



SOCIAL DEVELOPMENT

Our concern for human development is essential because it is the pivot of any real progress. No matter how many buildings, facilities, schools and hospitals we build and no matter how many projects and bridges we set up, it will remain a lifeless, material entity incapable of survival. The spirit of all this development is man, it is man who is capable with his mind, resources, art and determination to preserve these achievements and push further.

(Sheikh Zayed)

A high standard of education, investment in a sophisticated health service, the development of human resources, the empowerment of women and the provision of social welfare to the less well-off have ensured that the UAE continues to be a tolerant, open, caring society that cherishes its traditional roots.

POPULATION

The UAE population was estimated to be 4.32 million at the end of 2004, compared to 4.041 million in 2003. This figure is expected to touch the 5 million mark in 2005, 20 times more than what it was in 1971. More accurate figures will be garnered by 'Tedad 2005', the fifth census in the UAE's history. Preparatory work commenced in March 2005 and fieldwork, initially involving 1000 enumerators counting and marking buildings and gathering all related data, began on 3 September 2005, culminating in a head-count on 5 December.

The 2005 census is unique in many ways, particularly since it underlines the level of integration and coordination between federal and local governments. Census 2005, the most ambitious and far-reaching to date, is also using the latest technological and analytical techniques, including satellite technology to map buildings and personal digital assistants (PDAs) to record data, resulting in the most accurate and comprehensive study of the social and economic make-up of the UAE. In addition, for the first time ever, the private sector is contributing to the success of the census through a number of partners, including First Gulf Bank, Etisalat and Aldar Properties. The information gathered by the census will be extremely useful in planning for the future.

The UAE's population growth rate at an estimated 6.9 per cent is among the highest in the world. This can be attributed to improved healthcare, enhanced environment and education systems and increased per capita income, but also, more importantly, to a large and ever-increasing immigrant workforce. The most

significant demographic development in recent years is the sharp and constant decline in the gross fertility rate, particularly amongst national females in the 15 to 24 age group, suggesting that natural population growth factors may not be enough to balance the population structure in the near future.

The population is concentrated in urban areas where the maximum economic activity takes place. Thus the two leading emirates, Abu Dhabi and Dubai, account for almost 60 per cent of the country's population. There is also a concentration of population in the age groups 25 to 40 years, and males outnumber females by two to one because they constitute the majority of the expatriate workforce.

If the current trends in economic expansion and demand for expatriate labour plus the natural population growth rates continue, the UAE's population is likely to double again in the next 10 to 15 years. These growth rates will demand further infrastructure support, e.g. roads, utilities, residential/commercial accommodation, as well as education and health services.

HUMAN RESOURCES

At present, the majority of nationals work in a public sector that has reached saturation point and is, therefore, incapable of absorbing the 16,187 nationals that are expected to enter the job market in 2006. This figure will rise to 19,610 in 2010. UAE nationals account for only 2 per cent of the total workforce in the private sector, while private sector employment accounts for 52.1 per cent of the jobs in the UAE. By 2006, 107,087 secondary school graduates, 47,887 HCT graduates and 22,889 university graduates are expected to be in search of jobs. This is a situation that the Federal Government is anxious to address. One strategy put in place was to establish The National Human Resource Development and Employment Authority (Tanmia), an independent authority whose main objectives are to create job opportunities for UAE nationals, reduce the unemployment ratio, enhance the skills and productivity of the national workforce and recommend relevant policies to the Government.

Tanmia has provided 7000 nationals with either job training or help to find jobs since its launch in 2001. About 26,000 nationals have registered with Tanmia, and though a fraction of them find jobs through the agency, it has a high success rate when it comes to trainees. In 2004, the government body trained 1500 nationals and helped another 1800 to obtain jobs.

A detailed review of human resources in the UAE in 2004 is outlined in *UAE Human Resources Report 2005* compiled by Tanmia. The report highlights the fact that three important factors have shaped the nation's workforce: a demand for skills in the face of fast economic growth; a working age population that is increasingly made up of young people (over 45 per cent of the total national population is under 15 years of age); and a growing reliance on foreign labour



as a source of skilled and unskilled workers. Generally, UAE nationals' share of the total labour force increased marginally from 9.1 per cent in 1995 to 9.3 in 2004. However, the contribution of national women to economic activity has increased significantly, from 5.4 per cent in 1995 to 16.1 per cent in 2004.

Given the steady growth of the UAE labour force, the report also focuses on productivity. 'In recent years there has been a remarkable decline in productivity rates due to manpower increasing at levels higher than the annual GDP growth rate. Labour productivity declined at an annual rate of 2 per cent between 1993 and 2004'. This decline is attributed to the private sector's increasing reliance on labour-intensive production due to abundant labour supply – and thus, low wages – in the region, and calls for adoption of effective policies to encourage capital-intensive investments.

According to Tanmia's jobseeker database, during 2004 over 66 per cent of the nationals who applied to Tanmia seeking assistance in finding employment were females, and nearly 86 per cent had completed secondary education or above (females constituted 79 per cent of this category). 'Data showing the distribution of jobseekers according to their specialisations refute beyond any doubt the stereotypical opinion that most of those who major in social and human studies find themselves without a job. Among the jobseekers who hold tertiary qualifications, around 58 per cent are specialised in management, business, computer and science, while only 27.1 per cent specialised in humanities, social and behavioral sciences'.

Previous reports by Tanmia have highlighted the fact that the UAE is, perhaps, one of the very few countries in the world where foreigners dominate the private sector, both as employers and employees, and in almost all countries that allow immigration the rule is that foreigners are only allowed to take up jobs when suitably qualified nationals are not available. This provision is also part of the UAE labour law. However, in a country where foreign workers are the rule, not the exception, implementing the law is not easy. Tanmia recommended strong government intervention simply because there is unequal competition in the job market between national workers and a trained and experienced expatriate workforce. Tanmia, although urging a more aggressive approach towards the private sector, clearly recognises that expatriate workers will continue to play a 'vital role' in the country's economy. Nevertheless, Tanmia points out that the growth of the private sector and employment of non-nationals must be regulated and that choosing the 'carrot policy' as opposed to the 'stick' will simply not work.

No discussion of the UAE's human resources, therefore, would be complete without an examination of the impact of one of the major policy initiatives introduced in recent years to address the issue of national employment, the quota system. *UAE HR 2005* concludes with an examination of the application of employment quotas in the UAE banking sector. From 1999 to 2004 there was

an increase of approximately 282 per cent in the number of Emiratis working in banks. This is nearly 3500 new workers, and has led to nationals having a total workforce representation of 26.4 per cent in this sector. These developments were the result of positive changes in working conditions and the introduction of career development, and the report invites other sectors, such as insurance and trade, to address these issues in order to attract more nationals.

Previous reports by Tanmia have recognised that in order for nationals to become active participants in the private sector, effort is necessary by both parties. This requires fundamental changes in attitudes, conditions and environment within the private sector as well as among UAE nationals seeking employment.

One reason for the reluctance of nationals to work in the private sector is the unsociable working hours in the two-shift, six-day regime favoured by private sector employment. Training is also a key element of a successful emiratization strategy: a study of skilled labour opportunities for nationals in the private sector by the Centre for Labour Market Research and Information called for increased technical and English language training for nationals, as well as work experience programmes.

Nationals, on the other hand, in what was one of the key findings of a survey carried out by the Department of Human Resources in Sharjah, have a poor record in matching their qualifications to the demands of the job market, while those who do have relevant degrees are deficient in professional skills and job-oriented training.

Tanmia provides pre-employment training for its job-seekers, but it also sought an active role by the country's educational system in assisting nationals to qualify for work in the private sector. 'The country requires a revolution in school curricula. A strong science orientation should be inculcated from the early stages of schooling.' In other words, it seeks a curriculum that is oriented to the job market, keeping in mind that more and more job openings are coming up in the private sector.

HOUSING AND SOCIAL WELFARE

Despite the UAE's economic success, there are, inevitably, individuals who are not in a position to benefit directly from the country's good fortune. Therefore, an extensive social welfare network exists to assist these vulnerable members of society. This takes the form of social security benefits administered by the Ministry of Labour and Social Affairs, in addition to the practical help offered by the network of Ministry-supported social centres run by the General Women's Union (see section on Women), and the government-supported social welfare and rehabilitation centres providing assistance to the disabled. UAE citizens are also eligible for free or subsidised housing.

Those entitled to monthly social benefits include widowed national and divorced women, the disabled and the handicapped, the aged, orphans, single daughters, married students, relatives of jailed dependants, estranged wives and insolvents.

