



## 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)

ISLAM, COUPLED WITH A TRIBAL HERITAGE, form the basis of a stable social structure in the United Arab Emirates, enabling its people to meet the human challenges posed by the unprecedented economic transformation that has taken place over the past 30 or so years. 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.

### LABOUR AND SOCIAL AFFAIRS

The UAE places considerable emphasis on human resources development to improve its competitiveness through an efficient workforce, higher productivity, fair working conditions and social security.

#### POPULATION

The demographic structure of UAE society has been altered considerably by the sharp rise in population since the foundation of the state. The upward trend continued in 2003 when the UAE's population increased by 7.6 per cent to 4.04 million. An increase of 4.7 per cent to 4.23 million is expected by the end of 2004. This rapid growth is attributed to an improvement in life expectancy, a sharp cut in infant mortality and a steady influx of expatriate workers.

Ministry of Planning statistics indicated that just over one million people were under 15 years of age at the end of 2003, a rise of nearly 50,000 in one year. Approximately half of the UAE's population, or about 2.2 million, were between

15 and 40 years of age, while 742,000 were aged between 40 and 60. The rest were over 60. Abu Dhabi remains the most populous emirate, with Dubai in second place, while Ajman recorded the highest growth rate and Ra's al-Khaimah the lowest. The figures also showed that the population remained dominated by males who numbered 2.74 million, in contrast to 1.29 million females.

## HUMAN RESOURCES

The figures outlined above show that the UAE has a very young and steadily growing population, many of whom will be entering the labour market in the very near future. At present, the majority of nationals work in a public sector that has reached saturation point and is, therefore, incapable of absorbing the 13,361 nationals that are expected to enter the job market in 2004. These figures are expected to rise to 16,187 in 2006, and 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 United Arab Emirates. 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 Government is anxious to address.

According to the Employment and Human Resource Report 2004, released by the National Human Resource Development and Employment Authority (Tanmia) in March 2004, the UAE is, perhaps, the only country in the world where foreigners dominate the private sector, both as employers and employees. This situation, the report states, is in need of 'serious thinking and careful policy-making that sets targets with a long-term vision'. It stresses that 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.

To begin with, the report suggests 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.

A common complaint of private sector employers is that nationals have unrealistic expectations regarding their working conditions and never stay long in their jobs. A survey by Tanmia of nationals employed in the private sector found that indeed most national workers do not remain in private sector jobs for more than five years. Tanmia's research indicated that a third of nationals employed in the private sector had taken up their particular employment not by choice but because it was the only job available. These dissatisfied nationals will obviously be more open to a better offer if it comes their way, and they will

## Socioeconomic Development Indicators

| Indicator  | 2001  | 2002  | 2003  |
|--|-------|-------|-------|
| GDP per Capita (000s US \$) .....                      | 19.9  | 19.0  | 19.7  |
| Labour Force Size (000s)..... Male                     | 1,795 | 1,948 | 2,120 |
| ..... Female   | 284   | 321   | 365   |
| Unemployed Force as % of Labour Force .....            | 2.3   | 2.4   | 2.6   |
| ..... Male   | 3.2   | 3.4   | 3.6   |
| ..... Female   | 2.4   | 2.6   | 2.7   |
| ..... Total  | 13.7  | 14.1  | 14.7  |
| Females as % of Labour Force .....                     | 1.68  | 1.65  | 1.63  |
| Dependency Ratio (Inactive Population/Labour Force) .. | 41.7  | 44.9  | 45    |
| Population Density (sq. km) .....                      | 208.9 | 210   | 212   |
| Sex Ratio (No. of Males per 100 Females) .....         | 16.1  | 15.5  | -     |
| Crude Birth Rate (per 1000 population) .....           | 73.45 | 75.66 | -     |
| Life Expectancy at Birth .....                         | 70.43 | 74.52 | -     |
| ..... Male   | 72.59 | 75.25 | -     |
| ..... Female   | 8.9   | 7.9   | -     |
| ..... Average  | 16.1  | 16.2  | -     |
| Infant Mortality Rate (per 1000 Live Births) .....     | 9.2   | 9.0   | -     |
| Illiterates as % of Total Population .....             | 13.8  | 13.9  | -     |
| ..... Male   |       |       |       |
| ..... Female   |       |       |       |
| ..... Total  |       |       |       |



most probably look for a job in the public sector, given the lucrative salary package, rather than seek an alternative position within the private sector itself. As little as 20 per cent seemed to be happy with their current jobs in the private sector, these citing good career opportunities as the reason for their satisfaction.

Tanmia commented on the fact that 74 per cent of nationals surveyed expressed their satisfaction with working in a multi-cultural environment. However, 60 per cent of the respondents were of the opinion that nationals suffered from discrimination in a multi-cultural workplace. In particular, there was a perception that nationals were being denied essential training, and, therefore, the chance to be considered for promotion, by foreign employees who feared for their own jobs should a national become capable of replacing them.

In 2003, Tanmia sought the employment of 6563 job-seekers in the private sector, of whom only 12.6 per cent were successful. In order to rectify this situation, the report recommends 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 than has hitherto been the case, clearly recognises that expatriate workers will continue to play a 'vital role' in the country's economy. Nevertheless, Tanmia feels that 'the growth of the private sector and employment of non-nationals cannot be left unregulated' and that choosing the 'carrot policy' as opposed to the 'stick' will simply not work. Hence, Tanmia proposes the establishment of a 2 per cent quota system for nationals in certain job sectors. It cited the example of the banking sector where the 4 per cent quota stipulation was implemented on an experimental basis. Even though the target has not yet been reached, the number of nationals employed in the banking sector has risen from 11.9 per cent to 23.4 per cent between 1998 and 2003. The targeted numbers, says Tanmia, have not been achieved because a penalty system has not been put in place as yet.

