia (-7.7), which had and still have quite higher rates than the others. On the whole, Kuwait continues to rank in the second place after Lebanon.
- Overall, according to the data on 2003-2007 average, there are only 18 members performing above the OIC average in terms of articles (pmp).
- Most of the high ranking member countries are located in the Middle East, producing up to 253 articles (pmp).
- At the other side of the spectrum, there are member countries with less than one article (pmp), like Somalia and Afghanistan.

**Patent Applications**

Intellectual property rights, especially patents, are the key factors contributing to advances in innovation and scientific development. As a product of R&D activities, patents strengthen the link between science and technology, as the outcomes of research translate into new products or services. In this regard, although not all inventions are patented, the quantity of patent applications may be considered as a proxy for the degree of innovative capability in a country.

According to WIPO statistics, the total number of patent applications around the world in 2006 is estimated to be 1.72 million, and only 1.03% of them were filed in OIC member countries—where data are available. To shed light on the

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**Figure 11: Patent applications by residents and non-residents, 2006**

situation in individual countries, Figure 11 presents statistics on patent applications in countries for which data are available.

In this respect, the following observations can be made to summarize the situation in the OIC member countries:

- Patent activity is highest in Malaysia, Indonesia, and Pakistan and lowest in Tajikistan and Kyrgyz Republic.
- None of the members reaches to the world average patent applications even when the top countries -USA, Japan, China, and Republic of Korea that account for 70.5% of the total patent applications in the world- are excluded (the corresponding average is 4,984).
- In most of the countries, applications by non-residents are higher than those filed by residents; in fact, in seven of the 15 countries, they account for more than 80% of the total applications. In quantity, they are highest in Indonesia and Malaysia, exceeding 4,000.
- Applications by residents dominate only in five of the member countries, and, in quantity, they are highest in Kazakhstan and Turkey, exceeding 1,000.

Conclusion

Given the importance of evidence-based policy making and the role of S&T in the development of countries, national statistical offices of the member countries should give special attention to the collection and dissemination of statistical data on science and technology. Considering the available data, the following conclusions can be drawn for the member countries:

- Although the availability of researchers varies considerably among the OIC member countries, most of them lag behind the world, with inadequate quantity of researchers employed in R&D activities.
- Women, as researchers, are underrepresented in R&D activities, yet the OIC average is even slightly higher than that of the world.
- R&D intensity is quite low in the OIC, with only one country spending more than 1% of GDP on R&D while the world average is above 2%. On the other hand, some countries have recorded significant increases in their R&D intensity while most of the other countries have reported stable expenditures on R&D. The Ten-Year Programme of Action that was adopted by the Third Extraordinary Session of the Islamic Summit Conference called upon the member countries -under the domain of Higher Education, Science and Technology- to encourage R&D programmes and ensure their individual R&D intensity is not inferior to half of the world average.
- In most of the member countries, R&D activities are financed and performed by the public sector while, in few cases, business sector or higher education takes the lead.
- In parallel with the low R&D intensity and inadequate technological infrastructure, high technology exports of the OIC member countries remain quite limited, accounting for only 4% of the world high technology exports, yet again mostly originated from only two members.
- Moreover, high technology products do not occupy much part in manufactured exports of the members, and this does not seem to improve significantly over time except for few of them.
- Production of scientific articles is also concentrated in a few of the members. In 2007, the OIC member countries produced more than 50 thousand articles, yet, 70% of them originated from only 5 countries and almost one third of the members each produced less than 50 articles.
From 1998-2002 to 2003-2007, the number of articles per million people, on average, increased only by 10 articles to reach 27.

Patent statistics are not available for most of the member countries. Available data of 2006 on 13 members indicate that patent applications are below the world average and mostly filed by non residents, implying that indigenous innovation capability in most of these countries is at low levels.

Overall, given the lack of statistics on science and technology for most of the OIC member countries, it is difficult to come up with a general diagnosis. The member countries need much more available and detailed statistics that will allow for robust analyses towards developing evidence-based relevant policies to prevent further marginalisation and close the gap with the developed countries. On the whole, countries should give more importance to scientific development and promote activities that may extend the use of their capacities so as to contribute to national scientific and technological base.

References

ISI Web of Knowledge, Online Database.


UNESCO Institute for Statistics, Data Centre.

WIPO, Statistics on Patents.

World Bank, World Development Indicators, Online Database.
HEALTH SYSTEMS AND EXPENDITURE IN THE OIC MEMBER COUNTRIES

Nader Jamil Abdulhamid, SESRIC

The well-being of humanity is based on the development of health which is commonly and widely accepted as the ethical principle of equity. Over the recent decades, the issue of health has gained great importance as a major driver of socio-economic progress around the globe, with more resources than ever being invested in this sector. In a general overview, people are healthier, wealthier and live longer today than 30 years ago. According to the 2008 issue of the World Health Report, if children were still dying at 1978 rates, there would have been 16.2 million deaths globally in 2006 (where the actual figure was 9.5 million). This difference of 6.7 million means that 18,329 children’s lives were saved every day.

However, the Report also mentions other issues that should gain serious attention: First, the substantial progress in health development over the recent decades has been deeply unequal, with convergence towards improved health in a large part of the world, but at the same time, with a considerable number of countries increasingly lagging behind or even losing ground (Inequality). Second, the nature of health problems is changing in ways that were only partially anticipated, and at a rate that was wholly unexpected; Ageing and the effects of ill-managed urbanisation and globalisation accelerate worldwide transmission of communicable diseases and increase the burden of chronic and non-communicable disorders (Nature). Third, health systems are not isolated from the rapid pace of change and transformation that is an essential part of today’s globalisation; Economic and political crises challenge state and institutional roles to ensure access, delivery and financing of health care (Externalities).

Moreover, the Report draws attention to five important shortcomings of health care delivery. First, people with most means and least health problems consume the most care, whereas those with least means and most health problems consume the least (Inverse Care). Second, weak social protection leads to extremely harmful expenses; Over 100 million people annually fall into poverty because they have to pay for health care (Impoverishing Care). Third, health services for poor and marginalized groups are often highly fragmented and severely under-resourced due to the excessive specialisation of health care providers (Fragmented Care). Fourth, poor design of health systems that is unable to ensure safety and hygiene standards leads to high rates of hospital-acquired infections, medication errors and other avoidable adverse effects (Unsafe Care). Fifth, resource allocation mostly focuses at high-cost curative services neglecting the potential of primary prevention and health promotion to prevent up to 70% of the disease burden in addition to lacking the expertise to mitigate the adverse effects on health from other sectors (Misdirected Care).

The issue of health development gains greater importance when the OIC member countries are considered. Their mixed nature and high levels of heterogeneity and divergence in the economic structure and performance call for urgent action needed for the enhancement and utilisation of the allocation of resources.

Health Systems

The concept of Health Systems focuses on health services provided for the population of a country. It is commonly measured by the number of physicians, nurses, dentists, pharmacists and hospital beds available per 10,000 humans of the population. The data used for calculations is the latest available country data which ranges from 1997 to 2007.

Considering the four compared country groups, namely; OECD, EU 15, the Developing
Countries\(^1\) and the OIC, it is clearly recognised that the group of the OIC is far behind both of the OECD and the EU 15 for all of the five categories (Figure 1). Roughly speaking, the average level of Health Systems in the group of the OIC is around one-third of that in the OECD and the EU 15. And, when compared to the group of the Developing Countries, the OIC is again below the average for all of the categories except for the number of pharmacists per 10,000 where it is at the average level of the Developing Countries. That is, the average level of Health Systems in the group of the OIC is also behind that of the Developing Countries.

When the income sub-groups of the OIC are considered, it is clearly recognised that, while both of High Income and Middle Income OIC member countries (OIC-HIC and OIC-MIC) are performing well above the average of the OIC as a group for almost all of the five categories, the Low Income OIC member countries (OIC-LIC) are suffering much with respect to their average level of Health Systems figures (Figure 2). When comparing the “good” performers of the OIC sub-groups (OIC-HIC and OIC-MIC) with the average levels recorded by both of the OECD and the EU 15 groups, both OIC sub-groups average levels of Health Systems are significantly far behind those recorded by both of the OECD and the EU 15 groups.

Comparing the income sub-groups of the OIC with the country groups of the OECD, EU 15, and the Developing Countries shows, as expected, that all of the three income sub-groups of the OIC are far behind both of the OECD and the EU 15. But compared to the group of the Developing Countries, the OIC-HIC and OIC-MIC both performed better than the average of the Developing Countries with respect to the number of physicians, nurses and pharmacists. The OIC-LIC sub-group is far behind the average of the Developing Countries for all of the five categories. Regarding the category of hospital beds, surprisingly, the OIC-HIC recorded an average below that of the Developing Countries while the OIC-MIC recorded an average above that of the Developing Countries (Figure 3).

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\(^1\) The group of the Developing Countries is classified according to the IMF’s Country Composition of World Economic Outlook Groups, World Economic Outlook Database, April 2008, http://www.imf.org/external/pubs/ft/weo/2008/01/wecodata/groups.htm
The concept of Health Expenditure focuses on the financial side of health development with respect to the population of a country. It is analysed here through comparing the population, GDP and Total Health Expenditure for the country groups in question for the year 2006. The Health Expenditure analysis also provides explanation and reasoning for the above-mentioned situations with respect to the Health Systems analysis.

At the global level, with 17.9% of the world population, the OECD gains 75.5% of the world GDP and spends 84.2% of the world Total Health Expenditure. In the same manner, the EU 15, with 5.9% of the world population, gains 27.9% of the world GDP and spends 25.4% of the world Total Health Expenditure. But, the picture is reversed when considering the group of the Developing Countries, highest population percentage of the world but lowest GDP and Total Health Expenditure compared to both of the OECD and the EU 15. In the same manner as for the group of the Developing Countries, the OIC group with respectively higher population percentage of the world recorded lower GDP and Total Health Expenditure compared to both of the OECD and the EU 15.

This gives an idea about global trends of health development in these four groups. But what about caring for health development? How much do these four groups care for health development? This issue can be explained through analysing their Total Health Expenditure as percentage of their own GDPs (Figure 5).

While the OECD and the EU 15 spend 11.1% and 9.1%, respectively, of their GDPs on health development, both of the groups of the Developing Countries and the OIC spend only 5% and 4%, respectively, of their GDPs on health development (Figure 5). Taking into consideration the mixed nature of the OIC group which reflects high levels of heterogeneity and divergence in the economic structure and performance of these countries where, out of the world’s 50 least-developed countries, 22 are OIC member countries, and remembering that, by the end of 2006, the total external debt of the group of the OIC amounted to 752.6 Billion USD, and that, according to the 2008 World Bank classification, 22 OIC member countries are considered Heavily Indebted Poor Countries (HIPC)s, the issue of health development becomes a major challenge and an urgent area of concern that needs serious planning and policy reforms for more allocation of resources.

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The picture of the group of the OIC becomes clearer when considering the income sub-groups of the OIC. With 2.3% of the OIC population, the OIC-HIC gains 22.8% of the OIC GDP and spends 17.1% of the OIC Total Health Expenditure. In the same manner, the OIC-MIC, with 45.7% of the OIC population, gains 59.9% of the OIC GDP and spends 68% of the OIC Total Health Expenditure. But, the picture is reversed when considering the OIC-LIC, highest population percentage of the OIC but lowest GDP and Total Health Expenditure with respect to both of the OIC-HIC and the OIC-MIC (Figure 6).