Also eligible for financial assistance are widowed and divorced national women previously married to foreigners and the expatriate husbands of UAE women. While the number of those receiving assistance has dropped between 1980 and 2005, the cost to the government has risen, reflecting a steep rise in the cost of living. In the region of 67,102 beneficiaries received Dh658 million in social support assistance in 2004. The total amount will increase significantly in 2005 since President HH Sheikh Khalifa bin Zayed Al Nahyan has ordered a 75 per cent increase in the value of social assistance given to UAE nationals, to take effect from 1 October 2005.

Housing

The rapid rise in population coupled with the demands of modern living has necessitated government intervention at federal and emirate level to ensure that the housing needs of nationals are met throughout the Federation. Programmes include the free distribution of houses and land to UAE citizens. Applications for housing in 2005 are expected to be in the region of 33,000. In 2005, the board of the Zayed Housing Programme (ZHP) approved 50 per cent of the applications submitted for housing and loan assistance by the various housing committees from all over the country. One thousand two hundred and eighty UAE nationals benefited from a total amount of Dh655 million, including non-refundable housing grants and loans. The board also approved the ZHP's 2006 budget totalling Dh655,650 million (US\$178.7 million).

Early in 2005 President HH Sheikh Khalifa bin Zayed Al Nahyan approved the distribution of 1709 low-cost housing units and 2450 residential plots to eligible citizens in Abu Dhabi and Al Ain. In May 2005 the Executive Council of Abu Dhabi sanctioned over Dh4.5 billion (US\$1.23 billion) to finance housing loans for citizens in the emirate, a further indication of the government's desire to provide proper housing for every national family. A total of 3761 nationals will benefit from the decision. Of the total amount earmarked, Dh333.6 million will be used to build 278 houses in Abu Dhabi, Dh529.2 million to construct 441 housing units in Khalifa A and Dh241.2 million for 201 houses in Khalifa B. Over Dh1.2 billion is being set aside for the construction of 1019 houses in Sheikh Mohammed bin Zayed City, Dh451.2 million for revamping and completion of 376 housing units in Abu Dhabi City, Dh1.6 billion for building 1359 homes in Al Ain and over Dh1 billion for rejuvenation and completion of 87 houses in Al Ain.

In a significant new development, the Abu Dhabi Property Law, Law No. 19 of 2005, promulgated in August 2005, grants nationals and, in some investment areas, expatriates the right to own and transfer property in Abu Dhabi. Every property granted by the government to UAE citizens, before or after the issuance of the law, is deemed to be the beneficiary's property and it is therefore obligatory for citizens to register their title.

Dubai's Executive Council has also mandated Dubai-based Emaar Properties, the region's largest property developer, to construct Dh10 billion worth of housing units in the emirate for UAE nationals, as part of the Sheikh Mohammad bin Rashid Housing Programme. Under the project, 10,000 high-quality housing units will be built throughout the emirate.

Amlak Finance, a specialist Islamic mortgage finance company owned by Emaar, has been mandated to provide financing to UAE nationals interested in participating in the programme. Emaar will be responsible for promoting, marketing and selling the units, while Amlak, in cooperation with the Ruler's Court, will provide financing options for the UAE national buyers.

Social Welfare Associations

The UAE Red Crescent Authority (RCA) is prominent among the many non-governmental charitable organisations that help the needy, covering such areas as medical aid, student sponsorship, disability, special care, healthcare programmes, prisoner care and lump-sum aid programmes.

The RCA has extended financial aid in excess of Dh1 billion since its inception in 1980, benefiting both local and international communities. (See Foreign Aid for an account of international aid provided by the RCA). Approximately Dh115 million (US\$31.34 million) was spent on local assistance programmes in a five-year period up to 2003, involving the provision of services to needy families and the establishment of orphanages, clinics, special schools and homes for the elderly. Dh9 million was distributed in 2004, covering 30 humanitarian programmes implemented throughout the country, including construction and maintenance of several mosques, the maintenance of a number of schools, and the building of Qur'an memorisation centres and several houses in the Northern Emirates.

The Sheikh Zayed bin Sultan Al Nahyan Charitable and Humanitarian Foundation finances projects to benefit large communities both within the UAE and overseas. It does not distribute financial resources to individuals or groups. Within the UAE the charity has spent more than Dh120 million on major projects and about Dh57 million in contributions.

The Abu Dhabi-based Zayed Higher Foundation for Humanitarian Welfare of Special Needy People and Minors in Abu Dhabi was formed in 2004. Bodies under its auspices include the Authority for Social Welfare and Minors' Affairs, Zayed House for Comprehensive Welfare, Abu Dhabi Elderly Welfare Centre, Centre for Rehabilitation of Special Needs People, and Al Ain Centre and Club for Handicapped.

Eighty per cent of the Mohammed bin Rashid Al Maktoum Charitable and Humanitarian Foundation's budget is normally allocated to projects within the UAE. The Foundation's programmes concentrate on education, medical treatment, monthly or one-time assistance, food coupons, training courses and housing.

The Bait Al Khair Charity Society, established in 1989, was recently awarded ISO 9001:2000 certification, thereby becoming only the second charitable and humanitarian society to receive this award in the Middle East, the first being the Zayed Charitable Foundation. The Society provides assistance to poor students and emergency aid to those who have been hit by catastrophes. It also works with other charity organisations to ensure that the needy get the best of help.

Other organisations include the women's associations in each emirate, charity associations in Sharjah and Fujairah and Dubai, Ajman Care Society, Sharjah City for Humanitarian Services, the Handicapped Guardians Association and Taryam Omran Establishment for Cultural and Humanitarian Services.

EDUCATION

Educational opportunities in the UAE have blossomed since the establishment of the Federation when only a tiny minority of the urban population had access to formal education. Today, the UAE offers a comprehensive education to all male and female students from kindergarten to university, with education for the country's citizens being provided free at all levels. There is also an extensive private education sector, while several thousand students, of both sexes, pursue courses of higher education abroad at Government expense.

Now that the infrastructure is in place, the educational focus is on devising and implementing a strategy that will ensure the youth of the country are ready to meet the challenges of the twenty-first century workplace. Sheikh Nahyan bin Mubarak Al Nahyan, Minister of Education, has stated that what is required is 'an educational system that is dedicated to community enrichment, to competence and commitment in the workplace and to broad knowledge, wisdom and strength of character for every student'.

PRIMARY AND SECONDARY EDUCATION

Education at primary and secondary level is universal and compulsory up to ninth grade. This takes place in a four-tier process over 14 years: 4–5 year olds attend kindergarten, 6–11 year olds attend primary schools, the preparatory stage caters for children aged between 12–14 years, and 15–17 year olds attend secondary schools. The emiratization of teaching staff is scheduled to reach 90 per cent by 2020, in order to ensure that the Islamic principles and traditions of the UAE are preserved. However, over 40 per cent of pupils attend private schools. Some of these offer foreign language education geared towards expatriate communities, usually preserving the culture and following the curriculum of the students' countries of origin.

The Ministry of Education is constantly honing its educational strategy to ensure the development of programmes in its schools that comply with international standards, with particular focus on introducing the latest IT resources at all levels. For example, one of the goals is to provide one computer for every ten children in kindergarten, every five pupils in primary schools, every two students in preparatory schools and one computer per student in universities.

That IT education has become a major priority for the UAE is underlined by the fact that Sheikh Mohammed bin Rashid Al Maktoum launched his IT Education Project in Dubai in March 2000, and it will eventually be implemented in all the emirates. As well as installing computer labs in all participating schools, and creating a comprehensive cutting-edge curriculum, the IT Education Project also provides an invaluable online educational resource at www.itep.ae.

In September 2005 President HH Sheikh Khalifa bin Zayed Al Nahyan, in his capacity as Ruler of Abu Dhabi, issued Law No. 24 of 2005 establishing the Abu Dhabi Education Council (ADEC), to be chaired by HH Sheikh Mohammed bin Zayed Al Nahyan. The council, an independent corporate body with its headquarters in Abu Dhabi, has been entrusted with the task of developing education and educational institutions in the emirate. It will coordinate with the Ministry of Education in the formulation of the emirate's education plan within the framework of the UAE's general education policy.

HIGHER EDUCATION

The UAE has established an excellent and diversified system of higher education in a very short period of time. Nationals can attend government institutions free of charge and a wide range of private institutions, many with international accreditation, supplement the public sector. The country now has one of the highest application participation rates in the world. Ninety-five per cent of all females and 80 per cent of all males who are enrolled in the final year of secondary school apply for admission to a higher education institution or to study abroad.

UAEU

The United Arab Emirates University (UAEU), situated in Al Ain, opened in the academic year 1977/78 with four faculties or colleges. Currently, it has nine colleges: Humanities and Social Science, Science, Education, Business and Economics, Shari'ah and Law, Food Systems, Engineering, Information Technology and Medicine and Health Science. It is committed to its role as the leading teaching and research institution in the UAE.

