



# A Gift of Hope

Universiti Teknologi PETRONAS in the Community











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UNIVERSITI  
TEKNOLOGI  
PETRONAS

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A life-changing paradigm . . . . . 004

**1**  
Beginning the CSR journey . . . . . 006

**2**  
Making a difference through education . . . . . 030

**3**  
Teaching a community how to fish . . . . . 060

**4**  
Caring for the forests & healing the land . . . . . 086

**5**  
Linking hands for the community . . . . . 098



# A life-changing paradigm

**CORPORATE** Social Responsibility or CSR is something that has always been taken seriously at Universiti Teknologi PETRONAS (UTP). We believe that no one person or institution can exist in isolation, and serving the community, especially those that are closest to us physically, is our civic duty and our responsibility as good citizens.

We have been cognisant from the start of our CSR journey of the influence and positive impact the university wields and can wield on the broader society, and have emphasised the importance of our CSR initiatives providing recipients with sound responses to face the challenges and realities of the economy, environment and society.

We realised from the start the importance of not falling victim to the so-called ivory tower syndrome – becoming so focused in our goals of being a renowned institution of higher learning that we forget our responsibilities to the community. Instead we embraced the fact that we were and are a part of the community, and in that respect followed in the footsteps of Petroliam Nasional Bhd (PETRONAS). And as it is the case with PETRONAS, people and community remain at the heart of UTP's agenda.

The university's CSR approach has always been aligned with the university's overall vision and goals. We believe that CSR programmes cannot be an afterthought, and over the years we have strengthened our contribution in the key areas of education, socio-economy, and more recently environment.

Over the past two years, we have refocused our CSR approach – going beyond philanthropy and have moved towards structured initiatives that emphasise long-term and sustainable change in the lives of the target communities. It is a holistic approach that involves equipping the target groups and communities with skills, knowledge, confidence and the necessary market access to be economically active.

In other words, rather than to continue just giving fish, we want to teach underprivileged and marginalised communities how to fish.

Within this context, UTP has the opportunity to play a pivotal role as facilitator. We are connecting those who are in need with those who have the wherewithal to give, and in our experience there is no shortage of organisations, corporations and individuals who are willing to lend a hand. This is an approach, which we feel will be more sustainable and meaningful in the long run.

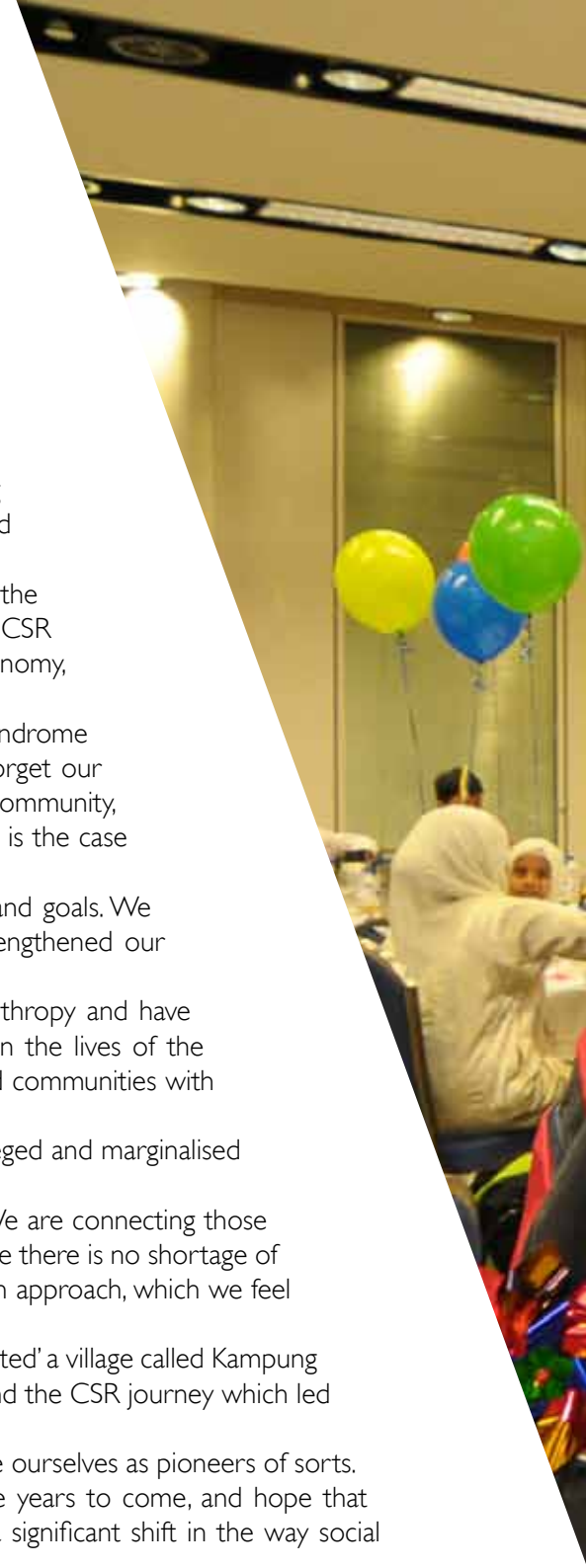
We have since June 2013 embarked on this new CSR approach, and have 'adopted' a village called Kampung Aji, located about 15km from the university. The details of the new approach, and the CSR journey which led us to this new path, are described at length in this book.

This new phase of UTP's social responsibility journey excites us, and we see ourselves as pioneers of sorts. We see tremendous opportunities to make a meaningful difference in the years to come, and hope that the successes demonstrated in the pilot community will be the start of a significant shift in the way social responsibility is viewed and approached.