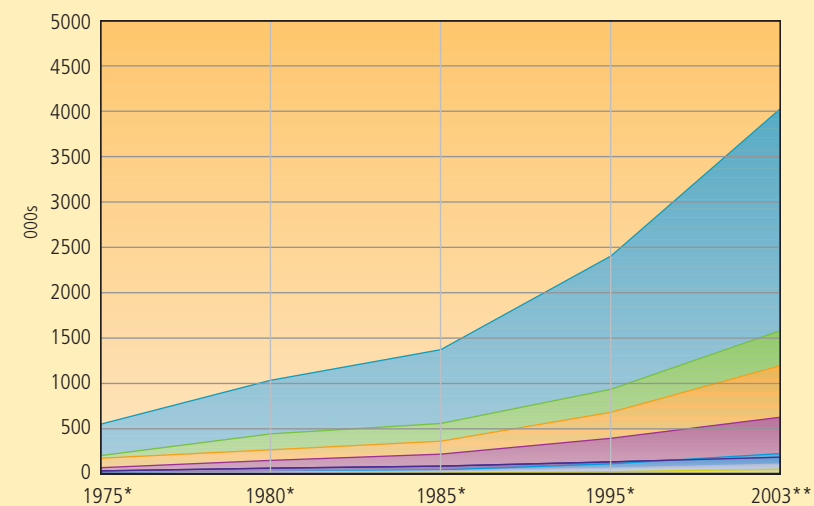
The insurance sector is likely to be the next focus of government attention. A report by the Planning and Follow Up Committee for recruiting nationals in the insurance sector showed that from 1997 to the end of 2002 the number of nationals in that sector rose from 1 per cent to 5 per cent. The government would like to see that figure increase to at least 15 per cent. One reason for the reluctance of nationals to work in the private sector is the unsociable working hours encountered. Under consideration, therefore, is the imposition of an eight-hour shift for the insurance industry to replace the current two-shift regime. Along with a five-day week, this would bring the insurance sector in line with the public sector. Such changes, combined with a minimum range of salary packages to be offered to nationals, are expected to enhance the sector's appeal to the career-oriented young national.



Population by Emirate

| Emirate               | 1975*          | 1980*            | 1985*            | 1995*            | 2003**           |
|-----------------------|----------------|------------------|------------------|------------------|------------------|
| Abu Dhabi .....       | 211,812        | 451,848          | 566,036          | 942,463          | 1,591,000        |
| Dubai .....           | 183,187        | 276,301          | 370,788          | 689,420          | 1,204,000        |
| Sharjah .....         | 78,790         | 159,317          | 228,317          | 402,792          | 636,000          |
| Ajman .....           | 16,690         | 36,100           | 54,546           | 121,491          | 235,000          |
| Umm al-Qaiwain .....  | 6,908          | 12,426           | 19,285           | 35,361           | 62,000           |
| Ra's al-Khaimah ..... | 43,845         | 73,918           | 96,578           | 143,334          | 195,000          |
| Fujairah .....        | 16,655         | 32,189           | 43,753           | 76,180           | 118,000          |
| <b>Total .....</b>    | <b>557,887</b> | <b>1,042,099</b> | <b>1,379,303</b> | <b>2,411,041</b> | <b>4,041,000</b> |

\* Census Data (Dec.) \*\* Estimated



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. The training policies of the companies themselves are underdeveloped and worsen with diminishing company size. Fifty per cent of large (over 500 employees), 35 per cent of medium-sized companies (100–499) and 21 per cent of small companies (less than 100) provide regular staff training. Finance companies have the best training record (57 per cent of all firms provide training), while training in education and health is startlingly low, at 15 per cent.

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 – its statistics indicate that the average cost of pre-employment training offered to its 13,000 registered job seekers (as of the end of 2003) is estimated to be between Dh10,000 and Dh40,000. 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.

#### NATIONAL IDENTITY CARDS

The Ministry of Interior will start issuing National Identity Cards to UAE nationals and expatriates from 1 December 2004. This will integrate labour and health cards, citizenship documents and driving licences in one card. It can also be used as a travel document for travel in GCC countries. The Ministry is currently setting up a central database to monitor changes in the UAE's demographic structure and to facilitate the project, which is part of the e-government initiative launched on 1 July 2003.

#### 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, a welfare system has been put in place to assist those burdened by intractable problems and to help the vulnerable to realise their full potential as productive members of society. In July 1999, the Federal National Council approved new legislation regulating social security benefits. Under the law, 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 social security benefits are widowed and divorced national women previously married to foreigners and the expatriate husbands of UAE women. In 2003, approximately Dh660 million (US\$179 million) was distributed among 77,000 beneficiaries of social welfare in the UAE – the elderly accounting for the largest group of recipients (12,000), followed by divorcees (5000). While the number of those receiving assistance has dropped between 1980 and 2003 from 83,076 to the current 77,000, the cost to the government has risen by 16 per cent per head. Sums for social security entitlements amount to between 1 per cent and 2 per cent of GDP.

The Social Security Department at the Ministry of Labour and Social Affairs plans to reduce the number of social welfare recipients by 1800 through assisting suitable recipients to find jobs or to set up small businesses and is inviting charitable and social organisations to contribute to the funding of this innovative project.

The Ministry of Labour and Social Affairs also disbursed a total of Dh1.9 million in domestic relief aid during 2003 compared to about Dh 2.6 million in 2002. The bulk of assistance, about Dh1.567 million or 80.1 per cent of the total, went to victims of fires, followed by boat capsizing incidents at Dh310,194 or 8.58 per cent and other catastrophes at Dh 78,625.

#### *Housing*

The rapid rise in population coupled with the demands of modern living has necessitated government intervention at federal 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 are expected to rise to an estimated 33,000 by the year 2005. In 2004, Dh640 million was allocated to the Sheikh Zayed Housing Project to facilitate the process. Islamic banks also offer funding for those nationals with government housing grants and loans who seek Islamic financing to supplement the money that they have available to build their homes.

#### *Social Welfare Associations*

Non-government social welfare associations (of which there are more than 100) also assist those in need in the UAE. The UAE Red Crescent Society is prominent among the many charitable organisations that help the needy, covering such areas as medical aid, student sponsorship, disability, special care, health care programmes, prisoner care and lump sum aid programmes. (See Foreign Aid for an account of the Red Crescent Society's work outside the country.)