UAEU offers more than 70 undergraduate bachelor degrees and a number of graduate programmes. International accreditation has been awarded to the professional academic programmes and the non-professional programmes undergo periodic external evaluation by international experts to ensure that they meet international standards.

Collaboration with international institutions also opens up new opportunities for UAEU's students. For example, in the 2004/05 academic year, a team of scientists from the Max-Planck Institute in Bremen, Germany, worked with the UAE University's biology department to study the effects of extreme environments on microbiological organisms. A team from the institute and the university had already carried out an initial survey on the Arabian Gulf's extreme environments. It is hoped that this project will help in the search for life on other planets.

The number of students enrolled at UAEU has increased from 502 in 1977/78 to more than 15,500 students in the first semester of the academic year 2004/05. In September 2005, UAEU welcomed 3676 new students, 2502 female and 1174 male. This growth has necessitated the building of a new campus at Al Maqam, Al Ain that will provide 280,000 square metres of additional educational and residential facilities. In line with the UAE's focus on constructive public-private partnerships in education, UAEU and Mubadala Development company (MDC) executed a 30-year concession agreement in August 2004 that will enable the development of the new facilities on a BOOT basis (Build Operate Own and Transfer). MDC subsequently entered into a joint venture with Serco Plc of the UK to undertake facilities management and operational services at the new campus.

Zayed University

Zayed University (ZU) was established in 1998 by the Federal Government to educate UAE national women. It has campuses in Abu Dhabi and Dubai governed by a single administration and offers similar programmes on both campuses. Zayed University currently enrolls approximately 2500 national women. With the opening of a new campus in Dubai in 2006, it expects enrolment there to increase to 5000 students. The Dh370 million new campus encompasses a total area of 711,000 square metres comprising six colleges, departments and laboratories.

Zayed University is organised academically into five colleges: Arts and Sciences, Business Sciences, Communication and Media Sciences, Education, and Information Systems. To cope with the changing healthcare industry, ZU launched Executive Masters in Health Care Administration (EMCHA) and Bachelor of Science (BS) in Health Sciences programmes in 2004. The primary language of instruction is English, but the university expects its graduates to be fully bilingual in English and Arabic, proficient in the use of information technology, and strong in quantitative and research skills.

The reason for ZU's success lies partly in innovativeness. Smart Square, located in Dubai Internet City (DIC), is an example of the ZU approach. This cooperative venture between ZU and IBM, which was inaugurated in early 2003, established a new business partner in the UAE for private and public institutions, to create and enhance their e-business and communication activities. The National Human Resources Development and Employment Authority (Tanmia) has agreed to



sponsor a section of the graduate on-the-job training for projects undertaken by Smart Square as part of its policy of equipping nationals with the necessary skills for today's demanding work environment.

Higher Colleges of Technology

In 1988, a system of colleges offering a more technically-oriented education was devised. The four founding HCTs began the new experiment with an enrolment of 239 students. Today, the HCT is a system of 12 single-sex campuses offering over 75 programmes. The colleges began the 2005/06 academic year in September 2005 with more than 16,000 students, including 6664 new admissions, more than half of whom were female. This is the biggest intake since the colleges were established.

The HCT and their commercial arm, The Centre of Excellence for Applied Research and Training (CERT), through a number of strategic alliances with multinational business organisations and prestigious international training institutions, pride themselves on responding quickly and effectively to current needs in the regional and international work place, providing professional development and lifelong learning opportunities for the UAE, the Gulf region, and – through its online training courses – many other parts of the business world.

It was announced in August 2005 that CERT will be converted into a joint stock company ahead of its planned initial public offering, thereby becoming the first public joint stock company in the Middle East to implement educational projects at the regional level.

The HCT gained international recognition in 1994 when UNESCO awarded the institution the Comenius Medal for Outstanding Educational Achievement.

New HCTs are constantly being added to the list. The Fujairah branch of the Men's HCT was opened in February 2005. Abu Dhabi Women's College (ADWC) will open a new 38,500-square-metre campus in Khalifa A City in 2006. The new campus will lessen the pressure on the present ADWC facility, where the number of students has doubled over the past four years, increasing from 1220 in the academic year 2001/02 to 2400 in 2004/05. The new four-storey facility will accommodate over 2000 students and also facilitate the transportation of students from areas like Bani Yas, Al Wathba, Sweihan, Al Shawamekh, Al Shahama, Al Rahba, Al Shamkha, Al Ghabat, Al Samha and Al Bahia.

The Dh108 million, third phase of expansion is well under way at Dubai Women's College (DWC) campus. This, the final phase of implementation of the master plan for the campus, includes construction of eight educational blocks, three lecture halls, a two-storey auditorium with seating for 1000 people, a student centre, a new student pick-up area and new sports facilities. The 40,000-square-metre project, which is scheduled to be completed in mid-2006, has been designed to meet future enrolment needs at the college.



Built on a total area of 43,000 square metres and costing around Dh200 million, the new campus of the Dubai Men's College at Academic City in Al Ruwayyah, which was inaugurated in April 2005, provides a truly digital environment. Everything from assignments and mark sheets to missed classes and the library is online and can be accessed by each of the 2000 students and 300 faculty members at any point in time. The college offers programmes in business, information technology, communication technology and engineering. It awards diploma, higher diploma and bachelor's degrees.

Occupying an area of about 10,000 square metres, the new premises of Sharjah Women's College will cost an estimated Dh10 million. The building will include a special wing for the Centre for Applied Studies in education and teachers' training, in addition to state-of-the-art facilities.

E-ducation Without Borders

The Higher Colleges of Technology hosted the third biennial 'E-ducation Without Borders', an international students' conference from 19 to 21 February 2005. Upholding the vision of a world where education truly knows no boundaries, the conference attracted over 1000 students from across the globe. The first 'E-ducation Without Borders' conference was organised in 2001 in Abu Dhabi by an international committee formed by students for students to explore new approaches, methods and applications, as well as increased efficiency in learning. The students who attended the conference became members of a global forum continuously pursuing the goals of life-long learning. Building on the success of the conference, a second one was organised, again in Abu Dhabi, with a focus on the subject of global approaches regarding implementation of technology in education. The main objectives of the 2005 conference were to build new strategies for the efficient delivery of 'e-ducation' (defined as education facilitated by electronic technology), reflect upon the strategies for the efficient delivery of e-ducation developed during the 2001 conference, and continue the growth of the global student forum.

The 2005 conference had an impressive line-up of international speakers, including Terry Mathews, Chairman, Mitel Networks; Murray Gell-Mann, Nobel Laureate in Physics in 1969; David Ignatius, Associate Editor and columnist, *Washington Post*; John E. Davies, Vice-President, Sales and Marketing, Intel Corporation, Tim Sebastian, BBC Foreign Correspondent, Presenter of *Hardtalk*; Jennifer Corriero, Co-Founder, Taking IT Global; Alexander Brown, President and CEO, CNBC Asia Pacific, etc., but the real stars were the students themselves.

A television documentary entitled 'Three Days to Change the World', focusing on the conference and the e-learning experience of a number of the participants, will be broadcast worldwide.

HCT also organised 'The Festival of Thinkers', a meeting of academic experts and thinkers, including a number of Nobel laureates. Under the theme, 'Future Changes:



Human Factors in Technological Adventures', the participants discussed issues ranging from global warming to democracy and human rights to future education of children (see Exhibitions and Events).

Private Institutions

Many excellent private institutions offer a wide range of tertiary-level opportunities. Notable institutions include the American Universities of Sharjah and Dubai, Sharjah University and the Ajman University of Science and Technology. The Ministry of Higher Education and Scientific Research is responsible for the accreditation of institutes and degrees and its website (www.uae.gov.ae/mohe/) provides a comprehensive list of recognised institutes and programmes.

Abu Dhabi University (ADU), which opened its doors in September 2003, is in a process of continuous development. It has campuses both in Abu Dhabi and Al Ain and has unveiled plans for a 4-million-square-metre campus in Khalifa City, with provisions for flexible future expansion. The first phase includes 70 classrooms and laboratories, administrative headquarters and accommodation. Plans are in place for a medical teaching facility, a graduate centre, a student centre and sports facilities. Space also has been allocated for further development in order to ensure that the university meets the future needs of its students. ADU, which has direct access from the Al Ain highway and is very conveniently located for students from Khalifa City, Abu Dhabi and Al Ain, will accept its first intake of 5000 students for the academic year beginning in September 2006.