Although there will be challenges and lessons to be learnt from the hurdles that come our way, we know that we are on the right path, and are grateful for the partners, faculty members, staff and undergraduates who are with us on this life-changing journey.



**Datuk Ir. (Dr) Abdul Rahim Hashim**  
Vice Chancellor







# 1

CHAPTER

## BEGINNING THE **CSR JOURNEY**

At Universiti Teknologi PETRONAS, the real meaning of higher learning is to touch the lives of those who live beyond the campus walls.











**T**wo hundred kilometres north of Kuala Lumpur, in a beautifully landscaped setting amidst bucolic surroundings, is a private university that has grown to be one of the most prominent since its establishment nearly two decades ago.

Universiti Teknologi PETRONAS (UTP) was established by national oil corporation, PETRONAS on 10 January 1997 at the invitation of the Malaysian Government.

In the years since its establishment, the university's expansion – in terms of academic programmes, research activities, infrastructure and facilities – has been nothing short of extraordinary. The milestones are remarkable and are a testament to the dedication of the faculty and staff in realising the vision of the university, which is to be a leader in technology education and a centre for creativity and innovation.

UTP's achievements over the years and the accolades and recognition received have not diminished the university's long-held belief in the importance of having a positive impact on the wider society through sustainable corporate social responsibility (CSR) programmes.

As an institution of higher learning the university has always acknowledged the importance of touching the lives of those beyond our campus walls, and this belief has strengthened over the years.

The university's journey in social responsibility has been an eventful one – those involved attest to the satisfaction and humility they've experienced through the many engagements with the local community and broader society.

Its CSR journey too has evolved over the years from philanthropic undertakings to more sustainable, and what it hopes are life-changing initiatives in more recent years.







## Birth, growth and accolades

**THE** university's beginnings were humble. The university – a wholly owned subsidiary of PETRONAS – first took shape as Institute of Technology PETRONAS (ITP) in 1995.

With an initial intake of 65 students, ITP started its first academic session in July 1995 in rented premises. Its offices, classrooms and students' accommodation were housed at PERMATA, Bangi while laboratory works were conducted at the then Universiti Putra Malaysia and Universiti Kebangsaan Malaysia.

There were six permanent staff at that time – supplementing the teaching and laboratory works were part-time staff from the neighbouring institutions of higher learning.

ITP relocated to Bandar Seri Iskandar, Perak on 1 July 1996 at the newly acquired Universiti Sains Malaysia (USM) branch campus after building temporary offices, hostels and laboratories. It co-existed with USM for five years pending USM's move to its new campus in Transkierian, Seberang Prai, and pending the setting up of UTP's own permanent campus.

With the enactment of the Private Higher Learning Institution Act in December 1996, the Government officially invited PETRONAS to set up UTP on 10 January 1997.

The academic master plan was then drawn up and finalised at the end of 1998, and the physical development began in earnest in 1999, recalls Deputy Vice Chancellor (Academic) Professor Ir Dr Ahmad Fadzil Mohamad Hani who was Director of Academic Studies at the time. His priorities then were two-fold – securing the necessary approvals for the academic programmes and driving the university's physical development.

At this stage it was found necessary to acquire an additional 200-hectares of adjacent land from the state, apart from the 200-hectares earlier acquired from USM.

The university has not looked back since – the planning and development of UTP Campus have progressed rapidly in the last decade.

The pinnacle of UTP's campus is the new academic complex, the Chancellor Complex. Designed by Foster + Partners with GDP Architects, construction was completed in 2004, and in 2007 the design received the prestigious Aga Khan Award for Architecture.

In the years since its establishment, UTP has produced more than 10,000 graduates and currently has an enrolment of over 6,000 undergraduates and 1,200 postgraduates from more than 50 countries around the world – a far cry from the initial enrolment of 65 students.

The university has three main faculties – Faculty of Engineering, Faculty of Geosciences and Petroleum Engineering, and Faculty of Science and Information Technology.

The Department of Management and Humanities, meanwhile, provides courses that are aimed at producing well-rounded graduates who will possess not only the latest competencies in Engineering, Science and Technology, but also other qualities such as strong leadership, good behavioural and communication skills, analytical thinking ability, as well as managerial, business and social competencies.

Today, UTP has an academic strength of 380 lecturers, including six industry sponsored Professorial Chairs.





*UTP's Chancellor Complex won the prestigious Aga Khan Award for Architecture in 2007.*



## Laying the foundation

Deputy Vice Chancellor (Academic) Professor Ir Dr Ahmad Fadzil Mohamad Hani was one of the pioneer teaching staff at Universiti Teknologi PETRONAS – joining in 1997 as senior lecturer and Dean of Engineering Studies. Later as Director of Academic Studies he was one of the people instrumental in shaping and growing the university.

Recalling those early years, he says at the time the university had few programmes on offer – two Foundation programmes (Engineering and Technology), that served as the feeder for its undergraduate programmes namely Bachelor of Engineering in Electrical and Electronic Engineering, Bachelor of Engineering in Chemical Engineering, Bachelor of Engineering in Mechanical Engineering, Bachelor of Technology in Information Technology and Bachelor of Technology in Business Information Systems.

“The number of teaching staff was quite small at that time, less than 30, and we had to rely on part-time lecturers from other institutions of higher learning and those that were from surrounding areas...it was a tight-knit community,” he says, adding that although the facilities at the time were modest, the students were largely positive and enthusiastic.