Disability-Adjusted Life Years (DALYs)

The Disability-Adjusted Life Year (DALY) is a newly introduced measure that constitutes the basics of the World Health Organization Global Burden of Disease (WHO GBD) analysis\(^1\). The DALY is a health gap measure that extends the concept of potential years of life lost due to premature death to include equivalent years of “healthy” life lost by virtue of being in states of poor health or disability. The DALY combines in one measure the time lived with disability and the time lost due to premature mortality. One DALY can be thought of as one lost year of “healthy” life. The results of the DALY analysis can be understood as a reflection of the above-mentioned situations with respect to the Health Systems and Expenditure analyses.

Considering the OECD, EU 15, the Developing Countries and the OIC country groups, it is clearly recognised that the group of the OIC is much far behind both of the OECD and the EU 15. While the OECD and the EU 15 recorded 10.3% and 3.2%, respectively, of the world’s DALYs, the group of the OIC recorded 28.1% of the world’s DALYs (Palestine is not included in this analysis because of its non-available data). The worst picture is that of the group of the Developing Countries; recording 92.0% of the world’s DALYs (Figure 7). Remembering that the group of the Developing Countries makes 87% of the world’s population, its DALYs record is not surprising because of its significantly low world GDP percentage (26.5%) of which only 5% is dedicated to Total Health Expenditure. One would not be mistaken when saying that the “world” is urgently in need for serious enhancements in the issue of health development. This is also true for the group of the OIC as it is a sub-group of the Developing Countries. The figures of DALYs reflect the situation of the Health Systems which, in turn, is a reflection of the situation of the Health Expenditure-GDP relationship/ratio.

\(^1\) The (WHO GBD) analysis provides a comprehensive and comparable assessment of mortality and loss of health due to diseases, injuries and risk factors for all regions of the world. The overall burden of disease is assessed using the disability-adjusted life year (DALY), a time-based measure that combines years of life lost due to premature mortality and years of life lost due to time lived in states of less than full health. The first GBD 1990 study quantified the health effects of more than 100 diseases and injuries for eight regions of the world in 1990. It generated comprehensive and internally consistent estimates of mortality and morbidity by age, sex and region. This study was updated for the year 2000-2002 and included a more extensive analysis of the mortality and burden of disease attributable to 26 global risk factors using a consistent analytic framework known as Comparative Risk Factor Assessment (CRA).
When the income sub-groups of the OIC are considered, it is clearly recognised that the OIC-HIC recorded the minimal (negligible) percentage of DALYs within the group of the OIC which is significantly better performance compared to both of the OECD and the EU 15. The OIC-MIC recorded almost one-third which is better than the OECD group but much worse than the EU 15 group, and the OIC-LIC recorded almost two-thirds which is significantly worse performance compared to both of the OECD and the EU 15) of DALYs within the group of the OIC (Figure 8).

When the DALY is age-standardised per 100,000 of the population, it is recognised that the DALY performance of the group of the OECD ranges from 8178 to 16246. In the same manner, the DALY performance of the group of the EU 15 ranges from 8178 to 16246. But, the picture gets much worse when considering the group of the OIC. Only Kuwait fits into the range of the group of the EU 15 with a recorded standardised DALY better than Portugal. Kuwait, Qatar, Bahrain, Brunei, Oman, United Arab Emirates, Malaysia, Albania and Turkey fit into the range of the group of the OECD (with Turkey having the least performance as an OECD member). The remaining OIC Member Countries fall far behind both of the OECD and the EU 15 of which 47 OIC Member Countries recorded standardised DALYs in the range of 16,384 (recorded by Tunisia) to 73,362 (recorded by Sierra Leone).

The group of the Developing Countries recorded standardised DALYs in the range of 9,768 (recorded by Monaco) to 84,594 (recorded by Lesotho). Comparing the standardised DALYs of the OIC Member Countries with those of the group of the Developing Countries, 22 OIC Member Countries recorded standardised DALYs in the upper half (15 in the top 50) while the rest is at the lower half (24 in the bottom 50) of the Developing Countries (Palestine is not included in this analysis because of its non-available data).

Conclusion and Policy Recommendations

In many regards, the responses of the health sector to today’s globalised world have been inadequate and ineffective. Inadequate, as they not only fail to anticipate but also to respond appropriately. Ineffective as a system’s failure requires a system’s solution, not a temporary relief. Problems with human resources for health care, finance, infrastructure and information systems extend beyond the narrowly definition of the health sector. This raises the crucial importance of working effectively across governments and stakeholders.
The 2008 issue of the World Health Report structures the reforms needed in the health sector in four groups that reflect the convergence between the evidence on what is needed for an effective response to the health challenges of today’s world, the values of equity and social justice that constitute the basic of the health development movement, and the growing expectations of the population in today’s modern societies: First, reforms that ensure that health systems contribute to health equity, social justice and the end of exclusion, mainly by moving towards universal access and social health protection (Universal Coverage Reforms); Second, reforms that re-organise health services as primary care so as to make them more socially relevant and more responsive to today’s globalised world while producing better outcomes (Service Delivery Reforms); Third, reforms that secure healthier communities, by integrating public health actions with primary care and by engaging healthy public policies across sectors (Public Policy Reforms); Fourth, reforms that replace disproportionate reliance on command and control on one hand, and laissez-faire disengagement of the state on the other, by the inclusive, participatory, negotiation-based leadership required by the complexity of contemporary health systems (Leadership Reforms).

In this respect, and taking into consideration the weak performance of the OIC group which call for urgent action needed for the enhancement and utilisation of the allocation of resources, it is worth mentioning that the First Islamic Conference of Health Ministers which was held in Kuala Lumpur, Malaysia (12-15 June 2007), has highly emphasised the health development issue in the OIC. The OIC member countries are urged to cope with the Kuala Lumpur Declaration 2007 which has been signed by the OIC Ministers of health in the said Conference. The Declaration constitutes a very important stage of utilised cooperation among the OIC member countries on national, regional and international levels aiming at developing, strengthening and maintaining the health sector in the Islamic world.

The Ministers have drawn crucial attention, among other things, to: (1) The importance of health to human development and poverty reduction being an important economic asset for labour productivity and educational attainment; (2) The decision of the 3rd Extraordinary Session of the Islamic Summit Conference to establish a special fund within the Islamic Development Bank (IDB) for poverty alleviation and health issues in the OIC member countries; (3) That communicable diseases, in today’s globalised world, can spread much faster and can lead to significant loss of lives and have negative impact on the economy of the OIC member countries; (4) The International Health Regulations (2005) adopted by all 193 WHO members have come into effect on 15th June 2007; (5) That more than one-third of unvaccinated children globally (9.9 million infants) reside in the OIC member countries; (6) That the exclusive breastfeeding rate (up to 6 months) in many OIC member countries is less than 20%; (7) That maternal mortality due to preventable complications of pregnancy and childbirth remains unacceptably high in many OIC member countries.

Accordingly, the Ministers, among other things, have urged and requested the OIC member countries to: (1) Further support the IDB fund through generous and urgent contributions; (2) Assess the existing national public health systems and develop, strengthen and maintain the core country capacities required under the International Health Regulations (2005) through the mobilisation of both domestic and external resources and expertise; (3) Support the implementation of the resolution of the World Health Assembly (60.28) on pandemic influenza preparedness.
plan sharing of influenza viruses and access to vaccine and other benefits; (4) Intensify their cooperation with the World Health Organisation and other international organisations to combat global health concerns; (5) Promote collective self-reliance in vaccine production and supply through strengthening National Regulatory Authorities and improving capacity for vaccine production and distribution in the OIC member countries; (6) Introduce stronger tobacco control legislation to protect present and future generations from the devastating health, social and economic consequences of tobacco consumption and exposure to tobacco smoke; (7) Invite the OIC general Secretariat, the Islamic Development Bank and the World Health Organisation to set up a tripartite consultative mechanism to combat diseases and epidemics.

References


E-GOVERNMENT READINESS IN THE OIC MEMBER COUNTRIES

Atilla Karaman, SESRIC

Today we are living in an era of speed caused by the technological progress of mankind which has a deep impact on each and every process in both the public and private sector. This impact has even been felt in the most remote geographical areas of the world due to the widespread use of information and communication technology tools. These technologies are also adopted by the governments to transform the public policy, processes and functions to better serve their citizens. Besides providing better services to citizens, the governments themselves also enjoy the productivity, transparency, accountability, and cost savings by porting their procedures from the paper base to the electronic base. When we look at the expansion of the e-government applications; in the beginning, some government agencies have started with bringing their services on-line independent of other government agencies. Sound infrastructure, improved web technology, and trained human capital have made it possible for the governments to attain a high level of on-line public services. However, in order for governments to maintain a sustainable growth in e-government services and to reach the citizen satisfaction, it is imperative for them to consolidate these unattached separate services under an integrated e-government system. The integrated e-government system available round the clock undoubtedly will tie agencies, processes and systems together in a more efficient and faster way. To assess the capability of OIC Member Countries in E-Government Readiness, the application of information and communication technologies by governments has been taken into consideration in this report. The data used in this report are mainly from “The United Nations e-Government Survey 2008”.

E-Government Readiness Performance of the OIC Member Countries

This section presents a general picture of the OIC Member Countries which have been evaluated based on their e-government readiness which is measured by taking the E-Government Readiness Index (EGRI) into consideration. The EGRI is a composite index comprising 3 sub-indices; the Web Measurement Index (WMI), the Telecommunication Infrastructure Index (TII) and the Human Capital Index\(^2\) (HCI). As shown in Figure 1, the average OIC e-government slightly increased from 0.31 in 2005 to 0.34 in 2007 as more OIC member countries try to serve more informative websites available for the public. It is still less than the World average and the averages of other regions, except the average of Africa. The slow adoption pace is highly related to the level of development of the Member Countries. Achieving high rankings in the EGRI requires robust broadband network, high market penetration rates of mobile communication means and applications, well-trained human resources and consolidated administration of disperse but attached e-government applications. Shortcomings faced in the fulfilment of those requirements cause the discrepancies between the regions.

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Figure 1: E-Government Readiness Index by Regions (2005-2007)

Figure 2 shows the top 10 OIC Member Countries ranked by the e-government readiness index with United Arab Emirates leading the index. With 8 countries in the Top 10 List, the Middle East & North Africa (MENA) is the most successful region. Malaysia and Turkey are the other OIC Member Countries from the regions of East Asia & Pacific and Europe & Central Asia, respectively taking place in the Top 10 E-Government Readiness Rank List. None of the member countries in the Latin America & Caribbean, South Asia and Sub-Saharan Africa regions took a position in the Top 10 E-Government Readiness Index Ranking. Except Lebanon and Turkey, the other OIC Member Countries in the Top 10 Rank List improved their positions from year 2005. Egypt is the only country in the Top 10 to move up 20 positions from its 2005 rank. In this list the gap between the scores of UAE (ranked 1) and Egypt (ranked 10) is slightly high, amounting to approximately a 25% difference in the ranking of e-government readiness of the OIC Member Countries.

Figure 2: Global E-Government Readiness Rankings of Top 10 OIC Member Countries

Figure 3 shows the number of OIC member countries in terms of Global EGRI rank changes from year 2005 to year 2007. Of the 55 OIC member countries for which the data available, only 22 managed to increase their positions from 2005 to 2007. A similar performance has been observed in all regions, except MENA and South Asia. MENA and South Asia have more good performing countries than those of other regions in year 2007. 11 of the member countries in the MENA and 3 of the member countries in the South Asia managed to increase their year 2005 ranks in year 2007. All member countries in the Latin America & Caribbean, 16 of the member countries in the Sub-Saharan Africa, 5 of the member countries in the Europe & Central Asia and 2 of the member countries in the East Asia & Pacific poorly performed in year 2007 when compared to their year-2005 ranks.