Al Hosn University in Abu Dhabi opened its doors to students on 17 September 2005. This new private university, which is supported by Abu Dhabi Holding Company (ADHC), will initially be operating from two separate premises for men and women near Mussala Al Eid along the airport road in Abu Dhabi. Starting with three faculties – Engineering, Business and Arts and Social Sciences – Al Hosn University will offer a unique set of disciplines, some of which are being introduced for the first time in the UAE. A large plot of land in Madinat Khalifa has been earmarked by the Abu Dhabi government for the university to construct a permanent campus.

The establishment of the College of Agriculture, Food and Environment Sciences at the University of Sharjah was announced in May 2005. The college is being set up in conjunction with the University of Arizona, USA, which was selected because of its well-earned reputation in the States, particularly in the field of desert farming in similar climatic conditions to the UAE. The college will award BSc degrees in Botany, Zoology and Agricultural Projects Management. New buildings for the faculty of medicine and the faculty of medical sciences at the University of Sharjah were also inaugurated in 2005.

An agreement was signed in March 2005 for the establishment of the George Mason University in Ra's al-Khaimah, the first step in the construction of a

university campus in the emirate. George Mason will offer a four-year undergraduate programme in Business, IT, Engineering and Pharmacy, and a two-year MBA. The university will also have a Centre for Conflict Analysis and Resolution.

Dubai announced at the end of 2004 that it is setting-up a 2.33-million-square-metre, multi-university complex, Dubai Knowledge Universities (DKU), in pursuit of its aim to be the regional destination for international education providers. DKU is designed to benefit students from the region who are unable to study abroad. It is hoped that on completion at the end of 2006 it will be able to accommodate 20 to 30 universities and house between 30,000 and 40,000 students.

Knowledge Village (KV), which was established in 2003, in the Dubai Free Zone for Technology and Media, houses more than 200 companies and institutes for training and education. More than 6000 students come to the campus every day. Some 25 per cent of them are from countries in the Middle East, in addition to students from Arab and foreign communities residing in Dubai. KV offers undergraduate, postgraduate, MBA and PhD programmes in fields such as Computing, Technology, Business Management, Life Science, Fashion and Media. In mid-2005, KV launched its new website <http://www.kv.ae>, a student-focused portal that includes e-services for learners studying at the cluster.

Other Institutions

In addition to the higher level institutions outlined above, the UAE also has several vocational and technical educational centres for those seeking practical training in their chosen careers. These include the Emirates Institute for Banking and Finance, the Abu Dhabi National Oil Company Career Development Centre, the Dubai School of Government, and The Emirates Aviation College for Aerospace and Academic Studies.

EMIRATES FOUNDATION

Sheikh Khalifa issued Law No. 8 of 2005 in June 2005 establishing the Emirates foundation, an independent corporate body with its headquarters in Abu Dhabi. The Foundation is a public and private-sector, nation-wide initiative to support creativity and innovation in science, education, technology, art, sports, environment and health. Sheikh Mansour bin Zayed Al Nahyan, Minister of Presidential Affairs, has been named Chairman and Sheikh Abdullah bin Zayed Al Nahyan, Minister of Culture and Information, is the Deputy Chairman. Members of the board include Sheikha Lubna Al Qasimi, Minister of Economy and Planning and Mohammad Ahmad Al Bowardi, Secretary-General, Abu Dhabi Executive Council.

Continuing the late Sheikh Zayed's philanthropic legacy, and recognising that in an increasingly global economy where the transfer of technology is a prerequisite for development, research is no longer a luxury but a necessity requiring funding and a sound infrastructure, the newly established Emirates Foundation will manage a variety of endowment funds to foster, enhance and maintain a diverse range

of innovative centres of excellence and educational institutions in the UAE. The Technology and Research Endowment Fund is the first to be launched. Ultimately, it is hoped that the foundation will stimulate increased social consciousness and act as a forum for active participation between the private and public sectors for the benefit of the community.

YOUTH

The UAE Government has placed particular emphasis on the promotion of youth activities, through social, scientific, arts, and cultural clubs. Scouts and Guides societies have been established across the country and they organise cultural, religious, social, scientific and educational programmes for their members.

SPECIAL NEEDS EDUCATION

The Special Education Department of the Ministry of Education was set up to cater for children with special educational needs. One of the most successful ventures has been a self-financing farm run by physically and mentally challenged people, the Zayed Agricultural Centre for the Disabled, which has been widely praised. Sharjah City for Humanitarian Services has also been prominent in the care, training, education, rehabilitation and integration of the disabled in society.

LITERACY

As well as providing for the educational needs of the youth of the country, the Government has undertaken an adult literacy programme in cooperation with the UAE General Women's Union. In 1975, the rate of adult literacy was 54.2 per cent amongst men, and 30.9 per cent amongst women. Today, the illiteracy rate in the country is in the region of 10 per cent (Ministry of Planning figures indicate an illiteracy rate of 9 per cent of total population for females compared to 16.2 per cent for males and UNDP HDI 2005 lists the UAE adult literacy rate for ages 15 and above as 77.3 per cent) and the UAE is on its way towards achieving its target of full literacy within five years. The UAE also provides free primary and secondary education for those adults who missed out on education during their childhood.

WOMEN

Nothing could delight me more than to see women taking up their distinctive position in society. Nothing should hinder their progress. Like men, women deserve the right to occupy high positions, according to their capabilities and qualifications.

(Sheikh Zayed)

The late Sheikh Zayed's support for the right of women to fulfil their potential has been central to the progress of women in the UAE since the foundation of the state. This was particularly evident when, shortly before he died in November



2004, he appointed the UAE's first female government minister Sheikha Lubna Al Qasimi as Minister of Economy and Planning.

Indeed, Sheikha Fatima bint Mubarak, Sheikh Zayed's wife, has worked tirelessly for decades towards the social, educational and economic development of women at all levels of society. Although great strides have been made, Sheikha Fatima is aware that more work needs to be done: 'We have not yet reached the target for which we strive, but we are sure that we are making substantial progress along the right path'.

In many ways it could be said that women have always held a position of strength in UAE society. Before oil revenues revolutionised the UAE's economy, they played an active role in agriculture in the mountains and in the desert oases. In many families or tribes, such as those of the fishing and pearling communities along the coast, the menfolk would often be away for long periods at a time. Women had to bring up the children, look after the aged and tend the farms and the livestock, a position of enormous responsibility.

Some women also played a major role in the running of tribal affairs, though it was generally behind the scenes. Sheikh Zayed's mother, Sheikha Salamah, for example, was to a very considerable extent responsible for the way in which her four sons worked together from the late 1920s onwards for over 30 years to help bring the Emirate of Abu Dhabi through the hardships of the world economic depression and the Second World War, and into the beginning of the oil era.

Oil-funded economic prosperity brought vastly improved health care, extended life expectancy and significant educational opportunities. But there was a danger that as the country began to develop and as its men moved to take advantage of newly provided opportunities, that the UAE's women might be left behind. Fortunately, government-backing and their own anxiety to play their part in the development of the country has ensured that this has not happened. In particular, women have embraced education with particular fervour and are outperforming males at every educational level. The percentage of female children in primary schools reached 98.7 per cent in 1995/96, rising to 100 per cent in 2002/03. In the secondary sector, the percentage of females at school is higher than that of males. In addition, women constitute over 65 per cent of those continuing on to higher education. This enthusiasm for education ensures that women can exercise their right to participate in the labour market and in the decision-making process.

THE LEGAL FRAMEWORK

The belief that women are entitled to take their place in society is grounded in the UAE Constitution which guarantees the principles of social justice for all, in accordance with the precepts of Islam. Under the Constitution, women enjoy the same legal status, claim to titles, access to education, and the same right to practise professions as men.

The Constitution stipulates that:

The family is the basis of society, which shall be responsible for protecting childhood and motherhood. Laws shall be formulated in all fields to observe this protection and care, in a way which safeguards the dignity of women, preserves their identity and secures for them the conditions appropriate for a prosperous life and suitable work which is in accordance with their nature and capabilities as mothers and wives and as workers.

The guarantees enshrined in the Constitution have been carried through into implementing legislation. Under the terms of the Labour Law, for example, it is prescribed that there shall be no discrimination between men and women in terms of equal pay for equal work.

The Government has also ratified international agreements relating to women, including the Convention on the Elimination of All Forms of Discrimination Against Women.

THE GENERAL WOMEN'S UNION

Recognising that organisation is the key to empowerment, the Abu Dhabi Women's Society was formed in 1972, and similar women's groups were rapidly set-up in almost every emirate. The General Women's Union (GWU) (originally the UAE Women's Federation) was established in 1975 under the leadership of Sheikha Fatima, with the aim of bringing together under one umbrella all the women's societies in the country. A Government-funded organisation, the GWU has brought to the fore many inter-related issues of concern for women, children and the family, and it has been instrumental in introducing handicraft, health education and literacy programmes throughout the UAE. It has also provided vocational training, job placement services, family mediation services and religious education.