He says that as a private university, UTP had to adhere to the new laws regulating private universities and colleges, and that meant ensuring the programmes obtained the necessary approvals from the Ministry of Education and accreditation by the Board of Engineers for engineering programmes and the National Accreditation Board for the technology programmes.

“We added new laboratories for the accreditation process and successfully obtained accreditations for all programmes before our first 150 students graduated in 2001. On top of

that, on-going academic programmes had to be delivered while ensuring graduates produced were of high calibre in the eyes of the industry particularly PETRONAS operating units.

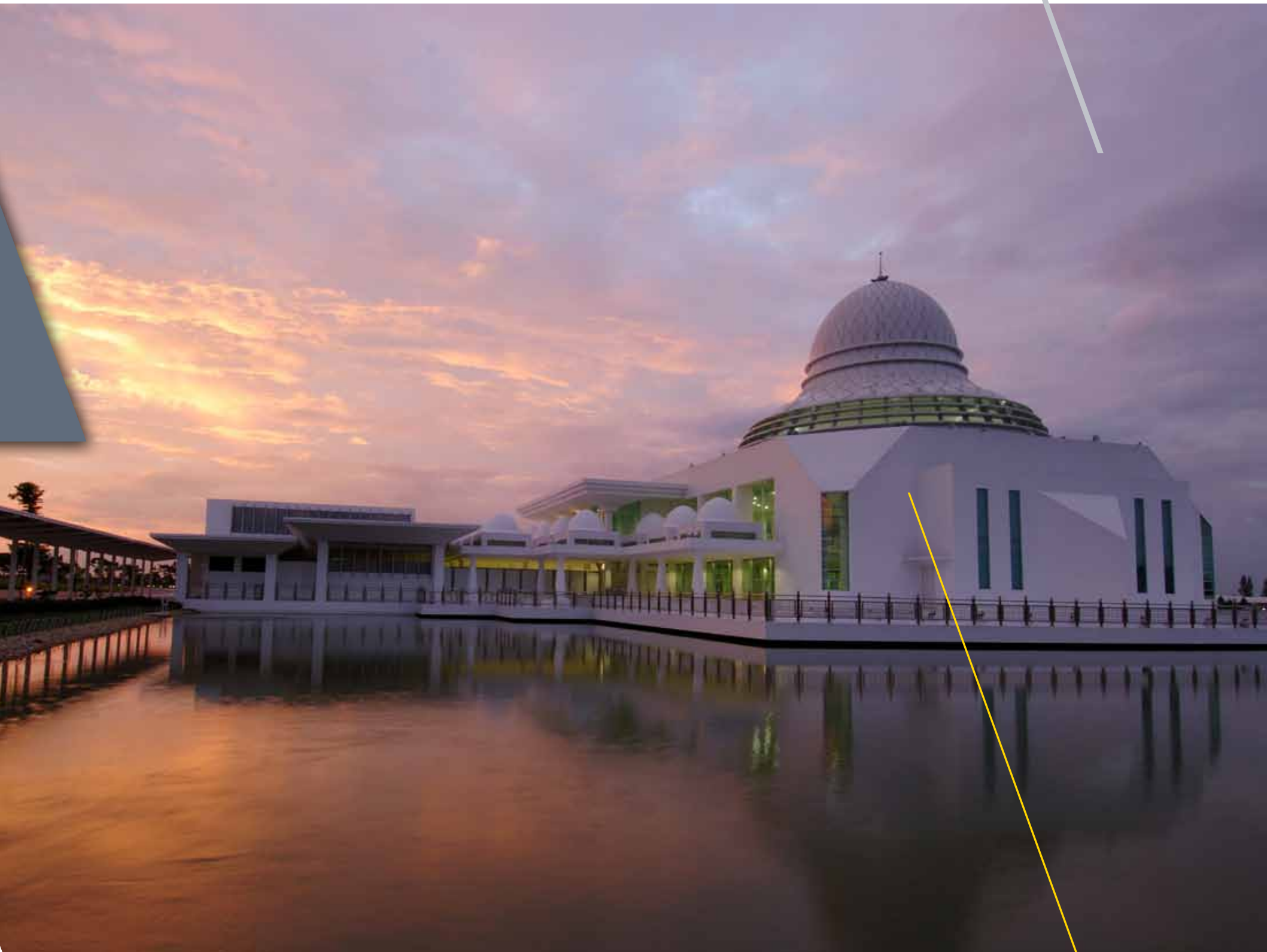
This was critical because at that time nearly 70% of UTP students were sponsored by PETRONAS and so the graduates had to be highly rated by the industry.

“Secondly, we had to be the drivers for the physical development in particular, providing the inputs and functions of the physical space and the contents (equipment) that went into the laboratory spaces,” he says.

Looking back at the progress UTP has made over the years Dr Ahmad Fadzil feels a deep sense of pride. The success of its graduates and the accolades received, he says, is a testament to the hard work and passion of UTP’s staff. “Personally, this journey has been a great learning exercise and of course, a rewarding experience,” he says.







UTP encourages students to pursue cultural interests. *Sanggar Kirana, a gamelan troupe formed in 2002, has performed locally and internationally.* In 2013, the group produced an album called *Gatra Pertama* containing nine original compositions. It is the first ever gamelan album produced in Malaysia by university students. The album is available at music stores and on iTunes.





## Achieving academic excellence



**ABOVE** Professor Ir Dr Ahmad Fadzil Mohamad Hani, Deputy Vice Chancellor (Academic)

**IN** less than two decades since its establishment, the university has attained prestigious national recognition.

In July 2012, UTP became the first private university to be accredited by Standards Malaysia when its Universal Testing Machine (UTM) Laboratory was recognised under the Laboratory Accreditation Scheme of Malaysia (SAMM).