The Sheikh Zayed bin Sultan Al Nahyan Charitable and Humanitarian Foundation finances projects with precise objectives 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.

In 2004, the Abu Dhabi-based Zayed Higher Foundation for Humanitarian Welfare of Special Needy People and Minors in Abu Dhabi was formed. 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 Needy 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 of Dh25 million in 2003 was allocated to projects within the UAE. The Foundation's domestic 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

The UAE invests heavily in education, believing it to be the key to future prosperity in an increasingly globalised economy. Government expenditure on education increased from Dh247 million (US\$67.3 million) in 1994 to Dh5.38 billion (US\$1.465 billion) in 2003. This increase was due to a large extent to the rising population, with a consequent demand for more educational institutions.

The UAE's educational strategy is based on encouraging the younger generation to play a full and productive role in social and economic development. Today, free education facilitates access for all citizens at every level of the system.

Guiding the educationalists in their efforts to keep up with a rapidly changing cultural and economic environment is Vision 2020, the Ministry of Education's policy document outlining a strategy for further educational development in the UAE up to the year 2020. Education 2020 is a series of five-year plans, designed



### Education

|   | 1999/2000 | 2000/2001 | 2001/2002 | 2002/2003 |
|---|-----------|-----------|-----------|-----------|
| Schools   | 1137      | 1167      | 1167*     | 1208      |
| Classrooms  | 23,829    | 24,114    | 24,737    | 25,630    |
| Teachers  | 36,707    | 38,097    | 34,290    | 40,278    |
| <b>Students</b>                                     |           |           |           |           |
| Kindergarten  | 65,835    | 67,752    | 70,702    | 74,811    |
| Primary   | 272,919   | 280,182   | 285,473   | 266,224   |
| Preparatory   | 120,621   | 124,875   | 128,782   | 153,009   |
| Secondary   | 86,302    | 91,068    | 95,388    | 98,021    |
| Special Needs Education                             | 1,751     | 1,772     | 1,772*    | 1,632     |
| Religious and Technical                             | 3,304     | 3,140     | 3,316     | 2,975     |
| Literacy and Adult Education                        | 16,553    | 18,655    | 19,855    | 21,330    |
| <b>Secondary School Completed</b>                   |           |           |           |           |
| Science   | 7,241     | 9,029     | 9,266     | 9,730     |
| Arts  | 9,059     | 12,596    | 13,333    | 15,438    |
| Total   | 16,300    | 21,625    | 22,599    | 25,168    |
| <b>UAE University Students</b>                      |           |           |           |           |
| Males   | 3,626     | 3,540     | 4,004     | 3,737     |
| Females   | 12,820    | 12,432    | 13,238    | 12,391    |
| Total   | 16,446    | 15,972    | 17,242    | 16,128    |
| Students of Higher Colleges                         | 9,740     | 11,477    | 12,236    | 14,265    |
| Students of Zayed University                        | 1,613     | 1,866     | 2,225     | 2,245     |
| Colleges of Technology and other Institutions       | 20,715    | 22,502    | 23,302    | 37,134    |
| Scholarship Students                                | 1,348     | 1,370     | 1,396     | 1,422*    |
| <b>Graduates of Colleges &amp; Higher Education</b> |           |           |           |           |
| Males   | 2,215     | 1,790     | 1,910     | 3,099     |
| Females   | 4,921     | 4,484     | 4,611     | 7,826     |
| Total   | 7,136     | 6,274     | 6,521     | 10,925    |
| Government Expenditure on Education (Dh. mn.)       | 4,858.8   | 5,133.6   | 5,095     | 5,383     |

\* Estimated

to introduce advanced education techniques and improve innovative skills and the self-learning abilities of students. A Planning, Development and Evaluation Office devises the plans and uses model schools to implement them. The National Centre for the Development of Curriculum and Methodology reviews curricula and developments in educational methodology. All developments take place within the strategy's framework.

## PRIMARY AND SECONDARY EDUCATION

Primary and secondary education is provided for all UAE citizens in a four-tier process and is compulsory up to ninth grade. In 2002/2003, there was a total of 595,040 students in 1208 public and private schools staffed by 40,278 teachers. Government schools numbered 744, whilst 290,032 students were enrolled at 464 private schools.

### *Curriculum Changes*

The Ministry of Education and Youth (MoE) is initiating a switch from instruction-oriented education to self-education, along with a programme for student care, covering their social, psychological and career needs. The major challenge facing any system undergoing such a fundamental change is how to re-educate a teaching population that has itself been educated and trained under the old regime. A holistic approach that sees the student rather than the teacher as the centre of the educational process requires a total rearrangement of teaching values and methods. Part of the Vision 2020 strategy is to allow the educational zones more autonomy to pursue their own development projects, within set guidelines. Also scheduled was a switch from class teachers to subject teachers at primary level.

An enhanced curriculum for mathematics and integrated science was introduced at first grade level for the 2003/2004 academic year in all government schools. In view of research carried out by the UAE University's College of Education, the curriculum change is timely. The researchers found that a majority of science students at secondary school level lacked the ability to interpret or transform the information contained in graphs, pointing to a need for a shift from a passive culture of rote learning to an active culture of applied learning.

Emiratization of teaching staff in government schools is scheduled to reach 90 per cent by 2020, making continuous in-service training all the more imperative. Many studies have shown that one of the main barriers to the employment of UAE nationals is a poor grasp of English, and a drive is on to change this by introducing a new English syllabus in all government schools over the next three years. The course, 'The UAE New Parade' developed by Longman, has already been tested in the Abu Dhabi, Dubai and Fujairah educational zones with encouraging results. One of the advantages of the new curriculum is that teachers who may themselves have weak language skills can benefit from its ongoing training.