As the needs of women have developed, so the range and focus of the GWU's concerns and expertise have evolved. The National Strategy for the Advancement of Women, for example, is a joint initiative between the GWU, UNDP, the United Nations Development Fund for Women (UNIFEM), local government agencies and NGOs. The strategy's purpose is 'to activate the role of women and their positive participation in eight major and significant fields, including education, economy, information, social work, health, legislature and environment, in addition to political and executive fields'. The effect of the strategy is to raise the debate on female participation to a new level with a rhetoric that unapologetically assumes gender equality and focuses on the removal of obstacles to that participation.

The Union has, amongst its many duties, responsibility for suggesting new laws or amendments to existing laws, researches matters pertinent to women and makes recommendations to the relevant ministries and government departments. In this context, the GWU was instrumental in the issuance in 2001 of a new civil

service law that extends maternity leave and the issuance in 2003 of a law establishing the Supreme Council for Mother and Child, which is directly affiliated to the Office of the President and chaired by Sheikha Fatima. The GWU also set up a committee to review the country's draft social status law governing family relations. The right (*khulo*) granted by the Social Status Law, which was approved by the UAE Cabinet in July 2005, permitting women to divorce their husbands through a petition to the Shari'ah Court, after paying compensation or returning the dowry, is being heralded as a landmark for women's rights in the Arab world. Up to this, Tunisia and Egypt were the only other states in the Middle East and North Africa where women had similar rights. The groundbreaking new law, comprising 363 articles divided into five chapters on marriage, legal competence, guardianship, will, inheritance and endowment, also establishes family guidance committees at Shari'ah Courts. These committees will provide a social support system for families to resolve their differences amicably and help preserve the family unit through counselling and mediation.

The GWU also plays a vital role in women's affairs at regional and international levels. In particular, it maintains strong Arab and international links with women's organisations and is affiliated to the Arab Women's Federation, the International Women's Federation and the International Family Organisation.

The GWU has participated in all of the UN-sponsored world conferences on women over the last few decades, beginning with New Mexico in 1975, followed by Copenhagen in 1980 and Nairobi in 1985, culminating in Beijing in 1995, the largest conference in the history of the United Nations. As a result of its dedicated work in this area, GWU is now focusing on the necessary measures at a national level to activate the UN Convention on the Elimination of All Forms of Discrimination Against Women and to implement the recommendations of the Beijing Conference.

This focus also extends beyond the UAE's borders. Addressing a UN session of the Commission on the Status of Women in March 2005 Noura Al Suweidi, director of the GWU, reiterated Sheikha Fatima's plea to the UN to continue its efforts to provide political, financial and moral support to millions of women in the developing world, to help them in the enormous challenges that they face, especially poverty, dangerous diseases and armed struggles, and to better their living conditions as stipulated by the UN Charter, principles of Human Rights and the Beijing Conference programme.

The UAE was re-elected to membership of the Women's Committee of the UN Economic and Social Council from 2006 to 2010.

Such active participation for the betterment of society is required at all levels. In June 2005 a high-ranking delegation led by Sheikha Al Yaziyah bint Saif bin Mohammed Al Nahyan, wife of Sheikh Abdullah bin Zayed Al Nahyan, Minister

of Information and Culture, attended the second meeting of the Higher Council of Arab Women Organisation (AWO) held in Bahrain under the aegis of Sheikha Sabeeka bint Ibrahim Al Khalifa, wife of the King of Bahrain. The meeting was attended by the First Ladies of the Arab countries or by their representatives.

WOMEN IN POLITICS

Considering the pivotal role that the GWU plays in political affairs in the UAE, it is not surprising that the organisation is actively seeking a greater decision-making role for women in national politics. The door is certainly open for female representation under the terms of the UAE Constitution.

In a keynote address to the seminar on 'Parliamentary Performance of Arab Women: Challenges and Future Outlook', held in 2004, Sheikha Fatima said that 'What has been achieved by UAE women, notably in education and positive participation in the national development and construction, make us look forward with confidence for their entry into the political scene. . . We are looking forward to the engagement of women in political life, building on the unstinting support of H.H. President Sheikh Zayed bin Sultan Al Nahyan for women's aspirations . . . Engagement of women in national action is part and parcel of their basic rights guaranteed by Islamic faith and valuable Arab traditions'. She went on to say that strengthening the role of the GCC women's organisations with the aim of serving local communities is an important way of improving the participation of women in all aspects of national life, including politics.

To further these political objectives a follow-up GWU-sponsored symposium on enhancing the role of women parliamentarians in public life was organised in conjunction with the UAE office of UNDP and UNIFEM, under the patronage of Sheikha Fatima. Delegates from Bahrain, Kuwait, Oman and the UAE, including a female member of the Omani Parliament and a female Bahraini Minister as well as heads of women's NGOs, took part in a closed session workshop over a period of two days. The participants discussed the project's regional action plan to strengthen the political participation of women and the preparation of national action plans for the respective countries.

The participants agreed to establish an Arab Women Parliamentarians' Steering Committee for the project, which will include representative members from several national organisations. This committee will have a consultative role in the project and will be set up within each participating Gulf country. It was also agreed that UNIFEM would undertake a 'training of trainers' programme, which would equip participants to provide training for women interested in a political career.

In the meantime, Sheikh Sultan bin Mohammed Al Qasimi, Member of the Supreme Council and Ruler of Sharjah, has appointed two women to the Sharjah Municipal Council. Female representation will continue after an electoral system is introduced to elect members to the council.

LEADERSHIP CONFERENCE

The first international conference on women's leadership to be held in the Middle East, entitled 'Women as Global Leaders: Educating the Next Generation', was hosted by the UAE in 2005. Organised by the student councils of Zayed University, the conference brought together nearly 1000 women from all over the world. For three days, undergraduate, graduate and PhD students, professors, professionals and government officials from around the globe were given the opportunity to engage with each other and listen to the stories of women who have successfully achieved national and international leadership positions.

WOMEN AND EMPLOYMENT

According to the *UAE Human Resources Report 2005*, the contribution of UAE national women to economic activity has increased significantly from a mere 5.4 per cent in 1995 to 16 per cent in 2004. This positive development was due to substantial enrolment by women in education, particularly higher education, relaxed social restrictions on female employment and the fact that work was increasingly being seen not merely as a source of income but as establishing personal identity.

This is, of course, good news, although it does have a downside for the demographic profile of the country because of 'the sharp and constant decline in the gross fertility rate, particularly among national females in the 15 to 24 age group. This decline is attributed to late marriage, increased participation of women in the labour market and accomplishments in higher education'.

Although the participation rate of economically active female nationals went up by 11 per cent between 1995 and 2004, their share of the total labour force is less than 27 per cent. This underscores the importance of current efforts to target women for jobs. As it is, the unemployment rate among national women is at a high of 19.7 per cent or 14,000 job seekers compared to 8.2 per cent for males, despite the fact that women graduates greatly outnumber male graduates. In 2004 alone, over 66 per cent of the nationals who applied to Tanmia for jobs were women, 76 per cent of the applicants had completed secondary education or above, and women constituted 79 per cent in this category. Significantly, 40 per cent of the new board members of Tanmia are eminent UAE national women. They are actively involved in developing effective programmes for training and employing nationals, and improving the working conditions for women in the local labour market.

As the Government forges ahead with its policy of emiratization, women are seen as being more and more crucial to its success. But there is no denying that the ratio of female to male participation in the workforce remains relatively low. There are several reasons for this. Firstly, the number of economically active males

over 15 years (2.12 million in 2003) far exceeds the female figure (365,000), mainly because foreign workers are predominantly male; secondly, some companies restrict the numbers of females employed; thirdly, UAE society is patriarchal and the changing of traditional views concerning a woman's place in the family is a slow process; fourthly, although women are well-represented at every educational level, it is no longer enough for women to gain a qualification – it is vital that what women choose to do in tertiary education should be relevant to the needs of the ever more technologically challenging workplace. This is where organisations such as Tanmia can make a big difference. In addition, many UAE women cease working after marriage and bearing children, partly because of an insufficiency of childcare centres and partly because of the well-founded belief that maternal care is likely to be more beneficial for their children.

On the positive side, females constitute 66 per cent of the workforce in the government sector, of which 30 per cent are in decision-making positions. In particular, UAE women comprise over 40 per cent of all employees in education, at least 35 per cent of whom work in the health sector and approximately 20 per cent in social affairs. In 2004 female participation in the private sector was 18 per cent: 10,500 businesswomen managing around US\$4 billion dollars worth of investments in major business fields. Women are now working in all areas of the private sector, including a significant 37.5 per cent in financial services.