Figure 3: Number of Good/Poor Performers by E-Government Readiness Rank Change between 2005 and 2007

Web Measurement Index

The WMI looks at how governments are providing e-government policies, applications and tools to meet the growing needs of their citizens for more e-information, e-services and e-tools. It measures the online presence of national websites, along with those of the ministries of health, education, welfare, labour and finance of the country. The web measurement index

3 see “UN e-Government Survey 2008”, p 43.
considers a five-stage model, which builds upon the previous levels of complexity of a government’s online presence. The main online presence is the national portal or the official government home page. The other online presence sites for Ministries/Departments of Health, Education, Social Welfare, Labour and Finance, have also been taken into consideration. If governments can meet the threshold points for infrastructure development, content delivery, business re-engineering, data management, security and customer management, they move up from one stage to another in the model. Thus, the web measure index shows the ability of governments to deliver online services to their citizens.

Figure 4: Web Measurement Index by Regions (2005-2007)

Figure 4 shows that the average OIC web measurement index has been slightly increased from 0.20 in 2005 to 0.24 in 2007 as more OIC member countries invest in infrastructure development, citizen-friendly portals, online applications and back office integration. The OIC as a whole achieved the highest index value leap from 2005 to 2007 with a 0.04 point increase. Except the averages of the World, Europe and Oceania; the other regions managed to increase their WMI values from 2005 to 2007.

Figure 5 shows the top 10 OIC member countries ranked by the web measurement index with United Arab Emirates leading the index followed by Malaysia. The UAE and Malaysia went up mostly due to the strength of three of their ministries’ websites, namely: Social Welfare, Labour and Finance. With 7 countries in the Top 10 List, the MENA is the leading region in the web measurement index. Malaysia, Pakistan and Turkey are the other OIC Member Countries from the regions of East Asia & Pacific, South Asia and Europe & Central Asia, respectively taking place in the Top 10 Web Measurement Rank List. None of the member countries in the Latin America & Caribbean and Sub-Saharan Africa regions took a position in the Top 10 WMI Ranking. Except Pakistan and Turkey, the other OIC member countries in the Top 10 Rank List improved their positions from year 2005. Oman withdraws attention which has moved up 76 positions from its 2005 rank. In this list the gap between the scores of UAE (ranked 1) and Kuwait (ranked 10) is high, amounting to approximately a 40% difference in the ranking of e-services provided.

Figure 6 shows the number of OIC Member Countries in terms of their Global Web Measurement Index Rank changes between 2005 and 2007. 22 out of 56 OIC member countries with available data increased their positions from

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4 Stage I – Emerging, Stage II – Enhanced, Stage III – Interactive, Stage IV – Transactional, Stage V – Connected
5 Back office functions are defined as those areas that support front line delivery of services. See “UN e-Government Survey 2008”, p 126.

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6 see “UN e-Government Survey 2008”, p 44.
2005 to 2007. The remaining 34 of the member countries had a degraded performance. All regions except MENA had more countries with moving down positions than the ones with positions moving up in the 2007 rank list. 10 of the member countries in the MENA increased their year 2005 ranks in year 2007. All Member Countries in the Latin America & Caribbean, 15 of the member countries in the Sub-Saharan Africa, 5 of the member countries in the Europe & Central Asia, 2 of the Member Countries in the East Asia & Pacific, and 2 of the Member Countries in the South Asia poorly performed in year 2007 when compared to their year 2005 ranks.

Parallel to the rise in WMI, as shown in Figure 7 the average OIC TII has slightly increased from 0.07 in 2005 to 0.10 in 2007. Despite the improvement in the OIC average, together with the averages of Africa, Oceania and Asia, it is still behind the World average. Only the averages of Europe and Americas have surpassed the World average.

Figure 6: Number of Good/Poor Performers by Web Measurement Rank Change between 2005 and 2007

![Figure 6: Number of Good/Poor Performers by Web Measurement Rank Change between 2005 and 2007](image)

**Telecommunications Infrastructure Index**

In recent years the mankind has witnessed significant improvement in the adoption of information and communication technologies. According to ITU data⁷, between 1991 and 2003 telephone lines doubled and the availability of personal computers grew fivefold. Cellular subscribers increased by 83 times in the last 12 years while the increase in world Internet users was a whopping 151 times. In the last few years there was exceptional growth in the use of the Internet among all regions of the world and especially in the developing regions. The TII was constructed as a composite measure of PCs, Internet Users, Telephone Lines, Mobile subscribers and Broadband per 100 relating them to a country’s infrastructure capacity as they relate to the delivery of e-government services and assigns each variable a 20% weight⁸.

Figure 8 shows the top 10 OIC member countries ranked by the telecommunications infrastructure index with United Arab Emirates as the index leader in the whole OIC. With 6 countries in the Top 10 List, the MENA is again the leading region in the TII. Malaysia, Brunei, Turkey and Maldives are the other OIC member countries from the regions of East Asia & Pacific (the first two), Europe & Central Asia and South Asia, respectively taking place in the Top 10 Telecommunications Infrastructure Rank List. None of the member countries in the Latin America & Caribbean and Sub-Saharan Africa regions took a position in the Top 10 TII Ranking. Except Maldives, the other OIC

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⁷ ITU World Telecommunication Indicators, 2003 projected figures.

member countries in the Top 10 Rank List couldn’t improve their positions from year 2005. Turkey and Saudi Arabia preserved their same positions in 2007. Maldives is the only country in the Top 10 to move up 28 positions from its 2005 rank. In this list the gap between the scores of UAE (ranked 1) and Lebanon (ranked 10) is high, amounting to approximately a 49% difference in the ranking of infrastructure of OIC member countries.

**Figure 8: Global Telecommunications Infrastructure Rankings of Top 10 OIC Member Countries**

![Global Telecommunications Infrastructure Rankings of Top 10 OIC Member Countries](image1)

**Figure 9: Number of Good/Poor Performers by Telecommunications Infrastructure Rank Change between 2005 and 2007**

![Number of Good/Poor Performers by Telecommunications Infrastructure Rank Change between 2005 and 2007](image2)

Figure 9 shows the number of OIC member countries in terms of their Global TII Rank changes in the 2005-2007 period. 26 out of 56 OIC member countries with available data increased their positions from 2005 to 2007. The remaining 30 of the member countries showed a poor performance. All regions except Sub-Saharan Africa and South Asia had more countries with positions moving down than the ones with positions moving up in the 2007 rank list. All OIC member countries in the South Asia and 13 of the OIC Member Countries in the Sub-Saharan Africa increased their year 2005 ranks in year 2007. All OIC member countries in the Latin America & Caribbean and East Asia & Pacific, 11 of the Member Countries in MENA and 6 of the member countries in the Europe & Central Asia had poorly performed in year 2007 when compared to their year-2005 ranks. The success of Sub-Saharan Africa is mostly based on increasing PCs per 100 and the big increase in cellular phone penetration.

### Human Capital Index

The HCI is a composite of the adult literacy rate and the combined primary, secondary and tertiary gross enrolment ratio, with two thirds weight given to the adult literacy rate and one third to the gross enrolment ratio\(^9\). The HCI also helps us to see to what extent the citizens of the OIC member countries are ready and how much the OIC member countries invest in the education of their citizens to embrace the e-government transformation in the Era of Speed.

As shown in Figure 10, the OIC average of HCI maintains its increase from 2005. Despite the fairly minor improvement in the OIC average; together with the average of Africa, it is still behind the World average. The averages of Europe, Americas, Oceania and Asia have surpassed the World average.

**Figure 10: Human Capital Index by Regions (2005-2007)**

![Human Capital Index by Regions (2005-2007)](image3)

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\(^9\) see “UN e-Government Survey 2008”, p 17.
Figure 11 illustrates the top 10 OIC Member Countries ranked by the HCI with Kazakhstan leading the index. With 7 countries in the Top 10 List, the Europe & Central Asia is the leading region in the human capital index. Guyana, Brunei and Libya are the other OIC Member Countries from the regions of Latin America & Caribbean, East Asia & Pacific and MENA, respectively taking place in the Top 10 Human Capital Rank List. None of the member countries in the South Asia and Sub-Saharan Africa regions took a position in the Top 10 Human Capital Index Ranking. Except Kazakhstan and Guyana – the only country from Latin America & Caribbean to enter the Top 10 List – the other OIC member countries in the Top 10 Rank List couldn’t improve their positions from year 2005. In this list the gap between the scores of Kazakhstan (ranked 1) and Libya (ranked 10) is fairly narrow, amounting to approximately a 10% difference in the ranking of human capital of OIC member countries. It is noteworthy that although MENA countries mainly occupy the Top 10 lists in the first two indices, Human Capital Top 10 list mainly consists of countries from Europe & Central Asia.

Figure 11: Number of Good/Poor Performers by Human Capital Rank Change between 2005 and 2007

Figure 12 shows the number of OIC member countries in terms of their Global HCI Rank changes in the period between 2005 and 2007. 13 out of 55 OIC member countries for which the data are available increased their positions from 2005 to 2007. The remaining 42 of the member countries did not succeed in improving their performance. All regions except Latin America & Caribbean had more countries with positions moving down than the ones with positions moving up in the 2007 rank list. 1 of the OIC member countries in the Latin America & Caribbean increased its year-2005 rank in year 2007. All OIC member countries in the South Asia, 18 of the Member Countries in the Sub-Saharan Africa, 10 of the Member Countries in MENA, 7 of the member countries in the Europe & Central Asia and 2 of the member countries in East Asia & Pacific and had poorly performed in year 2007 when compared to their year-2005 ranks.

Figure 12: Global Human Capital Rankings of Top 10 OIC Member Countries

Conclusion and Recommendations

The origins of e-government stem from the usage of internet as a platform for new organisational structuring and as a medium for public services dissemination. In this regard, the rapid technological revolution withdraws the attention of the decision-makers to improve the public sector performance. The OIC member countries as a group increased their EGRI slightly from 0.31 in 2005 to 0.34 in 2007. Although the OIC average index value is still less than the World Average, it is an undeniable fact that the e-government transformation requires sustainable development and sound
economic structure to which most of the OIC member countries have hard time in reaching. The three components of the EGRI; WMI, TII and HCI have shown a slight increase in the case of OIC as a group in the period between 2005 and 2007.

OIC member countries in the MENA, Europe & Central Asia and East Asia & Pacific regions have taken the Top 10 positions in the assessments. Despite this fact; for all sub-indices of the EGRI, the number of OIC Member Countries which failed to improve their ranks in the 2005-2007 period is more than the number of OIC member countries succeeded in improving their ranks in the same period. The main reason for this is the ever-changing nature of the technology which requires the financial capacity to acquire the latest innovations and high calibre human resources to implement them in the e-government transformation. It should be remembered that an e-government portal which seemed unique in 2005 could become an ordinary and average portal in 2007 unless the most recent trends in transaction based secure applications and citizen-friendly portal interfaces are adopted.

The WMI and TII make use of the indicators in which many OIC member countries have difficulty in reaching high scores to rapidly transform into an e-government whereas human capital and e-government readiness have positive correlation where a major number of OIC member countries can start from the human resources aspect while starting their e-government transformation initiatives. As a fact, when the population’s level of education and skills increases, the population is more likely to access and use modern information and communication technologies at increasing rates to facilitate their lives. When such facilitation is achieved at the OIC level, this will also bring greater economic benefits and public sector efficiency.