### *Student Website*

An important initiative by the MoE in activating the process of self-education has been the setting up of an interactive, bilingual website ([www.moeya.ae](http://www.moeya.ae)) for school students. Intended to become an authoritative guide for the different disciplines, it includes educational tours, art festivals, science fairs and talent shows; it is also a meeting place for students, where they can access information in privacy about a wide range of topics from science and sports to student welfare. The website runs interscholastic tournaments and quizzes designed to develop a range of skills and abilities, and it is also a channel through which companies and institutions can reach students. Training courses for teachers will help increase their computer and information skills and the site is updated weekly by coordinator teachers.

### *Computer Training*

In a dynamic move to make its schools 'electronically connected, culturally oriented educational institutions of comprehensive quality and regional impact', the Abu Dhabi Educational Zone has entered into an infotech agreement with the UNESCO-backed ICDL UAE to implement the International Computer Driving Licence (ICDL) programme in all faculties of the zone's schools. By 2008 all faculties under the zone will be required to complete the ICDL certification to verify their computer skills.

Another important computer training initiative, the IT Education Project (ITEP) is part of a larger vision to establish the UAE as a major knowledge-based economy. ITEP will ultimately be introduced throughout the UAE. Providing a high quality, industry-relevant IT education, ITEP complements the Ministry of Education's aim of introducing new means of teaching. The IT Academies in Dubai and Abu Dhabi are the vital administrative heart of the project. They are responsible for teacher training and courseware development, Internet-based anytime, anywhere, adaptive learning, project management and quality assurance for all ITEP initiatives.

### *Dubai Education Council*

The establishment of Dubai Education Council, to be funded through the allocation of 5 per cent of the income from The Palm and Jumeirah Residence projects, is an indication of the emirate's commitment to integrate IT into education as the key to maintaining a successful economy. The Council's board, comprising ten top educational and cultural figures, is entrusted with the task of devising an educational strategy that dovetails with the requirements of UAE society and the IT era.

### *Scholarships and Awards*

The Sheikhha Latifa Childhood Creativity Awards, organised by Dubai Women's Association, encourages children to explore their creative side. The competition is open to children of all nationalities in the UAE, but is conducted only in Arabic. It is open for any foundation, organisation or centre in the UAE that cares for children, including those with special needs.

The Sheikh Hamdan bin Rashid Al Maktoum Award for Distinguished Academic Performance rewards high achievers, encourages fresh talent and recognises academic excellence. Certificates of recognition, an excellence cup and a financial prize are awarded in several categories covering students, teachers, school social workers, research, project work, schools, administration and educational districts. More than 2000 have been honoured since the award began. In 2003, a prize fund of over Dh7 million was awarded to 335 UAE nationals holding doctorate, masters and postgraduate degrees from various colleges and universities in the country, in addition to outstanding students in the General Secondary School Certificate (GSSC).

The EDAAD scholarship programme was initiated with the ultimate goal of enhancing national skills and accelerating the overall development of the UAE in the new age. Successful candidates have the opportunity to pursue their undergraduate/graduate studies at distinguished universities worldwide.

## HIGHER EDUCATION

Admissions to higher education in the UAE continue to rise. Out of 14,151 eligible students, a record 10,459 registered at tertiary level for the academic year 2004/2005. A total of 3874 students were approved for admission to UAE University, 5644 to the Higher Colleges of Technology and 941 to Zayed University (ZU). Female students continue to outnumber their male counterparts in higher education in the UAE, comprising 62 per cent of those seeking further education.

### *UAE University*

The twenty-third batch of graduates, comprising 517 students, emerged in May 2004 from the UAE University (UAEU) in Al Ain. UAEU, established in 1976, has nine colleges and is committed to its role as the leading teaching and research institution in the UAE.

A new Dh65 million activity centre exclusively for the female students, who form an overwhelming majority of the student population at the University, was opened in 2004. The activity centre, part of the 'University Town' development, provides a range of modern facilities, including an Internet cafe, games rooms, banks, clinic, theatres and workshops.

### *Zayed University*

Zayed University (ZU) first opened its doors to students in 1998. Popular from its inception, the all-women university, which has campuses in both Abu Dhabi and Dubai, is no longer big enough to cope with demand. Between now and 2017, student numbers at ZU are expected to increase to 7000 (including male students). A major expansion, to encompass a total area of 711,000 square metres and comprising six colleges, departments and laboratories, has been

approved by the Minister of Higher Education and Scientific Research. The Dh370 million construction has begun at the Academic City in Al Ruwayyah, Dubai and an inaugural intake of 2000 students is scheduled for 2005. (Construction of as many as 20 colleges and universities is planned on the 1100-hectare University City site.)

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, aims to establish 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.

In 2004, Smart Square and the Air Force signed an agreement for the provision of training as well as administrative and technological consultancy, in line with the federal administration's e-government policy.

### *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 11 single-sex campuses offering over 75 programmes to more than 15,000 UAE students, and by the end of the 2002/03 academic year over 13,000 graduates had received awards through the HCT. New HCTs are constantly being added to the list. A new Higher College of Technology opened in Fujairah in September 2004, and Dubai Men's College, also an HCT, was the first to open the doors of its elegant Dh115 million new campus to students in September 2004 at the new Dubai Academic City.

Crucial links between the HCT and industry are supplied by the Centre of Excellence for Applied Research and Training (CERT), the commercial arm of the HCT established in 1996. The Centre has created strategic alliances with a number of large multinational organisations to develop a diverse range of business and technology solutions. It offers courses in a variety of fields and provides 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. Already operating two technology parks in Abu Dhabi and Dubai, CERT has also opened offices in Dubai Internet City.

A powerful CERT tool is the relationship that it has built up with international partners such as the CERT Thales Institute (CTI) – a partnership between CERT and Thales Université in Paris, delivering short- and long-term programmes through a corporate university structure based in Abu Dhabi; Abu Dhabi Petroleum University

– a consortium of world-class higher education institutions, including the HCT, Texas A&M University, Heriot-Watt University and the University of Oklahoma, providing educational and professional development opportunities for students preparing to enter the industry or for professionals already employed in the sector; CERT Teachers College (CTC) – a high quality teachers college based on the existing programme at HCT. Programme development is carried out in conjunction with the University of Melbourne and the University of Wollongong.