UTP improved its position in the 2015 QS World University Ranking by Subject. It maintained its position in the top 200 ranking for Chemical Engineering. Three subjects were added to this world ranking – Electrical & Electronic Engineering and Mechanical Engineering (201-250) and Computer Science & Information Systems (301-350).

UTP is the only private university in Malaysia to be ranked in the top 160 for the 2015 QS Asia University Rankings, and was ranked at 335 for the 2014 QS World University Rankings under the Engineering and Technology Faculty.

Professor Ir Dr Ahmad Fadzil Mohamad Hani, Deputy Vice Chancellor (Academic) attributes UTP's academic achievements to the academic master plan (drawn up in 1997), the research and development master plan (2003) and the recent transformation plan (2009).

"There is also the academic leadership with the stewardship of the top management. The support of technical and administrative staff in no small measure also contributed to the success of the academic delivery," he says.

The university also has distinct competitive advantages, he says. "We are a focused university and thus we are able to institute many initiatives that set us apart from others. For example, we are able to implement a structured industrial internship programme that is seven months long and is graded.

"The state-of-the-art facilities that came with the new campus in 2011 brought industry experience and relevance to the learning. For example, the Unit Operations and Plant laboratories provide the students with an industry environment. The strong relationship with PETRONAS brought us partnerships with many operating units allowing us to engage with industry practitioners at a high level through adjunct lectureship programmes and student projects," he says, adding that the industry's participation with UTP adds to the uniqueness of the learning environment.

Dr Ahmad Fadzil believes that academic excellence can be further achieved through collaborations with other organisations either universities or industries. "Collaborations with the industry have brought many benefits that allow us to excel in giving UTP students an edge. Moving forward, we need to replicate this across the spectrum of learning and research and as we do this, we should be conscious that we are a part of a global endeavour and as such the collaborations should now at be the international stage. This is what we are embarking on now," he says.









**ABOVE** Professor Dr Abdul Rashid Abdul Aziz, Deputy Vice Chancellor (Research & Innovation)

**THE** university has, from the start, placed an emphasis on Research and Development (R&D), and the goal is to achieve the status of an internationally renowned research university.

The university's Research & Innovation Office was established to drive, facilitate and promote the university's research and development. These include managing both research and consultancy projects in terms of their submissions, progress performance, financial allocation and utilisation and human resources management.

The office is also expected to fulfil requirements made by university researchers, attend to and appropriately channel requests made by external clients, and continue meeting the university's future R&D needs including the intellectual property requisition management and commercial exploitation of technology.

The university conducts extensive research activities in collaboration with PETRONAS and other institutions and industries locally and abroad focusing on Enhanced Oil Recovery, Carbon Dioxide Management, Deepwater Technology, Nanotechnology, Green Technology, Biomedical Technology, Hybrid Energy Systems, Intelligent Cities and Sustainable Resources.

In recognition of its research, development and commercialisation efforts, UTP was recently awarded a five-star rating by the Ministry of Education's Malaysian Research Assessment Instrument (MyRA).

The university also participated in several local and international exhibitions including International Exhibition of Inventions, New Techniques and Products of Geneva; British Invention Show, The Invention & New Product Exposition, USA; and Malaysia Technology Expo, just to name a few.

UTP's researchers have won various medals and awards for their projects. In 2013, UTP won a total of 108 medals at the International Invention Innovation & Technology Exhibition 2013, British Invention Show 2013, and the 2013 International Trade Fair – Ideas – Invention – New Product.

A year earlier, UTP marked another international milestone when all of its 51 exhibits won medals at the International Invention, Innovation and Technology Exhibition – bagging 35 gold, 14 silver and two bronze medals, as well as the MOSTI Patron Award and Best Booth Award.

As the university continues to forge ahead it remains steadfast in ensuring high quality education and the provision of an innovative research environment.

In 2014, UTP filed 72 patents – of which 11 have been granted - and commercialised three products. Since 2009, a total of 337 patents have been filed, of which 29 have been granted. UTP researchers and academicians have been prolific with publications: more than 10,000 papers and articles have been written for journals and conferences. The medal tally in research and innovation stands at 397. In 2014, UTP won 85 medals, of which 40 were gold, 33 silver and 12 bronze, on top of 10 special mentions.

UTP is especially proud to have been granted their first overseas patent in the United States for Methodology and Apparatus for Objective Assessment, Non-Invasive and In Vivo Assessment and Rating Of Psoriasis Lesion Scaliness Using Digital Imaging, thus breaking into the international arena of patents.

Universiti Teknologi PETRONAS (UTP) marked another international milestone when it bagged 70 awards, the highest number of awards won, at the recently-concluded International Invention, Innovation and Technology Exhibition (ITEX2015). UTP bagged 18 gold, 30 silver and 17 bronze medals and five special awards. With these achievements, the university was awarded the event's top award – the Ministry of Science, Technology and Innovation (MOSTI) Patron Award in May 2015.