Role models for women in all walks of life are multiplying rapidly in the UAE, encouraging women to break away from traditional areas of employment. Whether her skills lie in finance, IT, the arts, medicine, engineering, the army, police work or the social sciences, the contemporary UAE woman is assured of finding herself following in the footsteps of pioneering predecessors. The formerly unprecedented is gradually becoming the norm. Female police officers throughout the Emirates are working in all aspects of police work from administration and IT to traffic regulation and prison work.

The first female federal government minister, Sheikha Lubna Al Qasimi, is playing a major role in political life. In recognition of her pioneering achievements, her name, along with that of Raja Isa Al Qurg, president of the UAE Businesswomen's Council of the UAE Chambers of Commerce and Industry, have been included on the 'Women To Watch In The Middle East' list in a leading feature published on the *Forbes* magazine website. A UAE woman doctor, who serves in the Armed Forces, has been promoted as brigadier, making her the first woman in the entire Arab-Gulf region to reach that military rank. The first female chief executive officer has been appointed to JAFZA, and Dubai Technology and Media Free Zone Authority has also announced the appointment of a female Executive Director of its Media Sector. The latter will be responsible for the running of both Dubai Media City (DMC) and Dubai Studio City (DSC).

Women with full training in cargo and passenger control have graduated from Dubai Civil Aviation Centre's airport security course. A unit of female firefighters, initially trained for the Dubai Shopping Festival, has become a permanent feature of the Civil Defence. Dubai Municipality has its first female director; three women have been appointed to the board of the Dubai Chamber of Commerce and Industry; a national woman is Vice-President of Distribution at Dubai Bank, another heads the Social Service at the Primary Health Centre of the Department of Health and Medical Services and the first national endocrinologist is a woman. The name of a UAE national woman scientist also features in a list of names placed on a CD-ROM that was left on the surface of Mars by NASA to honour those associated with its Rover explorer mission. And if that is not enough, the UAE has hosted the first women's international car rally.

Nevertheless, gender inequality remains an issue requiring renewed focus to ensure that individual success stories are no longer exceptional. In particular, there is a need to conduct increasingly-targeted and direct interventions to influence policy-makers and legislators and to encourage skilled groups of capable individuals to lend support to and act as advocates for the strategy.

A key recommendation of the National Strategy for the Advancement of Women was for businesswomen's councils to be attached to each of the Chambers of Commerce and Industry throughout the UAE in order to assist women in business and to provide a link with public policy makers. This has been implemented in the larger emirates.

In August 2005 the UAE Businesswomen's Council, a nation-wide network of business, professional and academic women, issued the first-ever commercial directory for businesswomen in the UAE. The directory is part of the council's persistent efforts to offer services to businesswomen in various sectors and strengthen links between them and clients and consumers.

Abu Dhabi Businesswomen Group (ADBW) is implementing a number of major projects in cooperation with trading and educational partners. One is the education and training of potential female entrepreneurs in collaboration with ZU and the HCT. A second – 'Employment Passport' – provides an opportunity for graduates to gain work experience in companies and businesses run by the members of the ADBW.

Dubai Business Women Council (DBWC) is providing women entrepreneurs in the UAE with assistance for small and medium ventures, from compiling feasibility studies to consultancy in all areas, from setting up business to availability of finance.

There are some indications that the business community is increasingly aware of and taking notice of the challenges that women face in the workplace. The formation of the Professional Women's Sub-Group at Dubai Quality Group to create business and professional awareness among women in the UAE, through such means as career advisory meetings and the sharing of best practices, is a

positive move. So too is the sub-group's ongoing efforts to establish a crisis centre for working women.

Other organisations are also recognising that given the right conditions, targeting women can be a valuable marketing strategy. In 2004, a special floor for business transactions for women was opened at the Abu Dhabi Securities Market (ADSM) with the objective of encouraging UAE national women to participate actively in the business activities at the ADSM. As a result, the number of UAE women engaged in transactions at ADSM is on the rise.

In 2005, the National Investor (TNI) announced the launch of its new Dh100 million TNI Dana Women Fund to encourage women to participate in the region's booming capital markets. The open-ended fund is open only to UAE and GCC national women and will provide access to the local, regional and international securities market in a balanced manner.

In April 2005 Sheikha Fatima instructed the board of the newly-established Al Qudra Holding Company to allocate Dh50 million worth of its founding shares to UAE national women in the first initiative of its kind. It is hoped that the allocation will encourage women to participate in the establishment of new companies while providing financial security for the future.

MARRIAGE FUND

Despite the preponderance of males in the UAE, it was recognised in the early 1990s that growing numbers of UAE women were remaining unmarried. One of the main causes of this problem, which had escalating social consequences, was the high cost of marriage. A dowry system is traditional to the UAE and, as the country's wealth soared, dowry expectations rose with equal rapidity, making marriage too expensive for many young men and their families. The price of wedding celebrations themselves had also spiralled out of control, a further financial disincentive to any couple contemplating marriage. The Marriage Fund was set up in 1992 to combat the problems experienced by nationals wishing to marry. Marriage halls where mass marriages can take place were built to facilitate more economical ceremonies and the Government launched a campaign calling for a reduction in dowry size. Since then, an upper limit of Dh50,000 has been placed on dowry size, and the prohibition on extravagant weddings can be enforced by legal sanctions: a prison sentence or a Dh500,000 fine for the couples concerned.

A mass wedding that took place in Abu Dhabi in May 2005, including a grant of Dh70,000 for each bridegroom, is further evidence of the government's concern that the burden should be lightened for young couples.

Young UAE nationals with limited incomes (up to Dh16,000 per month) wishing to marry can apply to the fund for a marriage grant of up to Dh60,000, usually paid in two instalments, and the Marriage Fund receives between 4500 and 5000 grant applications every year, up substantially from the initial figure of 2036 in

1993. Many couples are participating in mass weddings organised by the fund to reduce costs. But the fund's involvement in the marriage process is not confined solely to financial needs. National couples wishing to obtain the marriage grant will first have to undergo a pre-marriage counselling course. In addition, the Marriage Fund holds dispute resolution courses for couples in trouble, and it has developed a hotline for nationals to help solve marital problems.

HEALTH

The United Arab Emirates is ranked forty-first in the 2005 *UN Human Development Report*, having risen from forty-ninth place in 2004. HDI focuses on three measurable dimensions of human development: living a long and healthy life, being educated and having a decent standard of living. Thus it combines measures of life expectancy, school enrolment, literacy and income, thereby providing a broader view of a country's development than income alone. This *Yearbook* has already highlighted the country's achievements in education and the Government's continuing efforts to provide a high standard of living for its people. But the high HDI ranking also reflects the success of the UAE's efforts to provide a world-class health service for its population.

A sophisticated physical infrastructure of well-equipped hospitals and clinics has increased capacity from a mere 700 beds in 1971 to over 7000 beds spread across 60 public and private hospitals. Most of the infectious diseases like malaria, measles and poliomyelitis that were once prevalent in the UAE have been eradicated, while pre-natal and post-natal care is now on a par with the world's most developed countries.

In fact, infant mortality and maternal mortality rates have dropped remarkably and, according to the Arab Human Development Report (AHDR), the UAE is one of two countries from the Arab Gulf Cooperation Council (GCC) that have successfully maintained maternal mortality rate at levels considered low by international standards. The new-born (neonate) mortality rate has been reduced to 5.54 per 1000 and infant mortality to 7.7 per 1000. Maternal mortality rates have dropped to 0.01 for every 100,000 in 2004, primarily due to the fact that 99 per cent of deliveries in the country take place in hospitals under direct medical supervision.

As a consequence of this high standard of care at all stages of the healthcare system, life expectancy at birth in the UAE, at 78 years, has reached levels similar to those in Europe and North America.

FACILITIES

In the government sector, the country has 34 general hospitals and 115 primary healthcare facilities, as well as many specialist centres. New hospitals are constantly

being built, including a Dh300 million obstetrics and gynaecological unit with 320 beds, which is being constructed at the Sheikh Khalifa Medical Centre (SKMC) as part of a plan to develop the area into a fully-fledged medical city. A new ten-bed, C4 Intermediate Care and Reconstructive Unit has also opened at SKMC. The C4 unit was established in April 2002 as the country's first intermediate-care unit.

Sharjah's Dh100 million Kalba Hospital opened at the beginning of 2005. This hospital has a kidney dialysis section, CT scan and MRI sections, a VIP medical ward, six fully-equipped operating theatres, an intensive care unit and a critical care unit. A full range of out-patient clinics is also serviced by specialists and consultants.

The UAE provides a high level of specialised health care at its facilities, including open-heart surgery and organ transplantation. Comprehensive diagnostic and therapeutic radiological facilities, along with surgical treatment, are offered at oncology departments in Tawam Hospital in Al Ain and Al Mafraq Hospital in Abu Dhabi. Gastrointestinal, renal and ENT units are also available in many general hospitals.