A non-profit professional association, the Emirates Project Management Association (EPMA), is the result of a liaison between CERT and Abu Dhabi Water and Electricity Authority (ADWEA). The new association, located at the CERT Technology Park in Abu Dhabi, provides accredited training courses, seminars and conferences in project management. The EPMA is affiliated with the leading international certification and accrediting bodies, including International Project Management Association (IPMA) and Project Management Institute (PMI). Dovetailing with the association's formation was the launch of a new Masters degree programme in Project and Programme Management.

Another dynamic approach to encouraging entrepreneurs and technological innovation in the student population is the e-biz challenge. Now in its second year, the challenge invites final year HCT and university students from the UAE and GCC to submit a business plan for an e-business or e-service that would benefit the local community by utilising the latest technology and local resources. In groups of three and assisted by a faculty adviser, 73 teams were registered and 43 teams qualified for the second round of the challenge. First prize in 2004 went to Sharjah HCT women's campus. In second place were students of ZU, whilst third place was awarded to Abu Dhabi Men's College.

#### *Other 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/](http://www.uae.gov.ae/mohe/)) provides a comprehensive list of recognised institutes and programmes.

A new Ajman University of Science and Technology (AUST) campus, which will be capable of accommodating between 6500 and 7000 students (it currently has the capacity for 3000), was opened in Fujairah at the beginning of 2003, adding to the campuses that already exist in Ajman, Abu Dhabi and Al Ain.

Two new universities are the British University of Dubai (BUD) in Dubai's Knowledge Village and Abu Dhabi University (ADU) located on two campuses – in Abu Dhabi and Al Ain. The former is the only research-based university in the



region. Offering introductory and foundation courses in its initial phase, BUD plans to commence postgraduate studies at Masters and PhD level in September 2004 in association with the University of Edinburgh. ADU, set to be one of the largest private sector universities in the region, will eventually comprise seven colleges. The first three colleges, Business Administration, Education and Computer Science and IT, opened in September 2003.

Tasked with bringing together a select group of international universities, training centres, e-learning and research and development companies under one roof, Knowledge Village (KV), based at Dubai Internet City, has already managed to attract some of the leading institutions of the world to its site.

The UAE's telecoms operator Etisalat, which also invests heavily in education in the UAE, operates the Etisalat College of Engineering, an independent university-status institution educating the national workforce in telecommunications and related technology. Etisalat has also launched the first phase of the Dh120 million Etisalat University being built at University City, Sharjah.

#### *National Research Foundation*

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. Therefore, the proposed establishment of a National Research Foundation should enhance the already burgeoning research initiatives evident at the universities and within the colleges of the HCT. The new centre will also forge stronger links between the leading institutions in the UAE and research organisations worldwide.

#### *Studying Abroad*

The number of nationals studying abroad with the support of the Ministry of Higher Education and Scientific Research for the year 2003 was 1322. A technical training project, run by the UAE Armed Forces, has been operating since 1993. Under the scheme, UAE nationals undergo a period of training abroad and more than 1500 students are currently studying at 50 colleges and universities in Britain and Ireland. Other institutions like the Abu Dhabi Investment Authority and ERWDA also provide scholarships for UAE nationals to pursue undergraduate and postgraduate courses overseas.

#### *Online Education*

The United Nations Development Programme's (UNDP) academic subject review project has highlighted the UAE as the most advanced e-learning country in the region. The project, which studied 15 universities from the Arab world, is part of the UNDP's programme on enhancement of quality assurance and institutional planning at Arab universities and aims to help countries in the region share e-learning more effectively.

e-TQM (www.etqm.net), the world's first online school of total quality management, is based at Dubai Internet City. Another online venture offering flexible learning opportunities is UK eUniversities Worldwide (UKeU). The British government-backed online educational service, which works in partnership with leading UK universities such as Cambridge University, York University and the Open University, has entered into MoUs with the HCT and CERT to provide a variety of purpose-built, quality assured programmes at undergraduate and postgraduate level for students and those seeking further professional development.

#### *Sharjah Institute of Technology*

The new Sharjah Institute of Technology, which was opened in September 2003, provides a route to career development for those who did not complete the school curriculum. It is the first vocational institute in the UAE, aiming to teach vocational and professional skills that will meet the market needs of a wide range of industries. Constructed at a cost of Dh80 million, the Institute is run under the supervision of Sharjah Electricity and Water Authority. Students who have completed their ninth grade are eligible for admission. It is open to both nationals and expatriates.

#### LITERACY

As well as providing free primary and secondary education to national children, the UAE provides free primary and secondary education in the Arab curriculum for those adults who missed out on education during their childhood. Here, too, females have been showing themselves more motivated than males. Recent Ministry of Planning figures show an illiteracy rate of 9 per cent (of total population) for females compared to 16.2 per cent for males. The UAE leads Arab countries in meeting the goals set by UNESCO's 'Education For All' programme, and it is estimated that the nation will achieve full literacy in less than five years.

## WOMEN

The UAE Government is committed to promoting the pivotal role of women in the economic, social and political development of UAE society. Much has been accomplished since the founding of the General Women's Union in 1975, the first cohesive force for the self-empowerment of women in the UAE.

#### THE GENERAL WOMEN'S UNION

Following the formation in 1972 of the Abu Dhabi Women's Society, similar women's groups were rapidly established in almost every emirate, and today the six societies boast 31 branches between them. The General Women's Union (GWU) (originally the UAE Women's Federation) was established in 1975 under the

leadership of Sheikha Fatima bint Mubarak, wife of the UAE President, with the aim of bringing together under one umbrella all the women's societies in the country. The GWU since its inception 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, established in 2002, 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 GWU was instrumental in ensuring the establishment of the Higher Council for Maternity and Childhood. The Council is responsible for educating public opinion on matters concerning maternity and childhood and for organising research on these topics. It encourages professional organisations to carry out projects targeting mothers and children's educational, health, cultural and social well-being, and is setting up a comprehensive database dealing with these issues. Another important function for the Council is the creation of training programmes to improve the skills of staff in voluntary agencies and foundations.

