The enhancement of human capital is the second thrust of the Ninth Malaysia Plan and the Federal government has allocated its biggest chunk of funding, RM45.1 billion, to human capital development programmes.

In line with this thrust, the Terengganu government places a high priority on education spending. More than RM1 billion has been invested in developing the Terengganu education system over the last two decades, and investment in human capital is ongoing in line with the Ninth Malaysian Plan to develop intellectual capabilities and a skilled knowledge-based workforce.

In Terengganu, it is also heartening to observe while modernity is being pursued, the people kept on being reminded of their core values – that is, of holding on to their traditions and beliefs. Indeed, Terengganu has shown the world how the modern and the traditional can become a winning combination.

Under the ECER Masterplan, education plays a dual role. On one hand, the sector is an economic driver and a catalyst for growth while on the other, it is a key enabler that supports other sectors such as agriculture, manufacturing and tourism in terms of human resources development.

**Basic Education**
Terengganu subscribes to the philosophy that minds must be developed from pre-school level, with the purpose of creating well-rounded students who have the necessary skills and tools to compete in the world.

More than just offering incentives, investors will be glad to know that Terengganu is serious about training its citizens with the proper skills and knowledge.

Since fundamental education begins in childhood, Terengganu pays a lot of attention to developing and improving the kindergarten and public school systems.

At pre-school level, the government has created the Excellent Kindergarten Programme, which introduces Maths and English to give kids a strong foundation. Students then start public school at six years old and the majority continue up to secondary school until the age of either 17 (Fifth Form) or 19 (Upper Sixth). In the process, they sit for a number of national-level examinations in core subjects like languages, maths, sciences, commerce and accounting.

To further improve the calibre of education, Terengganu is working together with the Ministry of Education to establish elite and premier schools to identify and groom high achievers.
Higher Education

In Terengganu, higher education is skewed towards enhancing students’ thinking, communications and creative capabilities and making them into productive, innovative and independent workers. Terengganu’s many institutes of higher learning include Universiti Teknologi MARA (UiTM), the Universiti Malaysia Terengganu (UMT), TATI University College (TATIUC) and Universiti Darul Iman (UDM) - formerly known as Kolej Ugama Sultan Zainal Abidin (KUSZA), the country’s pioneer State-established public institute of higher learning.

Apart from providing excellent grounding in the arts, sciences and languages, these colleges and universities also grant diplomas and degrees in technical, professional and vocational fields like engineering, business administration, marketing, accounting, finance, banking, information technology and human resource management. The emphasis is on job-oriented programmes in several key sectors and sub-sectors like manufacturing, information technology and hospitality, and practical work experience through industrial attachments.

Terengganu also houses several skills training institutes such as the Terengganu Skills Development Centre (TESDEC), Giatmara, industrial training institutes, polytechnics and community colleges.

These efforts have borne fruit since Terengganu’s youths are among the highest achievers in the rigorous national examinations which assess learning at both primary and secondary level, attesting to these students’ intelligence, abilities and potential. For four years running, Terengganu’s Year Six students have topped the annual primary school assessment exams (UPSR) and performed outstandingly in the middle school assessment exams (PMR) and the Malaysian Certificate of Education (SPM) examinations.

Post-secondary school, students can pick and choose from over 20 institutes of higher learning and skills training in Terengganu that are geared to fulfilling the manpower needs of diversified industries and sectors.
Recently, Terengganu collaborated with the Federal government to establish the State’s first full public university, Universiti Darul Iman (UDM), modelled on the University of London and University of Wales. UDM began operating on 14 January 2006 and enrolled its first intake of 1,950 students for the July 2006 session. The creation of UDM is part of efforts to create sufficient skilled manpower to meet the needs of investors in the Eastern Corridor.

To further enhance education, KUSZA dan TATI were upgraded. KUSZA has been absorbed as a UDM college whereas TATI was uplifted to University College status to become TATIUC. The UDM city campus will offer Health Science programmes like Dietetics, Radiography and Medical Technology while the UDM Besut branch campus will offer several programmes including Science and Information Communication Technology. In future, Besut will be a hub for agro-biotechnology excellence, supporting Terengganu’s core competency in agribusiness.

**Industry-oriented Institutions**

Apart from providing liberal and professional higher education, Terengganu has set up specific educational and training and research institutes catering to the human capital and sustainable development needs of strategic industries. These include:

The Terengganu Timber Industry Training Centre (TTITC) works in collaboration with the Malaysian Timber Council and the Terengganu Sawmillers Association to provide industry-oriented training that emphasizes the skills needed to produce high value-added downstream wood products.