Many of the new hospitals, public and private, offer advanced techniques such as 'keyhole', or minimally invasive, surgery and interventional radiology. Up until recently, these procedures were only available abroad (2499 UAE nationals received medical treatment abroad at the expense of the MoH between 1994 to 2003, thousands more travelled at their own expense). Obviously, it is not only more cost-effective and convenient to treat people in their own environment, it is also a better solution for the patient.

In 2003, Welcare Hospital, Dubai, became the first private hospital to offer open-heart surgery in the UAE. The American Hospital Dubai's recently opened 'Heart Centre' is unique in that it offers almost exclusively a 'beating-heart approach' for coronary artery revascularisation. Conducting surgery on a beating heart falls under the larger umbrella of minimally invasive surgery. Almost 100 per cent of coronary bypass surgeries will be carried out using this revolutionary technique.

In 2005 the American Hospital joined 'Emirates World Heart Foundation', a non-profit organisation based in the UAE that has a panel of eminent international heart surgeons who are on-call to carry out complicated heart surgery, free of cost, on poor patients in any corner of the world. Established by Dr Adel Al Shamry, Consultant Cardio-Thoracic Surgeon at Sheikh Zayed Military Hospital, the foundation also works with local and international medical staff under the umbrella of the UAE Red Crescent to provide surgical training, assistance with diagnostic procedures and consultations, as well as to provide educational programmes in the medical field. It also donates equipment and medicines to needy hospitals. The foundation, which started with 20 doctors, now boasts 100 surgeons who set aside one month of the year to handle the foundation's projects.

CHALLENGES AHEAD

Despite these major strides and the fact that the Ministry of Health's budget has increased each year at an average of 4.5 per cent, there is an ever-increasing pressure on the country's healthcare services. This is primarily due to the unprecedented growth in population, but other factors come into play, such as the burgeoning cost of technology. Out of the Dh1.67 billion spent by the MoH in 2003, Dh1.10 billion went on staff salaries, Dh499 million on the purchase of medicines, treatment abroad, rents for MoH buildings, hospital meals and laundry. The purchase of new medical equipment and devices, by contrast, accounted for as little as Dh2.2 million in 2003, although Dh30 million was earmarked for the purchase of emergency medical equipment for all rural primary healthcare centres.

One of the factors restricting development of health care is that the role of the private sector has been limited to date: of the 7000 or so hospital beds available in the country, as few as 1000 beds are in private hospitals. The reason for this is that free high-quality care and medicines have been readily available at government hospitals and pharmacies. Expatriates were also entitled to use MOH facilities for minimal fees on production of a health card which cost as little as Dh300 (US\$ 82) per year. This put a heavy burden on public health care and prevented the development of private facilities. Policy decisions at the MOH are gradually changing the emphasis on government subsidies. Since 2001 visitors to the UAE and residents without health cards or with expired ones, have had to pay full fees for hospital beds and surgical operations. In addition, expatriate cardholders are no longer entitled to free medicines.

The introduction of compulsory health insurance for expatriate employees is considered to be the best way forward, ultimately leading to more cost-effective and efficient services. Residents of Abu Dhabi, where the government spends Dh4 billion annually on health care, will be covered by a comprehensive insurance scheme to be introduced by Abu Dhabi's General Authority for Health Services (GAHS) in January 2006. Health insurance under the scheme will cost Dh1000 per person, but it will be mandatory for employers to shoulder the costs on behalf of their employees.

The new insurance policy, which will permit treatment in public and private hospitals, will phase out health cards, which will not be renewed once they expire. Initially, the insurance will cover all primary healthcare centres and emergency clinics in Abu Dhabi. Once the new medical insurance policy is in operation, fees will be introduced in Abu Dhabi government hospitals. The GAHS has set prices for all operations and medical services in line with the costs of medical services offered in GCC countries. The hospital will bill the insurance company directly.

Abu Dhabi's new health insurance law (No. 23 for 2005), issued in September 2005, states that, except in circumstances outlined in Articles 2 and 3, all foreign



residents and their family members must participate in the emirate's compulsory health insurance system. The system is, however, optional for UAE citizens. The law obliges employers to enrol all employees, spouses and three children under the age of 18 in the health insurance scheme. Employees are compelled to secure health insurance for persons sponsored by them, who are not covered by the employer.

Article 9 of the law stipulates that public and private healthcare facilities shall provide medical treatment services to the insured covered by the health insurance system. Private providers must obtain permission from GAHS to offer such services. Article 12 identifies medical treatment services covered in the health insurance system, including:

1. Check-up and primary health care by general practitioners and specialist doctors at clinics and health centres
2. Laboratory tests and X-rays
3. In-patient treatment
4. Dental and gum treatment, excluding orthodontics and dentures
5. Medicines
6. Expenses of an escort in critical cases.

GAHS has the right to add or delete any of the services if needed.

Emphasising the need to ensure that quality and efficient health services are delivered to UAE nationals and expatriates, the Ministry of Health will also be restructured and streamlined, both at administrative and technical levels, to keep abreast with international developments and reinforce the private health sector so as to enable it to play a more significant role in providing health services. Hospital boards will be revitalised, regular hospital visits will be initiated and a UAE council for medical specialists will be put in place to upgrade the training of UAE medical personnel. Training programmes will be conducted in conjunction with international universities.

To date, the healthcare services are primarily staffed by foreign nationals: only 3.3 per cent of nursing staff are UAE nationals. (Out of 5930 nurses employed by the UAE Ministry of Health in 2003, only 194 were citizens). Nursing schools have been set up across the country, from Ra's al-Khaimah to Abu Dhabi, to remedy this situation, although UAE nationals are under-represented at these schools. The UAE's first nursing association, Emirates Nursing Association, has been formed in an attempt to rectify the situation. Nursing salary scales are under review and the profession's first nursing journal, *Abu Dhabi Nurse*, was launched in 2003 by GAHS.

Approximately, 10 per cent of doctors in the country are UAE citizens. However, medical training at UAEU's Faculty of Medicine and Health Sciences and other centres, including new facilities at DHCC, will ensure that a qualified local workforce is nurtured.

DUBAI HEALTHCARE CITY

Dubai Healthcare City (DHCC) is destined to be a major player in the provision of health care, medical education and research, not only in the UAE but in the entire region. Scheduled for completion in 2010 but likely to be finished sooner, DHCC is being built on the former site of the Global Village in the vicinity of existing hospitals Al Wasl, Rashid, the American Hospital and Welcare. Investment in DHCC's first two phases has been projected at Dh11 billion (US\$3 billion). Phase one includes a 300-bed university hospital, a medical college, a nursing school, a life sciences research centre, 40 fully-equipped, ready-to-go clinics (to be offered on both leasehold and freehold terms) and specialised laboratories. Phase two, four times the size of phase one, both in terms of area and investment, will include centres for rehabilitation, nursing, obesity and nutrition and alternative medicine, as well as pharmaceutical companies.

The Mayo Clinic opened its first office and clinic outside the US at DHCC in April 2005. The new office will offer cardiac services dedicated primarily to diagnostic and non-invasive therapy, as part of a pilot project, and will also focus on heart research and education.

Global healthcare company, Johnson & Johnson, is moving its headquarters to DHCC and it has also announced that it will establish its own Training and Simulation Centre at DHCC in partnership with the Centre for Healthcare Planning and Quality (CPQ). CPQ has been jointly set up by DHCC and the leading medical education provider, Harvard Medical International (HMI).

In mid-2005 HMI and DHCC jointly announced the formation of the Dubai Harvard Foundation for Medical Research. The foundation will be headquartered at the Harvard Medical School Dubai Centre's Institute for Postgraduate Education and Research (HMSDC), which has its premises at the DHCC. Programmes will be implemented through HMSDC, which will also develop collaborative scientific and medical research between regional laboratories and Harvard Medical School.

Sheikh Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai, recently made a donation to the foundation to establish the Maktoum Harvard Medical Library, based at HMSDC. In 2005, Prince Al Waleed bin Talal, head of the Kingdom Holding Company in Riyadh, Saudi Arabia, also announced that he will donate Dh18 million to the foundation.

MEDICINES

The UAE is the highest consumer of medicines in the Gulf region. Average per head consumption amounts to Dh293.6 (US\$80) annually, while the average in other Gulf and Arab countries is US\$52 and US\$20.3 respectively.

Online access to all pharmaceutical products registered by the Ministry of Health is part of an e-pharma project that aims to ensure availability of vital information concerning approved pharmaceutical products to the public. It is hoped that the

move will greatly reduce health hazards resulting from unregistered drugs, as well as end unlicensed promotion of certain types of drugs. The available data will cover warnings, side effects, labelling, active ingredients, first aid (in case of poisoning or serious adverse side effects) and the actual price of the drugs. The e-project will also facilitate registration of medicines for import and the licensing of private pharmacies.