The GWU also plays a role in women's affairs at a regional and international level. In July 2004, the establishment of The Sheikha Fatima bint Mubarak Fund for Development of Arab Women was announced during the Regional Arab Women's Forum in Beirut. The forum, which was organised by the United Nations Economic and Social Commission for Western Asia (ESCWA) to discuss the achievements made since the convening of the Beijing conference a decade ago, had earlier awarded a certificate of merit to Sheikha Fatima in recognition of her enormous contribution to women's issues in the Arab world.

#### WOMEN IN EDUCATION

Enrolment rates in pre-university education provide clear evidence of the improvement in educational opportunities for women. A review of registered students in government and private schools at all levels shows that the number of female students increased from 187,069 in the 1990/1991 academic year to 291,213 in 2002/2003. The percentage of female children in primary schools reached 98.7 per cent in 1995/1996, rising to 100.8 per cent in 2002/2003.



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, and they are outperforming males at every educational level. It is clear from the above that the UAE has provided full educational rights to women. This, in turn, will make it possible for women to exercise their right to participate in the labour market and in the decision-making process.

## WOMEN AND EMPLOYMENT

As the UAE Government forges ahead with its policy of emiratization in an economic climate in which knowledge-dependent sectors are of paramount importance, women are seen as being more and more crucial to its success. However, despite the high levels of education achieved by women in the UAE, the ratio of female to male participation in the workforce remains low. Ministry of Planning figures for 2003 show that out of a total labour force of 2.485 million, women comprise only 14.7 per cent, and the bulk of those work in the public sector. There are several reasons for such low percentage figures. Firstly, the male population (2.74 million) far exceeds the female population (1.29 million); 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. 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.

Nevertheless, UAE women comprise 41.5 per cent of all employees in education, 34.2 per cent in the health sector and 19.7 per cent in social affairs. Women account for nearly 28 per cent of civil servants in 24 Federal Ministries, while women total 57 per cent of nationals working in the banking and financial services sector (and 39.3 per cent of all women employed in the sector). Role models for women are also multiplying in the UAE. Whether her skills lie in finance, IT, the arts, medicine, engineering, 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 women to receive full training in cargo and passenger control have graduated from Dubai Civil Aviation Centre's airport security course. A unit of six female firefighters, initially trained for the Dubai Shopping Festival, are set to become a permanent

feature of the Civil Defence. 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. Amongst 23 new UAE diplomats sworn in by the Minister of State for Foreign Affairs were eight women.

However, gender inequality remains an issue requiring renewed focus to ensure that individual success stories are no longer exceptional but the norm. 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.

Abu Dhabi Businesswomen Group (ADBW), a network of business, professional and academic women, under the umbrella of the National Businesswomen's Committee (NBC), is implementing three 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 from feasibility study to consultancy in all areas, including setting up business to availability of finances, for small and medium ventures.

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. Accordingly, the number of UAE women engaged in transactions at the Market is on the rise.

There is some indication that the business community is gradually sitting up and taking notice of the problems 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 move in the right direction. So too is the sub group's ongoing efforts to establish a crisis centre for working women.

In addition, in an effort to encourage women entrepreneurs, a new and significant measure of excellence, the Emirates Businesswomen Award (EBA), was created by Shell Dubai and Northern Emirates in association with the Dubai Quality Group.

The award honours outstanding women in the professional and business arena through a stringently devised points system based on five parameters: visionary leadership, future goals, professional achievements, career achievements and contribution to the community.

These are just some of the areas whereby a definitive framework is being established to enable women to participate fully in the workforce.

#### UNESCO CHAIR

The region's first UNESCO Chair in Communication Technology and Journalism for Women (and the first UNESCO Chair devoted solely to women) was inaugurated at Dubai Women's College (DWC) with the mission of promoting professional education and training for journalists, and having a special interest in enabling women to develop careers in the media throughout the Arab region. DWC hopes to organise an annual Women's Documentary Film Festival, a Women's Journalist of the Year Award, and an international conference on women in the media. Linked as it is with UNESCO, the Chair is envisaged as being an 'international centre of excellence in communication' serving 'as a focal point for a pan-Arab network in the field'.

#### WOMEN IN POLITICS

The door is open under the terms of the UAE Constitution for women to occupy any post, and the women of the UAE are increasingly playing an important part in political and government affairs.

A symposium on 'Parliamentary Performance of Arab Women: Challenges and Future Outlook', was held under the patronage of Sheikha Fatima in May 2004. The seminar examined obstacles facing representation of women in parliament, and also reviewed the experience of female members of parliaments in other Arab countries. A strategy to support women's engagement in parliament was at the top of the agenda.

In a keynote address to the seminar 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,' she added. Sheikha Fatima also referred to Sheikh Zayed's support for women's right to take higher positions in decision-making circles and for full participation in the national development process, which also includes political activity.

'Engagement of women in national action is part and parcel of their basic rights guaranteed by Islamic faith and valuable Arab traditions,' Sheikha Fatima stated. She explained that UAE women had taken up their national responsibility on an

equal footing with their fellow men and had made remarkable contributions to national development. She went on to say that strengthening the role of GCC women's movements and 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. She added that the seminar's recommendations would constitute an important addition to the agenda of the third Arab women's summit, which will be hosted by the UAE early in 2005.

#### 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 unviable for many young men and their families. The price of wedding celebrations themselves had 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.

Young UAE nationals with limited incomes (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 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 plans to hold dispute resolution courses for couples in trouble, and it has developed a hotline for nationals to help solve marital problems.

#### HEALTH

World Health Organisation (WHO) statistics show the UAE to be in twenty-seventh place in a major analysis of national healthcare systems in 191 member countries. The parameters used for the survey included the overall health of the population, distribution of health care in the population, responsiveness of the healthcare

system, including patient satisfaction, opinions of people belonging to different economic strata about the system and how the services were paid for by the population. The finding reflects the success of the UAE's efforts to provide a world-class health service for its population. Advances in medical science and technology and the increasing cost of medical care have created challenges to consolidate these achievements and optimise their technical efficiency, clinical effectiveness, operational economy and quality in the delivery of care.