Given this state of affairs, the following recommendations are suggested for reaching the e-government readiness at the OIC level:

1. Human capital seems to be the driving power for the most OIC member countries in order to prepare the nations ready for the e-government transformation. Therefore, decision-makers of the OIC member countries should adopt policies to invest more in the education of the generations which will create e-government platforms and use them effectively. In this regard, some courses with standardised contents can only be offered via e-learning to better acclimatize citizens for the promotion of e-government applications.

2. The policies for the research and development (R&D) of affordable yet powerful enough computers/notebooks to connect to the internet should be encouraged by the decision-makers of the OIC member countries. Such programs under the name OLPC (One Laptop per Child), etc. are under effect. Those efforts should be examined carefully to increase the computer penetration rates in the OIC member countries. The computers developed as a result of those R&D efforts should be also carry batteries able to store power generated from renewable energy sources since many areas in the OIC member countries are not connected to the national power grid or cannot be
provided with the regular power. The spare parts of the computer and power generators should be affordable and widely available.

3. Emerging mobile telecommunications technologies, such as Wi-Max, should be implemented for wide area network connection where cable based telecommunications channels cannot reach the remote geographic areas.

4. The OIC member countries without any e-government implementation should initiate their national programs with the launch of even one simple e-government site. Member countries not affording the proprietary based software and applications for e-government transformation can pick Open-Source platforms for their e-government transformation projects.

5. For the promotion of e-government portals, citizens should be provided with easy-to-surf pages. Security should be provided with affordable authentication technologies of electronic and/or mobile signatures. Instead of having separate e-government portals for different transactions, these portals should be consolidated under a One-Stop-Centre.
Bangladesh Received Support from World Bank to Improve Water and Sanitation Services in Dhaka City

The World Bank, in December 2008, approved a US$149 million International Development Association (IDA) credit to Bangladesh, which will support the improvement of water supply and sanitation services to the population of Dhaka.

The Dhaka Water Supply and Sanitation Project is designed to improve sustainable delivery of storm water drainage, wastewater, and water services by the Dhaka Water Supply and Sewerage Authority (DWASA).

This will be achieved through rehabilitation, repair, and expansion of the city’s sewerage network and treatment plants, and installation of storm water pumping stations and rehabilitation of canals to help improve drainage and minimize urban flooding. The project will also support DWASA’s pilot expansion of water and sanitation services into some of Dhaka’s slum areas to help increase services to the urban poor, and finance training to improve hygiene practice in the slums.

The credit from the (IDA), the World Bank’s concessionary arm, has 40 years to maturity with a 10-year grace period; it carries a service charge of 0.75 percent.

Source: World Bank, worldbank.org

Saudi Arabia Plans to Build the Largest Medical City in Makkah

The Saudi Arabia’s Ministry of Health has announced plans to build the largest medical city in the Middle East in Makkah.

The medical city, which will be named after Saudi King Abdullah Bin Abdul Aziz, would consist of three hospitals. One 500-bed specialist hospital, one 500-bed maternity and children’s hospital and Makkah’s 500-bed Al Nur Specialist Hospital will be part of the medical city. With the completion of the medical city, the number of hospital beds in Makkah will reach 2,780 in total. The first phase of the King Abdullah Medical City was completed on an area of 850,000 square meters.

The city, which will become operational in 2009, will house all the specialties with state-of-the-art facilities and highly advanced equipment and will serve citizens, expatriates and also Haj-Umrah pilgrims.

Source: Gulf News.
Turkey reaches out to Africa

In the framework of “Opening up to Africa Policy”, which was adopted in 1998, Turkey is willing to further develop its political, economic and cultural ties with African countries in the forthcoming period. Wishing to establish mutually beneficial relations with the Continent, the Turkish Government declared the year 2005 as the “Africa Year”.

Turkey obtained “observer status” to the African Union on 12 April 2005 and has accredited her Embassy in Addis Ababa to the African Union on 5 May 2005. The last African Union Summit held in Addis Ababa in January 2008 has declared Turkey as a “Strategic Partner”. As of May 2008, Turkey has become the 25th non-regional member of African Development Bank.

Turkish International Cooperation and Development Agency (TIKA) Program Coordinator Office in Africa was first opened in Addis Ababa in 2005 and later in Khartoum and Dakar in the years of 2006 and 2007 respectively. TIKA offices support development projects in their respective regions. Turkish Airlines flights to Addis Ababa and Khartoum started as of 22 April 2006. Flights to Lagos and Johannesburg started as of 27 July 2006 and 17 September 2007 respectively.

Turkey provides humanitarian assistance in the struggle against socio-economic collapse in Sub-Saharan Africa due to HIV/AIDS as well as to low agricultural production, lack of drinking water, famine and poverty caused by drought. Turkey donated 7.5 million USD to various African countries via international organisations such as World Health Organization, World Food Programme and the Red Crescent to assist them to cope with the negative effect of draught and other natural disasters. In the school year of 2007-2008 around 300 scholarships have been provided to the students from African countries.

Turkey makes important contributions to civilian police activities such as the UN Integrated Office in Sierra Leone (UNAMSIL), the UN Mission in the Democratic Republic of Congo (MONUC-CIVPOL), the UN Mission in Sudan (UNMIS), the UN Operation in Coted’Ivoire (UNOCI), the UN Mission in Liberia (UNMIL) and the United Nations Operation in Burundi (ONUB) with several police officers.

As an essential component of its policy of opening up to Africa, and with a view to further developing its relations with the countries in the region, Turkey has recently decided to open 15 new embassies in Africa, which will more than double its density of diplomatic representation in the Continent. Six of these new embassies will be in the member countries of OIC; namely, in Mozambique’s capital Maputo, Abidjan, the former capital of Cote D’Ivoire, Cameroon’s capital Yaoundé, Mali’s capital Bamako, the capital of Niger, Niamey and N’djamena in Chad.
In order to further deepen its relations with African countries, Turkey organized the First Turkey-Africa Cooperation Summit in Istanbul on 18-21 August 2008, with the participation of Heads of State/Government and Heads of Delegation from almost all African countries. The Summit provided Turkey with an opportunity to hold bilateral meetings with all participating African countries and put a road map ahead of Turkey and African countries to further promote relations with African countries and explore additional ways and means based on concrete plans.

Source: Ministry of Foreign Affairs of Turkey, mfa.gov.tr/turkey-africa-relations

**Kuwait Unveils Science and Technology Reform Plan**

The Kuwaiti government has endorsed a five-year plan to reform the country’s policy on science and technology. The plan, announced on 15 October 2008, is part of Kuwait’s US$131 billion development plan for 2009–2014, which aims to promote the development of a knowledge-based sustainable economy.

Under the plan, the budget for science and technology will be increased from 0.2 percent to 1 percent of Kuwait’s gross domestic product. A national strategy for science, technology and innovation will also be prepared by the Kuwait Institute for Scientific Research (KISR) in cooperation with higher education institutions and the technological and scientific sectors. The plan also emphasizes the importance of promoting science and technology awareness as tools for development and calls upon KISR and the Kuwait Science Club to develop specific programs for promoting science literacy as well as teaching science in schools.

To improve the quality and competitiveness of science-based companies, the government also intends to build new science and technology excellence centers for harnessing science, adopting new technologies, and providing professional training as well as scientific, technological and research consultation services. Open access scientific and technological databases will also be set up to provide reliable reference data for technical problem-solving, research and development.

Source: Science and Development Network

**Sudan Joins Un-Escwa**

Sudan has recently acceded to the membership of UNESCWA. The Commission has thus come to include 14 member countries. The UN Economic and Social Council (ECOSOC) approved the request by the Sudan to be admitted to membership in the Commission at its substantive session in July 2008. The accession comes in response to the request of Sudan and the recommendation of the UNESCWA 25th Ministerial Session held in Sana’a, Yemen from 26 to 29 May 2008. The United Nations does not proscribe a member of one Regional Commission from being at the same time a member of another Regional Commission, and most of the other Regional
Commissions have member countries that are not located in the region that they serve. UNESCWA now includes: Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, the Syrian Arab Republic, Sudan, United Arab Emirates and Yemen.

Source: UN, Regional Commissions Development Update, Issue

**THE GULF STATES AND SINGAPORE SIGN FREE TRADE AGREEMENT**

Singapore and the Gulf Cooperation Council (GCC) signed the GCC-Singapore Free Trade Agreement (GSFTA), the first-ever FTA for the GCC, in a key step forward for economic relations between Singapore and its 7th largest trading partner.

The GSFTA is a comprehensive free trade agreement covering areas including trade in goods, trade in services, investments, rules of origin, customs procedures, government procurement, electronic commerce, and economic cooperation. The Agreement will grant tariff-free access for about 99% of Singapore’s domestic exports, worth about 3.1 billion Singapore dollars ($$) in 2007. All GCC goods entering into Singapore will also be granted tariff-free access.

In 2007, total exports (i.e. both domestic exports and re-exports) to the GCC were worth an estimated $7.5 billion, while the GCC exported $34.8 billion worth of goods to Singapore. Thus, bilateral trade with the GCC reached a record high of $42.3 billion, a 127% increase since 2002.

The GSFTA will also encourage a greater recognition of Singapore’s Halal standards in the six-member Arab trade group. The GCC countries have committed to either recognise or begin talks to recognise the Singapore Muis Halal Standards (SMHS) as consistent and compliant with similar standards in their countries. Recognition of SMHS by the GCC countries will not only facilitate trade in halal products to the GCC, but will also provide greater assurance to Gulf visitors that their dietary requirements will be met when they visit Singapore.

Source: Ministry of Trade and Industry, Singapore, Press Release

**IRAN AND BOSNIA SIGN TARIFF AGREEMENT**

Iranian and Bosnian ministers signed a preferential tariff agreement in December 2008. The agreement was inked by Iran’s Minister for Commerce Massoud Mir-Kazemi and Bosnian Minister of Foreign Trade and Economic Relations Mladen Zirojevic.

Iran will export medical equipment, food stuffs, cars, medicine, clothing, ceramic tile and marble to Bosnia-Herzegovina, according to the agreement. Bosnia will, in return, export wood,
Nigeria: un to invest $50 million in cassava processing

Abuja — International Fund for Agriculture Development (IFAD) has revealed plans to invest $50 million to improve the processing of cassava in Nigeria and increase market accessibility of the product. Furthermore, plans are underway to diversify the huge focus on cassava and spotlight other crops that would better the lives and livelihood of small scale rural farmers. The body is a specialized financial agency of the United Nation focusing exclusively on poor farmers and rural communities with the aim of reducing poverty in the rural areas.

Perin Saint Ange, Regional Portfolio Adviser for IFAD in Nigeria, who made the disclosure at an interactive session in Abuja, was responding to criticisms directed at the agency for over emphasizing on cassava production to the neglect of market accessibility and other crops. The IFAD official said that after a lot of propaganda to increase the cultivation of cassava in the country last year, farmers were left with enormous harvests of the produce with no market to dispose them, adding that this led to the farmers incurring huge losses of which many are yet to recover from.

Ange acknowledged that the IFAD had indeed focused all of its energy in improving the production capacity and quality of the cassava crop to the neglect of the processing system and marketing of the crop, noting that the huge emphasis being laid on cassava is because it is the bread basket of a large part of the country with about 26 states of the country cultivating the product. He, however, explained that so far a little over $200 million had been devoted to complete the yet-to-be implemented programmes in Nigeria of which $100 million is still left. He also added that about $50 million is still in the envelope to address as a priority the processing and marketing of cassava in particular and others which could be yams that would add value.