The Universiti Malaysia Terengganu (formerly University College of Science and Technology Malaysia - KUSTEM) caters to research-intensive industries. UMT works hand-in-hand with businesses and government agencies on research projects that are sustainable and environmentally-friendly as well as on R&D projects with commercial applications.

Notably, UMT’s Institute of Marine Biotechnology is Malaysia’s first and it plays a crucial role in enlarging the

**UMT’s Centre for Research Management has been commissioned for the following sustainable projects:**

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<th>Projects</th>
<th>Partners</th>
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<td>Fish as Biosensor</td>
<td>PETRONAS Research Scientific Services</td>
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<td>The Management of Pahang’s Mangrove Forests</td>
<td>The Pahang State Forestry Department</td>
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<td>Sea Turtle Conservation</td>
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<td>Rigs to Reef</td>
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<td>Environmental Impact Assessment – MLNG 3, Bintulu</td>
<td>PETRONAS</td>
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</table>
knowledge base and facilitating the commercial applications needed by the country’s up-and-coming marine-related industries.

Companies can seek UMT’s specialist help with R&D in the areas of:

- Marine and Sea Technology
- Marine Science and Management
- Marine Informatics
- Science and Management of Sustainability
- Air-Sea Interaction
- Socioeconomics and Marketing
- Hydrology and Quality of Air
- Fish Health
- Feeds/Fish Feeds
- Aquaculture Biotechnology
- Aquaculture Engineering

The PETRONAS Institute of Petroleum Technology (INSTEP) caters to the specialist manpower needs of the oil and gas sector and the petrochemical companies in the Eastern Corridor.

The Terengganu Safety Training Centre (TSTC) was established to promote occupational safety and health in the workplace and was entrusted to drive safety standards within the oil and gas industry. TSTC trains workers in safety rules, safety measures and emergency procedures in numerous crisis situations, including search and rescue (SAR) for pilots and passengers of downed aircraft. TSTC today offers courses applicable to diverse industries including petrochemicals, construction, manufacturing, agriculture, marine services and even hospitality.

In end-2004, to conduct research studies and ensure accurate information databases for strategy creation and planning, the State government established the Terengganu Development Institute. TDI serves as a think tank for the State government’s economic planning strategies, particularly in greenfield areas like biotechnology.

(top) SAFETY FIRST: Occupational safety and healthy issues are discussed, taught and practiced at TSTC.
(bottom) SPECIALISTS: Oil and gas industry gets further boost by employing specialist graduates of INSTEP.
ENRICHING EXPERIENCE

MARINE MATTERS: UMT is tops for maritime and marine education, among others.

Since handicrafts are essential to Terengganu’s heritage tourism, the State has set up several handicraft training institutes to preserve its cultural arts, such as songket-making, batik-making, boat-making, and copper tooling. The government intends to set up a special training institute to add economic value and marketability to these traditional pursuits in the interests of promoting heritage and cultural tourism.

The proposed establishment of the Terengganu Riverine and Coastal Authority (TREVICOSTA) will promote sustainable development of the state’s rich marine areas which are core to Terengganu’s resource-based fishing, biotech and food processing industries.

Global Alliances for Quality
Terengganu’s outward-looking institutions are encouraged to link up with reputable foreign and domestic institutions to improve the quality of teaching and research, which will in turn enhance the calibre of graduates and benefit industry.

* The leading TATiUC conducts an engineering degree in conjunction with Queen’s University of Belfast and is affiliated with the Ingenieuschule St Gallen in Switzerland.

* UiTM (Terengganu branch) is allied with the Dublin Business School to offer Diploma and Degree programmes in management and finance, information technology and accountancy.

* The Terengganu Skills Development Centre (TESDEC) has formed a partnership with renowned foreign skills institute TAFE of Australia, and has ongoing collaborations with the South Alberta Institute of Technology, Universiti Sains Malaysia, the Malaysian Vocational Training Council, the Standards Industrial Research Institute of Malaysia, the MARA University of Technology, the PETRONAS Institute of Petroleum Technology and the Human Resources Development Centre.

* UMT collaborates with both international institutions and local agencies to facilitate R&D projects.

  - The Agrotechnology and Food Sciences Faculty works with the Marine Institute of the University of Newfoundland, Canada and the Board for Fisheries Development (LKIM).

  - The Oceanography Institute has tied up with the University of Kiel, Germany and the Royal Malaysian Navy

  - The Institute for Tropical Aquaculture has links with the Iran Foundation for Fish Research (IFRO) and the Marine and Fisheries Institute, Memorial University, Canada.

  - The Faculty of Science and Technology has linked up with IBM, Mesiniaga and Sun Microsystems to develop specialist IT skills to meet projected demand from the up-and-coming East Coast Multimedia Corridor.