HEALTH EDUCATION

The Ministry of Health has paid particular attention to health education as an effective method for changing unfavourable attitudes and behaviour that negatively influence the health and well-being of individuals and the community at large. To meet this challenge, the Ministry has established a Department of Health Education in the preventive health sector with representation in all medical districts. The department's responsibility is to develop and implement national plans to raise public awareness. The department has also organised conferences in collaboration with WHO on cancer prevention, nutrition and chronic diseases, in addition to studies on health topics, including the prevalence of diabetes in the community.

UAE observed 'World No Tobacco Day 2005', an international health awareness event supported by the WHO, with events organised by both government and private organisations. In Abu Dhabi, the Preventive Medicine Department, in cooperation with GAHS and the Sheikh Khalifa Medical City, created special awareness programmes for the day. These included free clinical testing in centres in Abu Dhabi, Dubai and Ajman, lectures by health professionals about the consequences of tobacco use and a mobile Quit Smoking Clinic.

WORLD HEALTH AWARD

The UAE's commitment to the objectives of the WHO are underscored by the initiation of the 'World Health Award' by the late Sheikh Zayed bin Sultan Al Nahyan. The UAE's desire to reinforce the WHO worldwide has become even stronger with the support of President HH Sheikh Khalifa bin Zayed Al Nahyan.

The UAE's World Health Award for 2005 was awarded to Queen Rania Al Abdullah, wife of King Abdullah II of Jordan at the fifty-eighth Session of the WHO for her enormous contribution to the welfare of women and children.

DISEASE CONTROL

Thirty-six infectious diseases are included in the control programmes that are jointly organised by the Ministry of Health with other relevant ministries and agencies in order to effectively coordinate suitable intervention methods, including vaccination, vector control, health education and chemoprophylaxis. The elimination of polio, measles and neonatal tetanus are examples of the successes achieved in this area.

The National TB Programme in the UAE was launched as a result of an initiative by WHO in coordination with the Executive Office of the Council of Health Ministers of the GCC countries, taking into consideration the epidemiological factors of the disease and the healthcare system in the country. The death rate resulting from TB decreased from 0.60 per 100,000 population in 1990 to 0.13 in 1995, a reduction of 78.3 per cent. With the re-emergence of the disease worldwide, the death rate increased again in the UAE to reach 0.32 per 100,000 population in 1996 and 0.42 per 100,000 population in 1997. However, due to the country's TB control strategy, including DOTS (Directly Observed Treatment Short Course) and the TB Programme, incidence decreased by 0.1 in 2001 and 2002 consecutively, a reduction of 76.2 per cent since 1997. The incidence rate is expected to decrease to 3 per 100,000 in 2005, the objective being to reduce the incidence rate to less than 1 per 100,000 population by 2010.

The National Strategy for Malaria Control has succeeded in eliminating indigenous transmission of malaria and the last locally-transmitted cases of malaria in the UAE were recorded in July 1997. However, due to its multinational population who frequently travel abroad, the country has been recording imported cases of infection. It is expected, nevertheless, that the UAE will be declared malaria-free by the World Health Organisation at its General Assembly in May 2006. To this end, the WHO has been evaluating all malaria eradication activities in the country and in conjunction with the Malaria Control section at the Ministry of Health is carrying out a field survey in three areas, Al Ain, Ajman and the East Coast to confirm that malaria is eradicated once and for all.

IMMUNISATIONS

The National Immunisation Programme (NIP), launched in 1980, has made significant progress over the last 20 years. The vaccination schedule started with the six immunisable childhood diseases (polio, measles, tetanus, pertussis, diphtheria and tuberculosis) recommended by WHO. MMR (measles, mumps and rubella) vaccination was added to the programme in 1985, hepatitis in 1990 and the Haemophilus influenza B (Hib) vaccine in 1999. In addition to regulating vaccination practices, national strategies have been focusing on sustaining high coverage, ascertaining the effectiveness and safety of vaccines, as well as on adequate and rational utilisation of new biotechnology.

A comprehensive review of NIP was conducted in 2002, taking into account the recommendations of the First Emirates International Conference on Vaccination held during the same year. Based on this review, the NIP was revised and updated to introduce multivalent combined vaccines, beginning in January 2005.

Pentavalent vaccines, offering protection against five diseases – hepatitis B, Hib and DPT (diphtheria, polio and tetanus) – is currently administered at two, four

and six months; quadravalent vaccine (Hib and DPT) booster at 18 months and MMR at 12 months. An additional dose of hepatitis B vaccine is also given at birth. All children born after January 2005 will be covered under the updated NIP.

NACP

In a conservative society like the UAE, AIDS is a rare disease. According to World Health Organisation statistics, the UAE is one of the countries with the lowest number of reported HIV/AIDS cases in the world. Cultural, social and behavioural Islamic norms have contributed to keeping infection at these very low levels.

The National AIDS Control and Prevention programme, established in 1985, has the ultimate objective of preventing transmission of the disease and the control of its entry into the country, through primary prevention, early detection and effective management.

Prevention is accomplished through early detection and screening, including screening of blood, blood products, organs and tissues before transfusion or transplants and screening of population groups. Budgets have been allocated for testing all expatriates at the time of issuing or of renewing their residence visas. Free treatment is provided to cases, if detected, and the Government provides financial, psychological and social support to patients and their families.

No cases of transmission through blood or blood products provided in UAE facilities have been recorded since 1985, when the AIDS programme was first implemented. This and the very low prevalence of HIV/AIDS in the country indicate the success of the programme. However, as with any programme, it is continually being updated in order to meet the threat that new global patterns of infection may pose to the UAE within the context of the changing social dynamics of the country. The Ministry of Health, in coordination with WHO and the Executive Office of the GCC, is engaged in continuous follow-up of developments in this field.

BLOOD TRANSFUSION SERVICES

An important factor in the control of disease and the long-term health of the population has been the creation of a reliable blood transfusion service. The UAE ceased importing blood in 1983 and has relied on local donors ever since. New laboratories costing Dh15 million have been established at the Blood Transfusion Services Department based in Sharjah. The Department has the capacity to take blood from 20 donors every five minutes – a rate of extraction which can be increased to 40 in an emergency situation – and provides blood to public and private health institutions in the UAE. It collects in the region of 40,000 units in the UAE annually. The Sharjah facility is one of only ten in the world to utilise gamma radiation for blood sterilisation procedures.

The UAE consumed 21,000 units of blood in 2003, transfused to 11,800 patients in 25 hospitals across the country. Hospitals in Abu Dhabi consumed 8778 units.

Sharjah's hospitals used 4483 units, followed by Fujairah at 1961 units, Ra's al-Khaimah, 1792 units, Al Ain, 1516 units, Dubai, 634 units and Umm al-Qaiwain, 279 units.

The first 'Chord Blood Centre' in the region was established in Sharjah in 2005. Chord blood is extracted from the umbilical chord immediately after delivery and can be stored for 25 years at -250 degrees centigrade. It can be used in the treatment of thalassaemia, leukaemia and some other cancers, either in the donor, his or her siblings or other potential recipients, subject to matching factors. The bank shares the laboratory, serological testing, equipment and technological facilities of the Sharjah Department, thereby saving 70 per cent of the cost. The service is available to both private and public sector hospitals in the country.

ALTERNATIVE MEDICINE

A federal law was passed in 1995 to regulate the sale and use of herbal medicines. But with the rapid increase in popularity of herbal remedies in the UAE (the total number of imported herbal medicines increased four-fold between 2000 and 2001, with nationals 17 times more likely to avail of herbal treatments than non-nationals), comprehensive regulation in the field of alternative medicine and the establishment of regional harmonisation of regulations and standards is of prime importance. The MoH has set up an Office of Complementary and Alternative Medicine (OCAM) with two committees – one to draw up rules and conditions governing the licensing of complementary and alternative practitioners, the other to evaluate alternative medicine degrees. Under new regulations, herbal mixtures being sold at herbal medical centres must be prescribed by doctors and registered by the MoH. Pharmacists and assistant pharmacists working in such centres must be licensed to practice by the ministry.

The Zayed Complex for Herbal Research and Traditional Medicine was created in 1996 and, as well as conducting research on herbs and plants (many of which occur in the UAE), it treats patients suffering from chronic illnesses. In recognition of its success in producing, on a small scale, internationally-standardised herbal medicines for the treatment of chronic diseases such as diabetes, hypertension, joint inflammation, and ulcers, WHO named the complex as a regional centre for alternative medicine in the Middle East.