Source: allafrica.com

EU launches talks on closer ties with Libya

As part of the initiative to strengthen relations with energy suppliers, the European Union launched talks on November 13, 2008 on closer political and economic ties with Libya. The envisaged framework agreement covers areas ranging from trade to energy, illegal migration and the environment, the EU’s executive Commission said.
EU External Relations Commissioner Benita Ferrero-Waldner said in a statement that EU is eager to establish a clear, long-lasting legal framework with Libya which is the last south-Mediterranean country with which the EU has no contractual relations.

The Commission said talks with Libya would have the goal to cooperate on foreign policy and security issues, a free-trade area, and in areas including maritime policy and fisheries. Libya exports the bulk of its oil to Europe and European firms want to expand energy investment there. The EU also offered the prospect of increased market access for Libya in fisheries and agricultural products, as well as cooperation on migration and tourism.

Source: Reuters, africa.reuters.com

KAZAKHSTAN, AZERBAIJAN TO SET UP PIPELINE ACROSS THE CASPIAN

Kazakhstan and Azerbaijan agreed on November 14, 2008 to set up an oil pipeline system across the Caspian Sea that will help get Central Asia’s vast energy reserves to Western markets and circumvent Russian territory. The Baku Energy Summit was participated by presidents or other senior officials from nations including Turkey, Georgia, Poland, Ukraine, Lithuania, Estonia, Bulgaria and Hungary. Most participants signed a declaration that highlighted the importance of diversifying export routes and expressed support for existing and planned Western-backed pipelines bypassing Russia.

The network will rely on a fleet of tankers and barges to bring Kazakh oil to Azerbaijan, the starting point for a 1,770-km pipeline that traverses the South Caucasus and ends at the Turkish port of Ceyhan.

Kazakh state energy company KazMunaiGaz said the network would be able to ship 500,000 barrels of oil a day at first, eventually growing to 1.2 million barrels per day.

Source: Moscow Times, moscowtimes.ru

TURKEY’S SMALL AND MEDIUM ENTERPRISES TO BENEFIT FROM WORLD BANK FINANCING

The World Bank, in December 2008, approved a US$200 million equivalent additional loan for Turkey’s ‘Access to Finance for Small and Medium Enterprises’ (SMEs) projects. The loan will be to Türkiye Halk Bankası A.Ş(Halkbank), with a government guarantee, and will provide medium and long term working capital and investment finance to small and medium enterprises in Turkey.

The additional loan for the Access to Finance for SMEs project is a commitment-linked flexible loan totaling US$200 million equivalent (US$60
The Abu Dhabi Fund for Development (ADFD) of the United Arab Emirates (UAE) announced in November 2008 that it will finance a number of infrastructure projects worth 29 million U.S. dollars in Kabul, capital city of Afghanistan.

The ADFD announced that it had signed a deal with a Turkish construction company to carry out the multi-million-dollar projects.

The projects will include rehabilitation and upgrading of some main roads in Kabul, and construction of a number of bridges, rainwater drainage system and pavement to ensure free flow of traffic, pedestrians and rain water. The projects are aimed at boosting relations of economic cooperation between the UAE and Afghanistan.

Source: xinhuanet.com

GCC MAY HALT SOME OF THE NEW PROJECTS

The Gulf Cooperation Council (GCC) countries had a significant pipeline of investments, measured at $2.2 trillion at the end of September 2008.

Securities and Investment Company (Sico) in its GCC Investment Outlook presented at the Fund Forum in Bahrain claimed that roughly $500 billion worth of projects are already underway although part of the planned investment may be postponed or cancelled. Sico viewed this as positive for the region as it will help to reduce inflationary stress. Although oil prices have fallen by over $100 a barrel over the past four months, with prices hovering at around $45-$60 a barrel, GCC economies have sufficient cushions to sustain economic growth, albeit constrained until the world economy picks up. With increasing revenues from the non-oil sectors, together with the wealth generated by sovereign investments, the region’s economies are set for continued strong but moderating growth.

Source: arabnews.com

GAS EXPORTING COUNTRIES FORM NEW ORGANIZATION WITH HEADQUARTERS IN QATAR

During the 7th Ministerial Meeting of the Gas Exporting Countries Forum (GECF) held in Moscow on 23rd December 2008, the world's leading gas exporting countries have officially agreed to create an organization with the headquarters in Doha, capital of Qatar. The new charter will transfer the GECF from a loose, consultative body into a formal organization with a permanent secretariat. The GECF was established in 2001 in Tehran and involves...
Algeria, Bolivia, Venezuela, Brunei, Egypt, Indonesia, Iran, Qatar, Libya, Malaysia, Nigeria, Trinidad and Tobago, the United Arab Emirates, Russia and Equatorial Guinea while Norway and Kazakhstan have observer status.

The charter of the organization was approved during the meeting but the guidelines of cooperation will be specified in future meetings. It was also stated that the aim is not to create a gas-OPEC but to transform the GECF into a more organized format.

Source: press.tv.com

GCC PROPOSES JOINT COMPANY TO BUILD $14BN RAILWAY NETWORK

Based on a feasibility study, which was presented to Gulf finance ministers and foreign ministers at their joint meeting in 25 November 2008, the Gulf Cooperation Council (GCC) is considering setting up a joint company to build a 1,940-km railway costing more than $14bn.

The railway would connect Saudi Arabia, Bahrain, Kuwait, Oman, Qatar and the United Arab Emirates, each of which would contribute a share of the start-up capital. By providing a new transport mode, the project will provide improved logistics and lower transport costs in the participating member countries and support other initiatives within the GCC member states towards customs and monetary union and trade facilitation. The project appears likely to be economically justified, with the economic rate of return of 13.5%. Construction of the railway, which is envisaged to be operational by 2016, would cost around $11.2bn, with an additional $3.1bn in land costs.

Source: Gulf Times

IDB AIMS TO BOOST LENDING DURING CRISIS

The Islamic Development Bank is seeking resources to increase its lending next year to help majority-Muslim member states deal with the financial crisis. The Bank is seeking to lend more than this year’s approximately $4.8 billion. The bank would try to increase loans to sectors such as those with high exporting potential and would seek to compensate for lower foreign investment. Member countries, including Pakistan, Indonesia and Bangladesh are possible candidates for more loans.

The IDB is seeking to create new debt products that complied with Islamic law for donor countries to invest in. The bank, whose largest shareholder is oil-exporter Saudi Arabia, began a capital raising program in 2006 which once completed would boost paid-in capital by 50 percent. The Bank is planning to offer low-cost loans to relatively-poor Muslim nations to help them in their efforts towards food security.

Source: arabianbussiness.com
ITFC SIGNS A 60 MILLION USD CREDIT AGREEMENT WITH FOUR TURKISH PARTICIPATION BANK

International Islamic Trade Finance Corporation (ITFC), an autonomous entity within the Islamic Development Bank (IDB) Group, signed a credit agreement worth 60 million USD with four Turkish leading Islamic financial institutions: Turkiye Finans, Al Baraka Turk, Bank Asya and Kuwait Turk Bank. The signing ceremony took place, in the presence of the Turkish Deputy Prime Minister Mr. Nazim Ekren, on October 23, 2008, on the sidelines of the 24th session of the Standing Committee for Economic and Commercial Cooperation of the Organization of the Islamic Conference (COMCEC) held in Turkey from 20 to 24 October 2008. At a time of global financial crises, this agreement set the stage for the above mentioned banks to receive 15 million USD each in support of SME’s in Turkey, thereby strengthening solidarity among Islamic financial institutions. ITFC has increased its financing amount to 200 million USD in Turkey in 2008 a level 4 times higher compared to the previous year.

Source: The Participation Association Banks of Turkey

AFGHANISTAN TO REBUILD AGRICULTURE SECTOR WITH HELP OF ASIAN DEVELOPMENT BANK

Asian Development Bank (ADB) is extending a 30 million USD grant to Afghanistan from the ADB’s Asian Development Fund for the Agriculture Market Infrastructure Project to help build facilities and standards in the livestock and horticulture industries in which the Afghan government will make an in-kind contribution of 1 million USD. Agriculture is the major source of employment and income for most Afghans. Within the sector, horticulture and livestock industries play a key role.

The project will invest in five slaughterhouses as well as a number of small-scale packing, sorting, grading, drying, and cold storage facilities for the horticulture sector. It will put up laboratories to certify product quality, provide technical support for product marketing both at home and abroad, and help build up the capacity of the Ministry of Agriculture, Irrigation and Livestock to create and implement sanitary and phytosanitary regulations.

Source: Asian Development Bank
**UAE: STRONG GROWTH IN HEALTHCARE SECTOR**

The UAE’s healthcare sector is showing robust growth and is poised to attract more foreign direct investments (FDI) in the near future, the Dubai Chamber of Commerce and Industry said.

In its report released on 17 December 2008, the Dubai Chamber said that the pharmaceutical market in Dubai alone is expanding, with the exports of pharmaceutical products reaching Dh84.4 million in 2007, compared with Dh56.4 million in 2005. The value of re-exported pharmaceutical products also grew from Dh179 million to Dh194 million, while imports ballooned from Dh1.2 billion to Dh2.15 billion.

The UAE is home to eight pharmaceutical factories with investments reaching $64.2 million.

Leading players in the pharmaceutical manufacturing business include Globalpharma, Gulf Inject and Medpharma, Neopharma, Pharmacare.

With regards to hospitals, the Dubai Chamber predicted that the number of hospital beds in Dubai is expected to nearly double last year’s capacity, from 2,934 in 2007 to 5,415 in 2010, thanks to the establishment and expansion of nine hospitals in Dubai and nine more at Dubai Healthcare City (DHCC).

The Dubai Chamber is also credited with the establishment of DHCC, an ongoing project worth $3 billion, as well as the $400 million Dubai Biotechnology and Research Park (DuBiotech).

DHCC is the world’s first healthcare free zone, while DuBiotech features a 300-hectare biotech science park that attracts a mix of biotechnology and pharmaceutical companies active in research and development, scientific discovery, testing, production, storage, sales and distribution.

**Source:** Gulf News

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**OPEC CUTS RECORD 2.2M BARRELS A DAY**

The Organization of the Petroleum Exporting Countries (OPEC) agreed, on 17 December 2008, to slash 2.2 million barrels from its daily production — its single largest cut ever — while bloc outsiders Russia and Azerbaijan announced their own cutbacks of hundreds of thousands of barrels from the market.

“I hope we surprised you,” OPEC President Chekib Khelil said when asked whether the size of the cut would shock moribund oil markets into an upward trend. “If you’re not surprised we need to do something about it.” And yet markets weren’t impressed. Crude oil prices sank to 40.20 USD after the announcement, a level not seen since the summer of 2004 and a clear sign investors are more worried that the world is heading for a long and painful recession in which energy use will continue to erode. In just five months, crude has given up all of the price gains made over the past four years.
Making matters worse for OPEC, Moscow distanced itself from direct ties with the 13-nation producers’ group, further dampening OPEC hopes of coordinated production cuts that might put a floor under crude prices. OPEC said oil ministers of the 11 nations under the group’s quota system agreed to take 4.2 million barrels a day off the market, but that includes two previously announced cuts that totaled 2 million barrels. That leaves the new output reduction announced on 17 December 2008 at 2.2 million barrels, effective Jan. 1, 2009. Still, even the record cut was unable to counterbalance consumers’ concerns about the dismal world economy.

Source: Arab News

SAUDI INVESTORS TOP IN UAE RANKING

Saudi economic activities in the UAE markets have topped other GCC economic activities during the past decade and have doubled in one year to a staggering 8,895 investors (44.1 percent) across the numerous investment and development sectors in the UAE.

According to a report on investments during 2007, issued by the Ministry of Finance, the largest number of Saudi investors, 4,010 in total, was concentrated in the commerce sector, and was followed by 655 investors in the occupational sector, the industrial sector, as well as other sectors such as medicine, legal practice, insurance and transport.