## HEALTH POLICY

Health policy in the UAE seeks to achieve the following:

- To provide the best standard of sustainable health care at primary and secondary levels.
- To reduce mortality rates in general, and disease and accident rates in particular.
- To control and eliminate infectious and parasitic diseases, especially among children and students.
- Early detection and treatment of chronic diseases.
- To provide necessary care to the elderly and the handicapped.

A major focus of UAE health policy has been on the development of maternity and child health care aimed at reducing prenatal and neonatal mortality rates, still birth rates and infant mortality rates. Significant progress has been achieved by:

- Increasing deliveries in hospitals from 98 per cent to 100 per cent, with an emphasis on continuing health care after delivery.
- Developing and promoting the safe motherhood programme, particularly in relation to ante-natal care, healthy nutrition and physical fitness.
- Vaccinating women against infectious diseases, providing pre-marital counselling, including screening for certain diseases and advice on leading a healthy life.
- Reducing child mortality rate for children under five years of age.
- Increasing vaccination of children to ensure that coverage reaches 98 per cent by 2010.
- Controlling diseases by increasing vaccination against all infectious diseases and developing programmes for endemic diseases.

Indicators relating to child mortality reflect positive achievements in decreasing the rate of mortality for children under five by one third. The target set is a rate of 4.8 children per thousand by the year 2015. The same is true of the infant mortality rate, where the target is 3.8 per thousand live births by 2015.

## PUBLIC HOSPITALS

In 1970, the health infrastructure in the UAE was limited to 7 hospitals with 700 beds and 21 health centres. By 2000 the Ministry of Health (MoH) was running 30 public hospitals with a total bed capacity of 4473, of which 22 were general. Two psychiatric hospitals are located in Abu Dhabi and Dubai with 157 and 80

beds respectively, while Abu Dhabi also has a 104-bed hospital dedicated to rehabilitation. There is a 40-bed TB hospital in Al Ain. In addition, a number of other government medical establishments exist, including a police hospital and an army hospital.

The MoH is undertaking a Dh450 million programme to provide new health facilities in the seven emirates. Five hospitals are planned – a psychiatric hospital in Dubai (Dh40 million), an obstetric and paediatric hospital in Sharjah (Dh50 million), and general hospitals in Kalba (Dh90 million) in Umm al-Qaiwain and Ra's al-Khaimah (Dh50 million each). In addition, ten medical centres are being built in Jumeirah, Hor al-Anz, Sharjah, Ajman, Ra's al-Khaimah, Umm al-Qaiwain and Fujairah, costing approximately Dh46 million, and four units and clinics will be added to existing health institutions at a cost of Dh67 million. Two hospitals, Rashid and Dubai, are to be enlarged, and construction of the region's first Trauma Centre has commenced adjacent to Rashid Hospital. Staff have already undergone the specialised training required for the running of such a unit.

A new state-of-the-art general hospital, Al Rahba, opened in Abu Dhabi as part of the General Health Authority for the Health Services (GHAS) strategy to upgrade health services in the capital and its outlying areas. The hospital, which has 84 beds (to be increased to 143) and offers a special trauma unit for coping with accident victims, includes as part of its remit the provision of a homecare and home follow-up service, the first of its kind in the UAE. The MoH is also to invest Dh4 million in upgrading research facilities and training medical staff in various medical fields at its government hospitals and medical centres.

The UAE provides a high level of specialised health care at its facilities, including open heart surgery and organ transplantation. In addition, cardiac catheterisation and renal dialysis are available in Abu Dhabi and elsewhere in the Emirates. 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.

## THE PRIVATE SECTOR

The private sector has developed in recent years to become an important partner in providing comprehensive health care to the people of the UAE. It is now contributing effectively to curative, preventive and health awareness services through hospitals, polyclinics, diagnostic and medical centres. Although most of these institutions are found in urban areas, they play a significant role in health provision, which reduces the burden on the government facilities.

As part of its policy to encourage the involvement of the private sector in health care, the MoH has approved the construction of five new private hospitals to be built throughout the UAE (two apiece in Abu Dhabi and Sharjah and one in Al

Ain). Belhoul Apollo Hospital, estimated to have cost Dh120 million and offering advanced tertiary care, was opened in January 2003. The 60-bed complex is part of the Apollo Hospitals Group, the largest corporate hospital chain in Asia and India. In Sharjah, the 160-bed Royal Hospital, estimated to cost Dh110 million, promising affordable care and set to be the largest private hospital in the region, will have two sections – one for the general public, the other for VIPs.

A teaching hospital, specialising in the treatment of chronic and incurable diseases, is to be built adjacent to Dubai Medical College for Girls. The hospital will have three sections – alternative medicine, modern medicine and medical research.

#### DUBAI HEALTHCARE CITY

Scheduled for completion in 2010, but likely to be finished sooner, Dubai Healthcare City (DHCC) is being built on the 380,000-square-metres former site of the Global Village, in the vicinity of existing hospitals, Al Wasl, Rashid, the American Hospital and Welcare. DHC will have a 300-bed university hospital, medical college (an initial intake of 50 students is planned for 2004), a nursing school for 300 students, a life sciences research centre, 40 fully equipped, ready-to-go clinics (to be offered on both leasehold and freehold terms) and specialised laboratories. The first four buildings in the initial phase will be inaugurated on 15 December 2004.

Such has been the degree of interest in the enterprise that a further site of 929,000 square metres has been proposed to allow for the expansion. Key to the success of the development is the agreement between DHCC and Harvard Medical School to form a joint venture in medical education and training, quality assurance, knowledge management, research and strategic planning. The Harvard Postgraduate Medical Education Programme will start in 2005, initially covering cardiology, oncology, orthopaedics and gastroenterology, while continuing education programmes are expected to begin before the first phase of construction has been completed. In a separate development, the Mayo Clinic has entered into a strategic partnership with DHCC to open a clinic in the complex. Physicians from the Mayo Clinic will provide medical care on site and the partnership will include cooperation in medical care, professional consultancy and research.