**August**  
Sixth Convocation Ceremony with 724 graduates

**September**  
The Chancellor Complex received Aga Khan Award for Architecture



The Aga Khan Award for Architecture

2006

2005

**March**  
Establishment of Halliburton Training Research Centre at UTP

**August**  
Fifth Convocation Ceremony with 563 graduates

**September**  
Accreditation from IChemE (Institution of Chemical Engineers) UK for Chemical Engineering Programme



**January**  
Commencement of MSc in Petroleum Engineering and MSc in Process Integration

**April**  
Proclamation of Tun Dr Mahathir Bin Mohamad as Chancellor of UTP

**August**  
Official Opening of UTP by Tun Abdullah Hj Ahmad Badawi, The Prime Minister of Malaysia

**Fourth Convocation Ceremony with 464 Graduates**

2004

**July**  
Official Opening of An-Nur Mosque by HRH The Sultan of Perak

**August**  
Seventh Convocation Ceremony with 848 graduates

2007

**August**  
Eighth Convocation Ceremony with 1088 graduates

2008

**August**  
Ninth Convocation Ceremony with 1139 graduates

2009

**July**  
Rated Tier 5 (Excellent) under the 2009 Rating System for Institutions of Higher Learning (SETARA)

**October**  
Proclamation of Dato' Shamsul Azhar Abbas as Pro Chancellor

**Tenth Convocation Ceremony with 1190 graduates**

2010

**April**  
Recognition for Structured Student Industrial Internship Programme from Talent Corporation Malaysia Berhad (TalentCorp)

**October**  
Eleventh Convocation Ceremony with 1470 graduates

**Formation of Research Advisory Council**

2011

**June**  
Official Opening of Academic Complex by Tan Sri Azizan Zainul Abidin, Chairman of PETRONAS and ITPSB Board

**August**  
Proclamation of Tan Sri (Dr) Mohd Hassan Marican as Pro Chancellor

**Third Convocation with 333 graduates**

2003

**Feb-Mar**  
Recognition from Public Services Department for Chemical Engineering, Electrical & Electronic Engineering, Mechanical Engineering, Information Technology and Information Systems programmes

**August**  
Second Convocation Ceremony with 304 Graduates

**October**  
Accreditation from Board of Engineers, Malaysia for Chemical Engineering, Electrical & Electronic Engineering

2002

# MILESTONES

**July**  
First Private University Accredited by Standards Malaysia via its Universal Testing Machine Laboratory

**October**  
Proclamation of Tan Sri Sidek Hassan as Pro Chancellor  
  
Twelfth Convocation Ceremony with 1267 graduates

**November**  
Rated Tier 5 (Excellent) under the 2011 Rating System for Institutions of Higher Learning (SETARA)

Rated 5 Star under 2011 MyRA (Malaysian Research Assessment Instrument)



**January**  
Conferred with a Tier 5 (Excellent) for D-SETARA 2011 (Discipline-Based Rating System) in Engineering

**October**  
Thirteenth Convocation Ceremony with 1147 graduates

**December**  
Rated 3-star for Excellence in the Quacquarelli Symonds (QS) World University rating for 2013

**February**  
Ranked in the top 200 in the 2014 Quacquarelli Symonds (QS) World University Ranking by subject for Chemical Engineering

**May**  
Ranked in the top 200 for the 2014 QS Asia University Rankings

UTP improves its ranking to 151-160 in Asia and is still Malaysia's only private university in the top 200 QS Asian Ranking 2015

Three subjects at UTP made it to the QS World University Ranking by Subject 2015: Electrical & Electronic Engineering, Mechanical Engineering and Computer Science & Information Systems



2012

2013

2014

2015

2001

2000

1999

1998

1997

1996

1995



**August**  
Proclamation of YABhg Mulia (Dr) Raja Tun Mohar Raja Badiozaman as Chancellor

Proclamation of Tan Sri Azizan Zainul Abidin as Pro Chancellor

Inaugural Convocation Ceremony with 150 Graduates

**July**  
Introduction of postgraduate degree programmes

**September**  
Accreditation from the National Accreditation Board for Chemical Engineering, Electrical and Electronic Engineering, Mechanical Engineering, Information Technology and Information Systems programmes

**July**  
Commencement of UTP Academic Masterplan Study

**December**  
Completion of UTP Academic Masterplan Study and Commencement of Physical Development Masterplan

**January**  
Invitation by the Minister of Education to set up UTP

**July**  
Relocation to the permanent campus in Bandar Seri Iskandar, Perak Darul Ridzuan

**April**  
Setting up of Institute of Technology PETRONAS





# Urban thinking, rural living



**AS** UTP continues its journey towards excellence, giving back to the community ranks high on its agenda. The university has always believed that no one person or institution can exist in isolation, and serving the community, especially those that are closest to it physically, is its civic duty and responsibility.

UTP believes that social responsibility in the higher education sector is not unlike that demonstrated in the corporate sector, and needs to be rooted in providing the recipients with sound responses to face the challenges and realities of the environment and society.

From the first tentative steps that it took in its social responsibility journey, the influence and potential influence UTP wields and can wield on the broader society is a fact it has not overlooked. No matter how small or insignificant an endeavour appears, it has never underestimated the effect that this can have.

The early proponents of UTP's CSR activities in education, for example, saw that the local community and the general public had a tendency to view the university as an institution that was beyond their reach. Rather than perpetuate the so-called ivory tower reputation, UTP chose

to follow in the footsteps of PETRONAS – that is, to be part of the larger community, PETRONAS' brand essence: Energy received, Energy returned, Aspiring people everywhere was an inspiration to the early proponents of the university's CSR programmes.

Over the years UTP has implemented a CSR approach that is aligned with the university's overall vision and goals. The university is steadfast in its belief that CSR programmes cannot be an afterthought, and over the years it has strengthened its contribution in the key areas of education, socio-economy, and more recently environment.

The university's location has also been a key factor driving the CSR initiatives – both then and now.