  - The Faculty of Agrotechnics and Food Sciences works closely with Thailand’s Songkhla University, and Vietnam’s Nong Lam University and Cantho University.
Training Incentives

Human capital is the key productivity factor producing optimal returns on investment. Recognising this, Terengganu offers generous incentives encouraging employers and investors to invest in human capital development.

The Human Resource Development Fund (HRDF) operates on the basis of a levy/grant system. Employers who pay the HRDF levy will qualify for training grants from the fund to defray or subsidise training costs for their Malaysian employees. Levies for manufacturing companies are based on number of employees and range between 0.5% and 1% of employees' monthly wages. The rate of financial assistance is 100% of the allowable costs incurred for training in Malaysia and up to 50% for costs incurred overseas, subject to the availability of levy in the employers’ accounts with the Human Resource Development Council, now corporatised and known as Pembangunan Sumber Manusia Berhad (PSMB or Human Resource Development Berhad).

The PMSB also aids specific industries through apprenticeship schemes, which trains future workers. A RM35 million Apprenticeship Fund run by PMSB pays the tuition fees of apprentices sponsored by employers in PMSB apprenticeship schemes, taking place in fields like mechatronics, hospitality, industrial machining, IT and wood-based manufacturing.

The best long-term policy to improve our competitiveness is through a modern and dynamic education system. Therefore, the way forward for Terengganu is through creating an educated and skilled workforce who will be the backbone of our economy. Through building capabilities, Terengganu will promote excellence.

In order to develop well-rounded individuals, Terengganu has invested heavily in educational institutes that develop different skills and talents, ranging from the spiritual to the artistic to the commercial.

An example of this effort is the Ulul-Albab programme that aspires to produce graduates that are well versed in the Quran, encyclopaedic and with endeavour. To achieve this aspiration, the Terengganu State Government has established the Institut Al-Quran (IQ Terengganu) and four IMTIAZ Schools of Excellence in 2007.

IQ Terengganu produces graduates (certificate and diploma levels) that will become future scholars, teachers and leaders of the Islamic community. At the same time, the IMTIAZ schools offer a value-added secondary education system that integrates the teachings of the Quran, the Malaysian Secondary Education New Curriculum and personality development of the children. Located in the districts of Besut, Dungun, Kuala Berang and Kuala Terengganu, the schools are fully-residential and enrol both boys and girls. Managed by the Terengganu Foundation, the schools aspire to be the best in the world by implementing a “Learning is Fun” concept in its teaching and learning of science and technology.

Terengganu has a long tradition of intricate wood-carving. New life is being breathed into this art at Desa Ukiran Kayu, craft institute which opened in January 2008 in Besut. The maiden intake of 18 students is undertaking a year-long fine arts course in wood carving and carpentry. Future intakes will be
limited to just 10 high-potential students who will be working towards their certificates in wood-carving and carpentry.

Terengganu is hoping to sustain its heritage of traditional boat-making by offering an apprenticeship programme with the renowned boatmakers of Pulau Duyung. Under the **Giat MARA Traditional Boatmaking programme**, six Giat Mara students will be training as apprentices under the supervision of Pulau Duyung's craftsmen. Students will graduate after two years or once they finish building a handcrafted boat that meets the expectations of their mentors and Giat MARA.

**HIGH EXPECTATIONS:** No more a family affair, anyone can now become a boat making apprentice as long as they make the grade.

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**Bridging the Digital Divide**

Kuala Terengganu has been chosen as the information technology (IT) hub for the ECER. Among the initiatives:

1. **Global Animation Centre**
   - investors to explore opportunities in setting up advanced computer animation and digital 3D graphics centre

2. **International Digital Business Exchange-IDBX (Batu Rakit)**
   - an internet exchange regional hub at competitive price important to fast-track IT development in the region
   - to establish a wider coverage for local businesses and providing affordable broadband services
   - will result in better fixed-line, fixed-wireless, data/IP and ISP gateway services

**NEW:** Animation is set to become one of highly sought after skills in future.
Where tertiary education and skills training is happening:

- Universiti Teknologi MARA (UiTM) - Dungun
- Universiti Teknologi MARA (UiTM) - Kuala Terengganu
- Universiti Malaysia Terengganu (UMT)
- Universiti Darul Iman (UDM)
- Terengganu Advanced Technical Institute University College (TATiUC)
- Terengganu Skills Development Centre (TESDEC)
- PETRONAS Institute of Petroleum Technology (INSTEP)
- Terengganu Safety Training Centre (TSTC)
- Terengganu Development Institute (TDI)
- Terengganu Riverine and Coastal Authority (TREVICOSTA)
- Giatmar