Kuwaiti investors came in second at 2,233; half of these were concentrated in the commerce sector, followed by 1,455 investors in the occupational and industrial sectors, among others.

Kuwaitis, according to the report, also account for the largest number of property ownership in the UAE (1,603), followed by the Saudis (1,357). Other statistics put Qatari investors third, with Bahrain and Oman having the least number of investors among the GCC countries.

Source: Arab News

AFDB’S RESPONSE TO THE FOOD CRISIS: FIRST BATCH OF PROJECTS

The financial crisis is an additional burden to African leaders already saddled with a food crisis hurting Africans. The African Development Bank (AfDB) is at the forefront of efforts aimed at finding a solution to the problem. In this regard, it has added US$1 billion to its agricultural portfolio, taking it up to US$ 4.8 billion. It has also restructured some of its agricultural portfolio to provide a rapid disbursement facility to the tune of US$ 250 million.

Among the short term measures adopted is an increased dissemination of NERICA (New Rice for Africa) rice seeds to help farmers meet their needs during the upcoming planting
Economic Cooperation and Development Review

These measures are part of the African Food Crisis Response (AFCR), the Bank’s framework for accelerated support to its Regional Member Countries (RMCs) affected by high food prices.

The specific objectives of the AFCR are to reduce vulnerability of the poor to high and unstable food prices; support broad-based growth through increased agricultural productivity, strengthen government policies for sustainable agricultural development; and strengthen government capacity to ensure an enabling environment for sustainable agricultural growth, including private sector participation.

Source: African Development Bank

MOROCCO INVESTS US $3.2 BILLION IN RENEWABLE ENERGY

Morocco has announced plans for a new campus providing knowledge-based services to strengthen research and training in clean technology. The “Knowledge Campus” is part of a $3.2 billion five-year renewable energy investment plan, prepared by the Moroccan National Electricity Office and scheduled to run between 2009 and 2014.

The campus is part of a $219 million clean energy industrial park being built in the eastern city of Oujda to support private sector investment as well as renewable energy companies.

The park will build the capacity needed for long-term research programs, and the knowledge campus will help develop the scientific workforce through training programs, conferences and seminars, new Master’s courses in renewable energies and through research projects.

The geographic position of the knowledge campus — on the border with Algeria — will also help to create more opportunities for knowledge sharing, technology transfer and science cooperation between Morocco and Europe and between Morocco and other Arabic and African countries.

Morocco’s five-year plan aims to develop local wind energy technologies, establish wind farms, solar energy test centers and demonstration projects, and increase investments in renewable energy research and development. Morocco’s general secretary of the Ministry of Energy, Mines, Water and Environment stated Morocco’s aims to increase renewable energy sources in the national energy balance from 4 percent now to 10 percent by 2012.

Source: scidev.net
Iran, a regular exporter of fuel oil, was forced to cut back fuel oil exports as the country suffered one of its worst winters, amid disruptions to its natural gas supply, forcing it to burn the residual fuel at power plants throughout the country in 2008. As a result, Iran will halt spot exports in first-quarter of 2009, to meet domestic demand for power generation. The National Iranian Oil Company (NIOC), which typically exports around three to four fuel oil cargoes monthly between January and March, will offer spot cargoes only if domestic requirements ease.

Fuel oil from Iran is typically purchased as a refinery feedstock in China, while in the Middle East it is bought for its low-density specifications and used as a blending component. Fuel oil imports into China rose 1.17 million tonnes in November, up from 875,000 tonnes in October 2008.

Source: Gulf News

Moody’s Expects up to 30% Growth in Islamic Banking in 2009

Islamic Financial Institutions (IFIs) in the Gulf Cooperation Council countries have displayed strong resilience amid the current global financial debacle, according to Moody's Investors Service in a new report.

The report added that IFIs' reputation had benefited from the current crisis, reflecting their conservative approach to business, a close proximity to their domestic and regional franchise, their balanced and ordered appetite for growth, and focus on the basics of banking as opposed to innovation. The rating agency believes this is also because the core principles of Islamic banking have protected them from elements of the crisis.

Global Islamic banking assets grew around 27 percent in 2007 and increasing growth is expected in the next years, albeit at a slower pace, before resuming more rapid growth.

Source: arabianbusiness.com

Abu Dhabi Islamic Bank Plans to Expand

A buoyant demand for Islamic banking despite global turmoil is fuelling expansion plans by Abu Dhabi Islamic Bank. Abu Dhabi Islamic Bank intends to open six new branches United Arab Emirates before April and is actively seeking acquisitions and branch expansion in other Gulf and Middle East and North African countries.
The Islamic bank’s third-quarter profit soared 57.8 percent and the lender expects 2009 will be a good year even as the global financial crisis spreads. Abu Dhabi also opened its sharia-compliant Al Hilal Bank. In 2007, Abu Dhabi Islamic and Emirates International Investment Co. bought 51.3-percent of Egypt’s National Bank for Development, which has 69 branches in the North African country. The owners plan to convert National Bank into an Islamic bank in 2009, before expanding its network in Egypt.

Source: Reuters, arabianbusiness.com

MOZAMBIQUE SIGN POVERTY REDUCTION SUPPORT LOAN AGREEMENT WITH AFRICAN DEVELOPMENT BANK

Following the success of the first Poverty Reduction Support Loan (PRSL) as a result of the Mozambique Government’s commitment and ownership, African Development Bank and Mozambique signed on 17 November, 2008, the second Absolute Poverty Reduction Support Program (PRSL II). This budget support loan amounts to 60 million UA and it will be disbursed in equal UA 20 million tranches over three fiscal years, ending December 2010.

As Alice Hamer, Mozambique Resident Representative of African development Bank, pointed out in her speech, “the Bank has the confidence that the Government will perform even better during the implementation of the PRSL II”. By the PRSL, it is aimed at ensuring macro-economic stability, improving governance through public sector reforms and decentralization, and the establishment of a favourable environment for economic and private sector development. In this connection, the Mozambique Minister of Planning and Development, Aiuba Cuerencia, said that “while many challenges remain, Government leadership and cooperation partners’ support, particularly that from the African Development Bank, will enable us to continue improving people’s lives and establish a solid platform to achieve the Millennium Development Goals.”

Source: African Development Bank
The Paris-based International Academy of History of Sciences awarded Alexandre Koyré Medal, a distinction award granted once every two years since 1968, to Professor Ekmeleddin Ihsanoglu, Secretary General of the Organization of the Islamic Conference (OIC). The Koyré medal is awarded to outstanding scholars for their innovative achievements in the evolution of studies in the history of science. The recipient of the medal is elected by vote by the members of the Academy.

Prof. Ihsanoglu is the first Turkish scholar to be awarded this medal, which he received in a ceremony which was held at the Academy in Paris, France, on 12 December 2008. Professor Ihsanoglu received the medal for his outstanding and innovative research and publications. He is the author of a fifteen-volume work on the history of science during the Ottoman period, which took 25 years to put together with a team of researchers under his direction.

Founded in 1927, the International Academy of History of Science grants the Alexandre Koyré medal, which honours the publication of a work in the history of science. The medal was granted for the first time to Derek Thomas Whiteside who compiled Isaac Newton’s works, while Guy Beaujouan was the immediate past awardee.

**Humanitarian Ground Bridge for Gaza Kicks off Under OIC Secretary General’s Aegis**

A seven-truck convoy set out on 17th January 2009 from Jeddah, on its sway to the Gaza Strip. The convoy consists of around 170 tons of medicine, medical equipment and suppliers, blankets, children's wear, a power generator to operate and provide lighting for an entire hospital, in addition to other food supplies, and children's milk. This has been preceded by a convoy of relief aid to the Palestinian people in the Gaza Strip through the Rafah crossing on 14th January 2009, which included 300 tons of medicine, medical equipment, and food supplies.

The convoy was seen off by the OIC Secretary General, Professor Ekmeleddin Ihsanoglu, who pointed out in a speech given on the occasion that the convoy inaugurates the humanitarian ground bridge launched by the OIC in order to provide basic humanitarian needs to the population in Gaza. He added that more convoys will
follow, reflecting the solidarity of the Muslim Ummah [nation] with the people of Gaza, who suffer indescribable forms of oppression, destruction and devastation.

Ihsanoglu called upon the OIC Member States, civil society organizations, and philanthropists across the Muslim world to contribute to the campaigns run by the OIC. The humanitarian bridge is conducted in cooperation and coordination with the Saudi Red Crescent Society and in conjunction with the assistance campaign of the Custodian of the Two Holy Mosques King Abdullah bin Abdul Aziz. This assistance campaign also unfolds in pursuance of the decision by the Expanded Emergency Meeting of the Executive Committee at the level of the OIC Foreign Ministers held on Saturday, 3rd January, 2009, at the Jeddah-based OIC General Secretariat.


The Twenty-fourth session of the COMCEC convened in Istanbul on 20-24 October 2008 with the participation of delegates from 44 OIC member countries. Bosnia-Herzegovina, Central African Republic, the Russian Federation, Kingdom of Thailand and Turkish Republic of Northern Cyprus participated in the Session as observers. The OIC General Secretariat, subsidiary, specialized and affiliated organs also participated in the Session. A number of related international and regional organizations, such as D-8, UNCTAD, FAO, ECO and the World Bank attended the Session.

The Meeting of the Senior Officials of the Twenty-fourth Session of the COMCEC was held on 20-22 October where the delegations of the member countries and the OIC institutions considered and deliberated on various issues of enhancing economic and commercial cooperation among the member countries. These issues constitute the major agenda items of the COMCEC, which, among others, included the recent world economic developments and their impacts on the economies of the member countries. Issues such as the impact of recent soaring oil and food prices as well as the impact of the global financial crisis on the economies of the member countries were discussed under this agenda item.

The Senior Officials also discussed various issues related to trade and investment, poverty alleviation, capacity building and technical cooperation and e-government applications and their economic impact on the OIC member countries. They also reviewed the progress on the implementation of the OIC Ten-Year Programme of Action. In their deliberations on all these issues, the Senior Officials discussed and considered the recommendations and policy implications of many technical and background reports prepared and presented by the various relevant OIC institutions as well as those of some related international and regional organizations.
The SESRIC was represented thereat by Dr. Savaş Alpay, Director General; Mr. Nabil Dabour, Acting Director of Research Department; Mr. Mehmet Fatih Serenli, Acting Director of Training and Technical Cooperation Department; and Mr. Cem Eyerci, Senior Researcher. The Centre contributed the following background reports dealing with prominent issues on the said agenda: (1) Annual Economic Report on the OIC Countries 2008; (2) Report on “Microfinance Institutions in the OIC Countries”; (3) Proposal on the Implementation Mechanism of Vocational Education and Training Programme for the OIC Member Countries (OIC-VET); and (4) Results of the Questionnaire Circulated by the SESRIC to the member countries on the Proposed Themes for the COMCEC Exchange of Views Sessions. In addition to these reports, the Centre made two presentations on the impact of global financial crisis on the developing countries, including the OIC members. The Centre also briefed the Committee on the initiative and the establishment of the Statistical Working Group (SWG) at the OIC level.

The Ministerial Meeting of the Twenty-fourth Session of the COMCEC was held on 23-24 October and started, in the opening ceremony, with the inaugural address by H.E. Abdullah Gül, President of the Republic of Turkey and Chairman of the COMCEC. At the opening session, statements were also made by H.E. Prof. Ekmeleddin İhsanoğlu, Secretary General of the Organisation of the Islamic Countries (OIC); the representatives of the three geographical groups of member countries; H.E. Dr. Ahmad Mohamed Ali, President of the Islamic Development Bank (IDB); and H.E. Shaikh Saleh Bin Abdullah Kamel, President of the Islamic Chamber of Commerce and Industry (ICCI).