Located about 40km southwest of Ipoh on the main Ipoh-Lumut Highway and adjacent to the once-famous tin mining town of Tronoh, Bandar Seri Iskandar, the nearest town to UTP, has witnessed tremendous growth over the years.

Named after Sultan Iskandar Shah, who ruled the state of Perak from 1918 until 1938, the town only got its name after a few institutions commenced operations here. The

**ABOVE** UTP is well connected to all services by road and by electric train to the national capital

first of this was USM's Engineering branch campus followed by schools and later UTP and the Perak campus of Universiti Teknologi MARA (UiTM).

Today Bandar Seri Iskandar boasts a growing number of residential and commercial developments and several public facilities and amenities. It is indeed a far cry from the 1990s when much of the landscape surrounding the USM campus, which UTP acquired, was made up of disused mining ponds and oil palm plantations.

Despite the growth witnessed in recent years, the fact remains that this is still very much a rural location, with most of the local population residing in villages and making

a living off the land. If the aim of CSR is to give back to the community, then there can be no more deserving recipients than these rural communities.

This is a reality UTP Vice-Chancellor Datuk Ir (Dr) Abdul Rahim Hashim is cognisant of. "As a university, we cannot have an iconic building that has won the Aga Khan award and yet not be concerned about our stakeholders, and one of the key stakeholders is the community surrounding us. And there is a greater concern and burden of responsibility because we are located in a rural setting. The gap is huge and the question that will be asked is what are we doing to help narrow that gap."



Near UTP is *Kellie's Castle*, a historical site that draws thousands of visitors every year





**OVER** the years UTP has undertaken several activities and initiatives to fulfil its obligations to the communities closest to it.

In the early years, the annual orientation week at the university, dubbed Minggu Aluan Siswa (MAS), was used as a platform to undertake most of UTP's social responsibility activities, ranging from fund-raising, blood donation drives and gotong-royong activities.

It's important to note that back then, these activities were not even branded as CSR programmes but were instead viewed as community service initiatives. Undoubtedly, the focus was on philanthropy, and often these initiatives – donations in cash and kind to the needy and underprivileged – would coincide with the various festive holidays.

In tracing UTP's CSR journey it's worthwhile remembering that in those early years the university's emphasis was on developing and expanding its academic programmes as well as constructing the campus. That said, the community and society at large were never far from the minds of the lecturers and staff, and they did what they could to touch the lives of those they came across. Those early social responsibility initiatives were modest to say the least, and were undertaken with a generous heart.

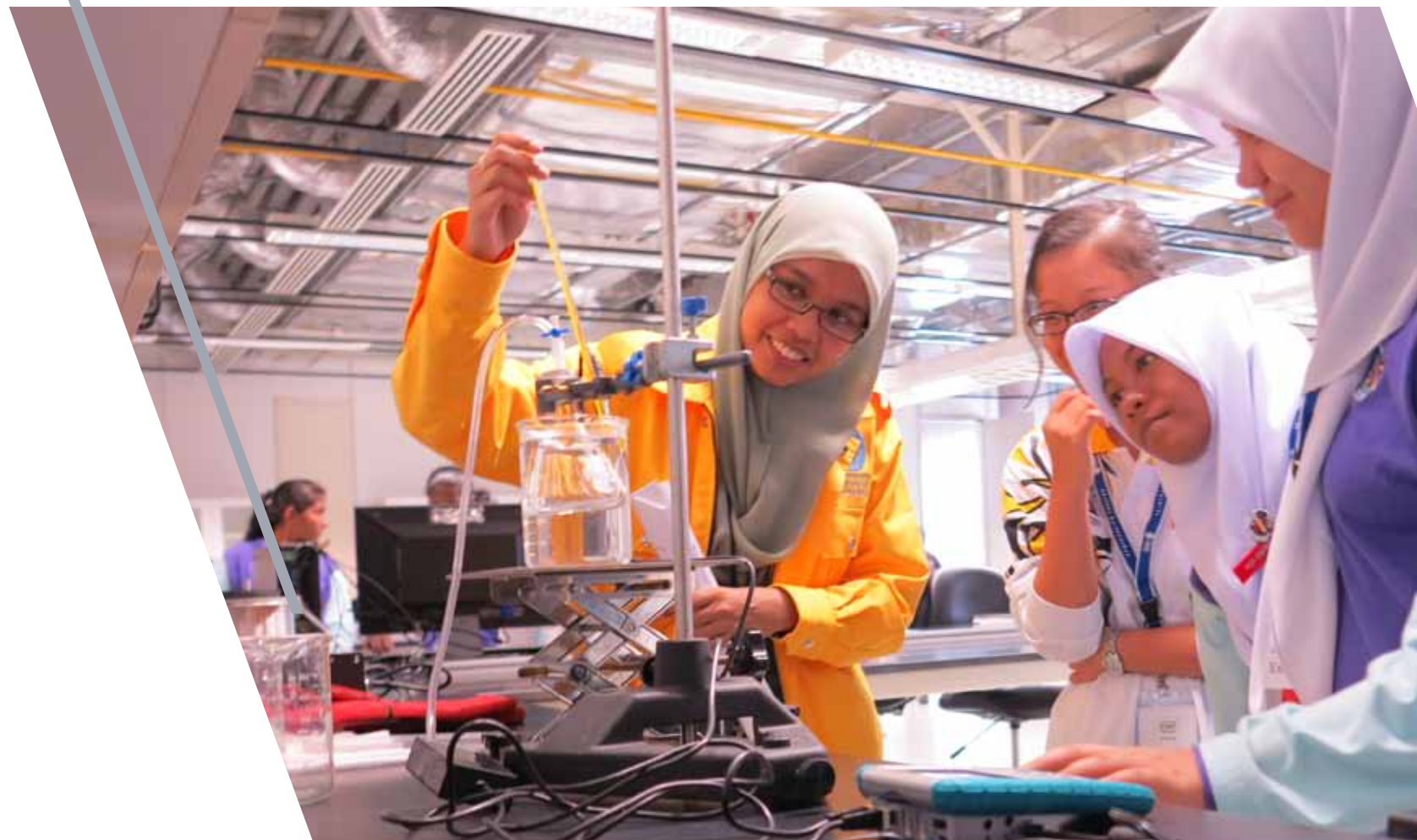
In the area of education for example, the lecturers took time from their busy schedules to offer motivation talks at the local schools as well as free tuition to students in the nearby primary and secondary schools, initially for subjects like English and later Maths. The lecturers also forged a close relationship with many of the schools in the surrounding areas, initially because many of their own children were enrolled in these schools. The forum for this was of course, the various Parent Teachers Associations.