#### PRIMARY HEALTH CARE

Central to the government's strategy of bringing health care to the people are the 115 Primary Healthcare Centres (PHCs). In addition to basic medical care, these health centres provide dental, maternal and child care. The large numbers attending the centres reflect clearly the extent to which the services are utilised.

The MoH School Health Department provides curative, preventive and health awareness services, in addition to supervising the school environment and the nutritional needs of students. The department has created a clinic in every school under the supervision of a nurse, and a physician is allocated for every 3 clinics.

#### DENTAL HEALTH

Government dental services are provided on three levels: comprehensive dental and oral health at 72 units located in PHC centres and school health clinics; specialised dental services in eight dental centres; specialised hospital dental services. The MoH Dental Department is giving priority to early detection of dental problems, such as prevention of caries by fluoridation, and early detection and treatment of gingivitis. These programmes are implemented through coordinated activities with the Departments of Maternal and Child Health and School Health. Other areas of focus are continuing training, the establishment of standards for dental service performance, in addition to the establishment of specialised centres for facio-maxillary service. There is also a thriving private dentistry sector.

#### 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 on cancer prevention, nutrition and chronic diseases, in addition to studies on health topics, including the prevalence of diabetes in the community in collaboration with WHO.

#### DISEASE CONTROL

In a conservative society like the UAE, AIDS is a rare disease. According to World Health Organisation statistics, the UAE is among 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.

Thirty-six infectious diseases are included in the control programmes that are jointly organised by the MoH 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 Malaria Control Programme has also been successful in eliminating local transmission of the disease. No indigenous cases have been reported in the last few years and it is expected that WHO will declare the UAE free of malaria in the very near future.

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.

#### 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 state-of-the-art blood transfusion service. The UAE ceased the import of blood in 1983 and has relied on local donors ever since. A new mobile blood bank was donated recently to the Blood Transfusion Services by 20 private companies, led by BP. The 40-foot vehicle is being used to run blood collection campaigns and to provide educational services. The addition of the new bus will greatly expand the capabilities of the existing mobile service.

New laboratories costing Dh15 million were also opened 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 22 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.

Another pioneering technique being used by the UAE Blood Transfusion Services in Sharjah is the extraction of blood cells from umbilical cords for use in the treatment of patients with leukaemia and thalassaemia. Plans are in place to open a cord blood bank in 2006, allowing stem cells from the umbilical cord blood to be stored for future use and research. The bank will share the laboratory, serological testing, equipment and technological facilities of the Sharjah Department, thereby saving 70 per cent of the cost. The service will be available to both private and public sector hospitals in the country.

#### CAUSES OF DEATH

Cardiovascular disease, followed by accidents and injuries, malignancies and congenital anomalies, are the four leading causes of mortality, accounting for more than half of all deaths reported in the UAE.

Cardiovascular disease is responsible for 28 per cent of total deaths, in comparison with 48 per cent in the industrialised world. The difference in the mortality pattern is attributed to a relatively younger population profile in the UAE. The age-standardised mortality rate of cardiovascular disease in the UAE is estimated to be 82 per 100,000 population per year, compared with age-adjusted mortality of 99 per 100,000 population in the developed world.

The incidence of coronary artery disease in the UAE is estimated to be 3.2 per 100,000, as against 8 per 100,000 in industrialised countries; this variation is also attributable to the UAE's demographic character.

Accidents and injuries constitute the second largest cause of death, accounting for the highest rates of 'Years of Potential Life Lost (YPLL)', since 60 per cent of YPLL is attributed to fatal traffic accidents among young males between the ages of 15 and 44.

Cancer cases among UAE nationals are estimated at 50 per 100,000 per year, compared with 350 per 100,000 per year in developed countries. These estimates, which are based on the cancer registry in Tawam Hospital, are similar for both genders. The variation in the incidence of neoplastic disease is also attributed to the country's demographic character.

Cancer of the bladder, lung, colorectal region, oesophagus and non-Hodgkin's lymphoma are the five most common forms of cancer reported among males. For females, the five most common types of cancer are breast cancer, cervical, colorectal, non-Hodgkin's lymphoma and acute leukaemia. Breast cancer accounted for 23 per cent of all female cancer cases and 11 per cent of overall registered cancer cases.

A comprehensive plan to reduce the cancer death rate in the country by 40 per cent by the year 2020 and improve curative and survival rates of detected cases by 2010 is in operation. The UAE established a Cancer Control and Prevention Department in the early 1980s. This was developed in 1997 into a National Cancer Programme that included a National Cancer Committee. The National Registry of cancer cases will also enhance efforts to assess attributable risk factors and establish trends of morbidity and mortality with special emphasis on indicators pertaining to age, gender, site and geography.

## NURSING

The number of nurses in the Ministry of Health has increased from 1902 in 1977 to 6423 in 2000. However, the nursing profession is one area in which UAE nationals are under-represented. Although five new nursing schools have been opened, only a quarter of those enrolled are local women. 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 the Abu Dhabi General Authority for Health Services (GAHS).

The UAE was one of 50 countries, and the first in the WHO East Mediterranean Region, to participate in a 'Leadership for Change' programme organised by WHO and the Geneva-based International Council of Nurses (ICN) in cooperation with the UAE's Federal Department of Nursing. The series of workshops is developing the leadership and management skills of nurses and other healthcare professionals.

## HEALTH INSURANCE

Since it is generally recognised that free health care cannot continue for all nationals if the country is to keep up its high standards of care, a national health insurance authority has been proposed for the largely public healthcare system to offset the costs of health spending for federal and local authorities.

The insurance scheme (being devised with advice from experts from WHO), which will apply to all residents, regardless of age, nationality or gender, will be managed by the authority acting in coordination with the MoH, and the authority will buy services from public and private health facilities with insurance companies acting as agents for both sides. Premiums will vary, depending on the level of service for which the consumer requires insurance.

## 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.