In the Ministerial Working Session, which was chaired by H.E. Prof. Dr. Nazım Ekren, Minister of State and Deputy Prime Minister of the Republic of Turkey, the Ministers and Heads of Delegations exchanged views on the theme “Improving Investment Climate in the Member States”. In this connection, the Heads of Delegations stressed the importance of; *inter alia*, economic and political stability, legal reform, infrastructure, human development, public-private partnership, establishment of institutional mechanisms and further trade liberalisation through the implementation of the Protocol on Preferential Tariff Scheme (PRETAS). In the same context, Mr. Ulrich Zachau, World Bank Country Director for Turkey, made a presentation on investment climate in the OIC member countries. Prof. Dr. Francis Sermet, Former Head of Development Economic of Western Switzerland (DEWS) made a presentation on the important factors for improving investment climate giving best practice examples from Switzerland. Mr. Alparslan Korkmaz, Advisor to Prime Minister and President of Investment Support and Promotion Agency of Turkey, made a presentation on the recent Turkish experience in improving and enhancing investment climate.

In the Ministerial Working Session, the Ministers and Heads of Delegations exchanged views on the impact of high food and energy prices and global financial crisis on the
The closing session of the Twenty-fourth Session of the COMCEC was held on 24 October 2008 under the chairmanship of H.E. Kürşad Tüzmen, Minister of State of the Republic of Turkey in charge of foreign trade. In this Session, the Ministers and Heads of Delegations reviewed and adopted the draft resolutions prepared by the senior officials. They decided, *inter alia*, that “The Impact of Food Crisis on the Economies of OIC Countries” be the theme for the Exchange of Views at the Twenty-fifth Session of the COMCEC and requests the IDB/ICDT, in collaboration with the SESRIC (the coordinating institution for the exchange of views sessions), the OIC General Secretariat, relevant OIC institutions and other related international organisations to organise a workshop on this topic prior to the Twenty-fifth Session of the COMCEC and to submit its report to the said COMCEC Session.

A signing ceremony was held at the Closing Session where the Heads of Delegation of Kingdom of Morocco and Sultanate of Oman signed the Protocol on the Preferential Tariff Scheme for TPSOIC (PRETAS) and TPSOIC Rules of Origin. The Head of Delegation of Qatar has also signed the PRETAS, while the Head of Delegation of Syrian Arab Republic signed TPSOIC Rules of Origin.

At the closing session, H.E. Dr. Amer Husin LUTFI, Minister of Economy and Trade of the Syrian Arab Republic made a statement on behalf of all participating member countries, in which he thanked H.E. Abdullah Gül, President of the Republic of Turkey and Chairman of the COMCEC, the OIC general Secretariat, COMCEC Coordination Office and OIC institutions as well as all parties concerned for their contribution to the work of the Twenty-fourth Session of the COMCEC and to the enhancement of joint actions among the OIC member countries.

H.E. Kürşad Tüzmen, Minister of State of the Republic of Turkey in charge of foreign trade made a closing statement of the Session, in which he stressed the importance of making the Protocol on the Preferential Tariff Scheme for TPSOIC (PRETAS) operational among OIC member countries at the beginning of 2009 to achieve the target of 20% intra-OIC trade level by 2015, which will be as a starting point to accomplish the goal of establishing a free trade area among the member countries of the OIC.
The Islamic Conference of the Ministers of Higher Education and Scientific Research (ICMHESR-4) held its 4th Session on 6-8 October 2008 in Baku, with the participation of 38 OIC member states and under the patronage of His Excellency Mr. Ilham Aliyev, President of the Republic of Azerbaijan, on the theme of “Bringing Change through Scientific Youth Force”. The aim of the Conference was to provide an opportunity for the Ministers and Representatives of the OIC Member States to discuss various important issues pertaining to higher education and scientific research in the Islamic world and to evaluate and follow up the implementation of the Strategy for Development of Science and Technology in Islamic Countries, approved by the 8th Islamic Summit Conference (Tehran, December 1997) and adopted in its amended version by the 10th Islamic Summit Conference (Putrajaya, October 2003). Dr. Savas Alpay, Director General of the SESRIC and Mr. Mehmet Fatih Serenli, Director of Training and Technical Cooperation Department at SESRIC represented the Centre at the Session.

Dr. Savas Alpay, Director General of the Centre, made a presentation on “Education: Prospects and Challenges in the OIC Member Countries” wherein he started by expressing his thanks and appreciation to the government and people of the Republic of Azerbaijan. Similarly, he expressed his satisfaction with the significant progress made by most of the member states in increasing Net Enrolment Ratios in the primary and secondary educations. He also underlined that since building a knowledge-based economy is one of the major challenges faced by most of the member countries in the 21st century, this would require developing a scientific culture that supports and encourages the contributions of the scientists and attaches importance to higher education, as well as the implementation of policies to ensure good quality education for all at the primary and secondary levels.

He concluded his address by pointing out the fact that higher investment in education should be associated with faster economic growth. Most OIC member states have committed substantial resources to expand and improve their education systems, but these investments in education have not generated the maximal benefits for the individuals and the societies because of the lack of associated economic growth. The link between the improvements in the level and quality of education and economic growth should be strong.

During the plenary sessions, the members of the Conference presented their reports on the efforts deployed by their governments in the fields falling within the advancement of higher education and scientific research in their countries, and harnessing of material and technical resources available as well as human and scientific capacities needed to achieve educational and scientific resurgence, in line with the national policies and vision of each member state.

The Conference took note of the statements and reports made by the Member States and the international organizations, in relation to higher
education and scientific research, and urged them to pursue their endeavors to promote higher education and scientific research, while taking into consideration the priority needs, the general policies and the available resources. The Conference adopted the Report of the Director General on ISESCO’s Efforts in the Field of Higher Education, Scientific Research and Technology. It also adopted the report of the Fourth Consultative Council for the Implementation of the Strategy for the Science, Technology and Innovation in Islamic Countries, and urged the Member States to renew their commitments to bring about scientific and technological development, to give it priority in their national development plans and to allocate at least 1% of their GDP to the promotion of science and technology.

The Conference also adopted Transforming Economies into Knowledge - based in the Islamic Countries, and the draft document on the Islamic Area of Higher Education. The Heads of Delegations decided to refer the draft document on the Ranking of the Universities of the Islamic World to the Member States’ ministers of higher education and scientific research to further examine it and give their opinions thereon. The launching of the project on “Atlas of Islamic World Innovation” has been commended by the Conference. Furthermore, the Conference adopted the revised version of the Strategy for Science, Technology and Innovation in Islamic Countries and its Implementation Mechanisms. As well as the draft proposal for the creation of the Network of Women Scientists in OIC Member States.

SECOND MEETING OF THE OIC STOCK EXCHANGES FORUM ISTANBUL, REPUBLIC OF TURKEY, 18-19 OCTOBER 2008

The Second Meeting of the OIC Stock Exchanges Forum was organised by the Istanbul Stock Exchange of the Republic of Turkey and convened in Istanbul on 18-19 October 2008 with the participation of representatives of 17 stock exchanges in 15 OIC member countries, Central Depositories, Clearing and Registry Institutions of 7 OIC member countries, OIC General Secretariat, Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC), Islamic Centre for Development of Trade (ICDT), Islamic development bank (IDB) and COMCEC Coordination Office. Representatives of Capital Markets Board and Privatisation Administration of Turkey, Islamic Financial Services Board (IFSB), Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI), Citibank EMEA and Dow Jones Indexes have also attended the Meeting.

The Meeting was opened by Mr. Hüseyin ERKAN, Chairman and CEO of the Istanbul Stock Exchange. Welcoming all the delegates to Istanbul, Mr. Erkan reminded the participants that the OIC Stock Exchange Forum was
initiated and established within the framework of the COMCEC in 2005 with a view to enhancing cooperation among the stock exchanges of the OIC member countries.

Recalling that the Forum started in 2005 with the participation of 11 OIC stock exchanges and 7 other related institutions, Mr. Erkan said that today the participation of 17 stock exchanges in 15 OIC member countries and the increasing number of OIC and other related regional institutions is a clear indicator on the enthusiasm of the member countries to continue this initiative.

Noting the high potential of the stock exchanges in the OIC member countries, with a total market capitalisation of $2.1 trillion and 4,100 listed companies, Mr. Erkan strongly emphasised the importance of enhancing cooperation among the stock exchanges of the member countries, particularly at this time where the global credit crisis has tremendously affected the financial markets.

During the working sessions of the Meeting, the participants discussed and deliberated on various technical cooperation issues of concern to the stock exchanges of the member countries as well as on other administrative issues with a view to enhance and strengthen the future work and activities of the Forum. In addition to the discussions and comments made by the representatives of the stock exchanges of the member countries, a number of presentations on specific issues have been also made by the participants of various related institutions. Mr. Emin Ozer, a member of the Capital Markets Board of Turkey, made a presentation on the recent progress in the Turkish capital markets and the role of the Capital Markets Board of Turkey. In the face of the global financial crisis, Mr. Ozer highlighted the fact that it is indeed very important for OIC member countries to deal with this financial challenge as a good opportunity to increase the potential of and interest in Islamic financial and investment instruments in the regional and international markets. This issue has been also emphasised by Mr. Rushdi Siddiqui, Global Director of Dow Jones Islamic Market Index Group, who argued in his presentation that the financial crisis has provided a unique, one-time opportunity to explain Islamic finance to the world at large, from a holistic rather than from religious point of view.

In the same context, Mr. Mohamad Nedal Alchaar, Secretary General of the Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI) gave an overview and evaluation of the benefits of the AAOIFI standards, particularly the Islamic Securitisation/Sukuk Market. This presentation was followed by the presentation of Mr. Abdullah Haron, Assistant Secretary General of the Islamic Financial Services Board (IFSB), in which he made a general introduction on the concepts, structures and statistics of the Islamic capital market at global level and touched upon the challenges in globalising the Islamic capital market instruments.

On the other hand, in his presentation, Mr. Andrew Mulley, Issuer Services EMEA Business Head of Citibank, referred to the different phases of the global financial crisis pointing out that an enormous amount of liquidity has already drained from the market and this lack of liquidity leaves room for new opportunities for market players. In this context, he presented
A set of proposals, recommendations and decisions have been made at the end of the Meeting, where the Forum, among other things, emphasised the importance of standardisation for Islamic capital markets and called upon the regulatory authorities to encourage the recognition of the standards issued by relevant institutions such as AAOIFI, IFSB and IIFM. The Forum decided that these institutions be members and advisors of the Forum. The Forum also decided that Istanbul Stock Exchange to continue acting as the secretariat and coordinator of the Forum and recommended that a similar forum among the capital markets’ regulatory authorities should be established.

The Forum also decided to merge the two previous committees of the Forum into one committee called “Working Committee”, which shall assume the task of studying and proposing the areas of cooperation to the Forum. Within the scope of the Working Committee, four task forces have been established, namely task force for customised indices, task force for post-trade services, task force for the promotion of Islamic capital markets, and task force for studying the feasibility of an Islamic Securities Exchange.