Deputy Vice Chancellor (Research & Innovation) Professor Dr Abdul Rashid Abdul Aziz, who has been with UTP since January 1996, says back in the early years the social responsibility activities were undertaken on an individual basis.

"The community programmes were carried out on an ad hoc basis, and often coincided with university events such as a visit from the Sultan of Perak or the convocation. Reaching out to the surrounding community has always been important to us, for example during the convocation we would invite children from the schools in the area to participate in various activities such as invention competitions," he says.

**ABOVE** Students take an oath at the January 2014 intake

## The early years





## Social responsibility begins in the family

**AS** a wholly owned entity of PETRONAS, it was also natural for UTP to adopt some of the many CSR programmes undertaken by the national oil corporation. In the early years especially, these CSR programmes offered UTP the chance to make a difference.

Later when the university secured its footing as a leading private university it used some of these programmes as the basis for its own signature CSR programmes.

One of the earliest social responsibility programmes undertaken under the PETRONAS umbrella was through the Wives and Women Staff Association of PETRONAS (Petronita). These have primarily been philanthropy-driven activities that have over the years also included motivation and health talks targeted at women and children.

Today many of UTP's women staff and the wives of the UTP staff remain active in Petronita, specifically the association's Perak Branch. Some of the initiatives carried out in 2013 include We Care We Share (a community outreach programme for orphans), charity bazaars, Bicara Petah Si Anak Kecil (a public speaking and confidence building programme for young children), and numerous fund-raising activities.



The experiences and lessons learnt from UTP's involvement in Petronita's activities were instructive and invaluable, and contributed to the creation of one of UTP's signature CSR programmes, Menggapai Impian.

Program Bakti Pendidikan PETRONAS (PBPP) is another CSR programme introduced by PETRONAS to emphasise its commitment in promoting human capital development in the communities wherever the PETRONAS Group operates.



**ABOVE** PETRONITA visit to Rumah Seri Kenangan Tanjung Rambutan in 2014

### *Together making a difference*

The university's signature annual CSR programme Menggapai Impian began with the aim of providing underprivileged primary and secondary school students a head start in their education and a better learning experience.

Under this programme, which celebrated its seventh year in 2013, UTP staff volunteer to sponsor a minimum of RM150 for each underprivileged child who will receive basic school necessities such as school uniforms, school bag, shoes and stationery for the new school term. Children are chosen from different racial backgrounds from various orphanages in the state.



Since its introduction in 2007, the programme has aided 464 children from 17 orphanages and welfare homes such as Rumah Kanak-Kanak Sultan Abdul Aziz in Kuala Kangsar, Rumah Nur Kasih in Air Tawar, Salvation Army Tambun in Ipoh and Pertubuhan Kebajikan Anak-Anak Yatim Good Shephard, Buntong, Ipoh.

In 2013, 60 children were chosen from three orphanages namely Pertubuhan Kebajikan Kasih Nurul Iman Negeri Perak, Pertubuhan Kebajikan Harapan Baru, Ipoh and Pertubuhan Kebajikan Anak Yatim Anugerah Istimewa, Ipoh.

The 2013 edition of Menggapai Impian was momentous because apart from receiving school supplies, each child also received a cash donation of RM100 (in the form of Bank Rakyat Savings Account) from actress Siti Saleha Mohd Baharum. UTP Alumni Association also contributed RM1,000 to each orphanage.



### *School adoption programme*

In 2010, UTP marked a milestone in its CSR programmes when it adopted its first school under the Program Bakti Pendidikan PETRONAS (PBPP). The school, Sekolah Kebangsaan Felcra Nasaruddin in Bota, Perak, is also PBPP's 38th school adopted by the PETRONAS family, as well as its first school in Perak - making the scheme the biggest school adoption programme in the country.

The school's inclusion into PBPP was officiated by Deputy Director-General of Education Dato' Noor Rezan Bapoo Hashim at a ceremony held at the school's premises. The event was also attended by UTP Rector, Datuk Dr Zainal Abidin Hj Kasim and Shahari Embon, Headmaster of SK Felcra Nasaruddin.

Under the scheme, PBPP identified 41 "borderline" Year 4 students from underprivileged families who took part in a host of structured academic and non-academic activities to improve their performance and confidence. The students attended weekly tuition classes conducted by specially appointed teachers and participated in monthly extra-curricular activities conducted by volunteers from UTP.