**WORKSHOP ON NATIONAL ACCOUNTS FOR ASIAN MEMBER COUNTRIES OF THE ORGANIZATION OF THE ISLAMIC CONFERENCE**

Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC) organised a two-day Workshop in the field of National Accounts on 1-2 December 2008, in Ankara, Turkey for Asian member countries of the Organization of the Islamic Conference (OIC) in cooperation with the Islamic Development Bank (IDB), the International Monetary Fund (IMF) and the United Nations Statistical Division (UNSD). Thirteen countries, namely, Afghanistan, Azerbaijan, Bangladesh, Indonesia, Iran, Kazakhstan, Kyrgyz Republic, Malaysia, Maldives, Pakistan, Turkmenistan, Uzbekistan and Turkey participated to the Workshop. The Workshop was conducted in English and simultaneous translation to Russian was provided.

The Workshop was opened by Dr. Sıdıka Başçı, Acting Director of the Statistics and Information Department of SESRIC. After welcoming all the participants to Ankara, Dr. Başçı briefly
summarized the statistical activities of SESRIC. Following her speech, the first session started with the welcoming messages and first presentations of the two trainers, Mr. Gulab Singh from UNSD and Ms. Devi Manraj from IMF. The topics discussed during the sessions that followed were:

- Implementation of 1993 SNA
- Supply-use tables as a framework for annual and quarterly accounts
- Estimation of GDP from the expenditure side
- Volume measures
- 2008 SNA- Changes from 1993 SNA

Moreover, country experiences of Azerbaijan by Ms. Sabina Guliyeva, Indonesia by Ms. Wiwiek Arumwaty, Malaysia by Ms. Lee Wooi Yin, Pakistan by Mr. S. Muhammad Arif and Turkey by Mr. Mehmet Kula and Ms. Meltem Akyildiz were presented during the sessions as well.

The documents presented during the Workshop can be downloaded from the web page of

http://www.sesric.org/stat_workshop_list.php

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**A SEMINAR ON “THE EMERGENCE OF E-COMMERCE AND ITS IMPACT ON ECONOMIES OF OIC MEMBER COUNTRIES”**

A seminar on “The Emergence of e-Commerce and its Impact on Economies of OIC Member Countries” was co-organized by the SESRIC, IDB and the COMCEC Coordination Bureau in Istanbul, Turkey on October 28 – 30, 2008.

The seminar was attended by 35 representatives from 30 OIC member countries and speakers from the ICDT, WTO, WCO, WIPO and the UNCTAD made presentations on the below listed subjects:

- “Do we need rules to regulate the worldwideweb? Case Study”, by WTO
- “e-Business, ICTs and innovation: Some implications for developing countries” by UNCTAD
- “The role of the Trade Information Network for Islamic Countries (TINIC) in developing intra-OIC e-commerce” by ICTD
- “The Role of Intellectual Property in e-Commerce” by WIPO
“e-Commerce and Coordinated Border Management” by WCO

“Focus on Copyright in the Digital Environment” by WIPO

Various issues like e-commerce legislation development, copyright infringements, border and customs management, enhancement of e-commerce in developing countries among others were raised by the panelist and discussed by the OIC member country representatives.

OIC member country representatives expressed their deep appreciation for the comprehensive information represented thereat. Each representative also talked about the current situation of e-commerce in their country and mentioned some of their achievements and obstacles that need to be overcome.

In the concluding session, the representative of SESRIC, Mr. Hüseyin Hakan Eryetli, Senior Researcher, emphasized that each OIC member country is currently at a different phase of implementing e-commerce and it would be necessary to circulate questionnaires to determine country-specific training needs. He also emphasized that the project of implementing an intra-OIC B2B and/or B2C e-commerce platform would be crucial in enhancing economic cooperation among OIC member countries.
A Selection Of Recent Titles

The Bottom Billion: Why the Poorest Countries are Failing and What can be Done about It.

Global poverty, Paul Collier points out, is actually falling quite rapidly for about eight percent of the world. The real crisis lies in a group of about 50 failing states, the bottom billion, whose problem defy traditional approaches to alleviating poverty. In the Bottom Billion, Collier contends that these 50 failed states pose the central challenges of the developing world in the twenty-first century. The book shines a much needed light on this group of small nations, largely unnoticed by the industrialized West, that are dropping further and further behind the majority of the world’s people, often falling into an absolute decline in living standards. A struggle rages within each of these nations between reformers and corrupt leaders- and the corrupt are winning. Collier analyze the cause of failure, pointing to a set of traps that snare these countries, including civil war, a dependence on the extraction and export of natural resource and bad governance. Standard solutions do not work against these traps, he writes; aid is often ineffective, and globalization can actually make matters worse, driving development to more stable nations. What the bottom billion need Collier argues, is a bold new plan supported by the Group of Eight (G8) industrialized nations. If failed states are ever to be helped, the G8 will have to adopt preferential trade policies, new laws against corruption, and new international charters, and even conduct carefully calibrated military interventions. As former director of research for the World Bank and current Director of the Centre for the Study of African Economies at Oxford University, Paul Collier has spent a lifetime working to end global poverty. In the Bottom Billion, he offers real hope for solving one of the great humanitarian crises facing the world today.

Africa at a Turning Point?: Growth, Aid and External Shocks

Since the mid-1990s, sub-Saharan Africa has experienced an acceleration of economic growth that has produced rising incomes and faster human development. However, this growth contrasts with the continent’s experience between 1975 and 1995, when it largely missed out on two decades of economic progress. This disparity between Africa’s current experience and its history raises questions about the continent’s development. Is there a turnaround in Africa’s economy? Will growth persist? Africa at a Turning Point? is a collection of essays that analyzes three interrelated aspects of Africa’s recent revival. The first set of essays examines Africa’s recent growth in the context of its history of growth accelerations and collapses. It seeks to answer such questions as, Is Africa at turning point? Are the economic fundamentals finally pointing toward more sustainable growth? The second set of essays looks at donor flows, which play a large role in Africa’s growth. These essays focus on such issues as the management and delivery of increased aid, and the history and volatility of donor flows to Africa. The third set of essays
Economic Cooperation and Development Review

consider the recent impact of one persistent threat to sustained growth in Africa: commodity price shocks, particularly those resulting from fluctuations in oil prices. *Africa at a Turning Point?* is the first book in a new series from the Africa Region of the World Bank Group, Africa Development Essays. Its conclusions will be of interest to development practitioners, academics, and policy makers.

**Enhancing Job Opportunities: Eastern Europe and the Former Soviet Union**

Rutkowski, Jan J. and Scarpetta, Stefano, editors, 269 pages, World Bank, 2005.

This book covers the following countries: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Hungary, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Moldova, Poland, Romania, Russian Federation, Serbia and Montenegro, Slovak Republic, Slovenia, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan. The chapters are related with unemployment, changing labor markets in those regions, job creation, Labor market policy and institutions, investment on climate and job creation.

**The Fortune at the Bottom of the Pyramid: Eradicating Poverty through Profits**


C.K.Prahald, a well known management thinker, argues that Private Business Enterprises/Multinational Companies (MNCs) can help to eradicate poverty while making profit. According to him, “Bottom of the pyramid”—that is, an estimated 4 billion people constituting two-thirds of the world’s population represent a multi trillion dollar market and can be a source of new wave of growth. MNCs can play a vital role in "creating the capacity to consume among the poor" by providing the solutions/products that are affordable, accessible and available. To do so, Prahalad pinpoints, business sector has to emphasize following areas: Innovation, scale of operations, sustainable eco-friendly development, process innovation, customer education, interface functionality, and distribution. Prahalad’s vision “is not about philanthropy and corporate social responsibility”; but is centered around the idea that "If we stop thinking of the poor as victims or as a burden and start recognizing them as resilient and creative entrepreneurs and value-conscious consumers, a whole new world of opportunity will open up." Drawing on a wealth of case studies, the book defies the established theories about the poverty problem and role of private sector and gives a comprehensive analysis of innovative approaches to fight poverty with profitability.
The Malaysia-Indonesia Remittance Corridor: Making Formal Transfers the Best Option for Women and Undocumented Migrants,

This study finds that Indonesian migrants to Malaysia are showing an increasing clear preference for informal transfer mechanisms compared to their counterparts in other countries. A little less than half of all Indonesian migrants overseas—thought to be around 2 million—are working in Malaysia. An increasing number of migrants are women, and the corridor is also marked by a high number of undocumented migrants. This report gives an overview of the Malaysia-Indonesia remittance corridor and suggests policy avenues for improving access to formal remittance transfer channels; increasing the transparency of the flows and the cost structure; and facilitating remittance transfer, particularly for undocumented and female migrant workers.

The Millennium Development Goals in the Arab Region 2007: A Youth Lens

The Report marks the midpoint between the adoption in 2000 of the Millennium Development Goals (MDGs), under the United Nations Millennium Declaration, and the target date of 2015 for their attainment. Since adopting the eight Goals, the Arab region has achieved progress in many relevant areas, including significant strides in health and education. This report gives special emphasis to the complexities and magnitude of issues facing young men and women aged between 15 and 24 in the Arab world.

World Trade Report 2008: Trade in a Globalizing World

This report aims to deepen understanding about trends in trade, trade policy issues and the multilateral trading system. International trade is integral to the process of globalization. Over many years governments in most countries have increasingly opened their economies to international trade, whether through the multilateral trading system, increased regional cooperation or as part of domestic reform programmes. Moreover, the purpose of the Report, whose main theme is “Trade in Globalizing World”, is to remind ourselves of what we know about the gains from international trade and the challenges arising from higher levels of integration. The report addresses a range of interlinking questions, starting with a consideration of what constitutes globalization, what drives it, what benefits does it bring, what challenges does it pose and what role does trade play in this world of ever-growing inter-dependency. The report asks why some countries have managed to take advantage of failing trade costs and greater policy-driven trading opportunities while others have remained largely outside
international commercial relations. It also considers who the winners and losers are from trade and what complementary action is needed from policy-makers to secure the benefits of trade for society at large. In examining these complex and multi-faceted questions, the Report reviews both the theoretical gains from trade and empirical evidence that can help to answer these questions.

**African E-Markets: Information and Economic Development**


Written by a select group of African academics, policy makers, research, and expert from various social and economic science disciplines, *African e-markets* provides provocative insights and case studies on the role information plays in African development. Up-to-date research and analysis on the impact of various forms of information on the development process is presented, including e-economic development and its impact on economic growth. Calling for greater attention to be paid to information as a key sector in national economic development, this exploration of African economies cites the advantages of better statistical data and geographic information for more effective economic planning, management, and forecasting in the digital age.

**Sustaining Gains in Poverty Reduction and Human Development in the Middle East and North Africa,**


This book reviews the experience of the region with poverty and human development since the mid-1980s. Moreover, it finds evidence of stagnation in the rate of poverty reduction during this period, combined with substantial improvement in such non-income dimensions of poverty as health and education indicators. The first trend is a consequence of the stagnation of the region’s economies during the period examined, while the second is likely due to several factors, including improvement in the delivery of public health and education services.

**Beating the Odds: Sustaining Inclusion in Mozambique's Growing Economy**


The story of Mozambique is one of successful transformation. Since 1994, when it faced a decimated infrastructure, a weak economy, and fragile institutions, it has sustained high economic growth and has made tangible reductions in poverty. Its recovery from civil conflict and extreme poverty make it a showcase for other nations embarking on similar transitions.
### ECONOMIC and FINANCIAL INDICATORS

#### Output & Prices

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#### Output & Prices (cont.)

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#### Source: BASEIND, IMF, World Economic Outlook, October 2008

### Highest GDP (2007): Top 10 OIC Countries

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### 10 OIC Countries with Lowest Inflation Rate (August 2007-August 2008)

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### OPEC Monthly Basket Price (US$ per Barrel)

Source: OPEC

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Source: UN, Monthly Bulletin of Statistics Online