Throughout their participation in PBPP, the students also joined their counterparts from other schools nationwide to take part in activities such as the PBPP Annual Camp and other motivational programmes designed to enhance their skills and build their character.

Initiated in 2002 by PETRONAS and its partners operating within the PETRONAS Petroleum Industry Complex in Kertih, Terengganu, PBPP is part of PETRONAS' corporate social investment programme to emphasise its commitment in promoting human capital development in the communities wherever the PETRONAS Group operates.

PBPP has now expanded to Perak, Johor, Pahang, Kedah, Melaka, Pulau Pinang, Sabah, Sarawak, Wilayah Persekutuan Labuan and Kuala Lumpur and Selangor. Over 3,000 children have benefited directly from the programme. Since its inception, PBPP has clinched several awards including the Petroleum Economist Award in 2007 for 'Best Youth Education Programme' and the Platts Global Energy Award in 2008 for 'Programme of the Year'.





## Uniting to make a difference



**OVER** the years, UTP's social responsibility activities have been given a boost thanks to the participation of the university's undergraduate students through the various student bodies, clubs and societies.

One of the flagship CSR programmes conducted by the undergraduates is Titian Budi, which is aimed at instilling racial integration between university students and the local communities. The programme also acts as a means to inculcate the awareness and sensitivity among UTP students on the importance of helping the needy and giving back to society.

Similar programmes organised by the university's international students, and the various residential colleges, respectively called Mission Awareness Programme and RC Mesra Outreach, boast similar concepts and goals, and have been similarly successful in harnessing the talents of the undergraduates for the good of the community.



The funding of these CSR activities is another aspect that has evolved over the years. Today, a significant proportion of the funds for these programmes are generated by the respective clubs and societies via social enterprise and entrepreneurial ventures.

It was acknowledged from the beginning that UTP stood in an enviable position with regards to the ability to make an impact – from talented and passionate employees to a pool of socially conscious undergraduates.

Having built its research and development capabilities – as evidenced by the volume of research undertaken and accolades received – it now sees a greater opportunity to mobilise its research capabilities for the good of society. Through its mission oriented research activities it hopes to match its research capabilities with that of society's needs.

**TOP LEFT** Mission Awareness Program (MAP) at Tasik Raban Perak, 2005

**LEFT** PETRONAS Community Project Sentuhan Kasih at Kampung Bali, Tronoh, Chinese New Year 2010





## Taking a holistic approach



**AS** a university there is no doubt as to the influence UTP can wield on the broader society. For the impact to be meaningful and sustainable, the university sees the need for its CSR approach to be more all encompassing.

This means not merely having an impact on a particular group but entire communities. UTP Vice-Chancellor Datuk Ir (Dr) Abdul Rahim Hashim calls this the “tablecloth effect”.

“You raise a community, and eventually the other surrounding communities or parts of the tablecloth with rise up. It’s a more holistic approach. At the end of the day I don’t think we can sit back and say that’s their problem. It’s not an us-and-them scenario.

“We are part and parcel of the community and we simply cannot turn a blind eye. We want the university to integrate with the community and what better way to help the community than raising its standing and making a difference to people’s lives,” he says.

And this is where the university stands today with regards to its social responsibility focus.

It has taken the first steps by ‘adopting’ a small village in Bota, some 15km from UTP, and designing intervention programmes that address the needs of this community. The

details of this new approach, which commenced in June 2013, are described at length in the following chapters of this book.

Beyond philanthropy, the university believes that it’s crucial for social responsibility initiatives to equip the target groups and communities with key skills and knowledge. The underlying idea is to help the community to help themselves. “Instead of giving fish, we want to teach them how to fish,” says Abdul Rahim.

Within this context, UTP has the opportunity to play a pivotal role as facilitator; in other words, connecting those who are in need with those who have the wherewithal to give, and there is no shortage of organisations, corporations and individuals who are willing to lend a hand.

This new phase of UTP’s social responsibility journey is exciting. There are tremendous opportunities to make a meaningful difference in the years to come.

The road may be long, and undoubtedly one that will be fraught with challenges but it’s a journey that UTP is embracing with open hearts. And that is making all the difference.

**OPPOSITE PAGE** Datuk Ir (Dr) Abdul Rahim Hashim tries his hand at making *vadai* at the Sentuhan Kasih Deepavali 2012 event in Kampung Wellington, Ayer Tawar.



## Community CSR programmes

Sentuhan Kasih (Touch of Love) is a community programme jointly held by PETRONAS and UTP in conjunction with festive celebrations. It includes various activities such as gotong royong and health programmes that included a free health check-up and talks.







# MAKING A DIFFERENCE THROUGH **EDUCATION**

The entire focus of the university's raison d'être is to have a profound impact on society through education.









**UNIVERSITI** Teknologi PETRONAS (UTP) believes in the need to impact society through sustainable corporate social responsibility (CSR) activities, and as an institution of higher learning, it was only natural that education was identified as a key catalyst for economic growth and sustained economic progress.

It was recognised from the start that UTP had an edge by way of students, talented employees and access to resources; and that these should be efficiently mobilised for the betterment of society, in particular, education. This, after all, was the cornerstone of the vision that led to the establishment of the university – not only to lead the way in terms of industry-relevant engineering and technology programmes but also to leave a profound impact on the broader society.



For the university, CSR activities in education were acknowledged as a powerful tool to build an image. The early proponents of CSR activities in education saw that the local community and the general public had a tendency to view the university as an institution that was beyond their reach. Rather than perpetuate the so-called ivory tower reputation, UTP chose to be part of the larger community.

UTP's CSR activities in the area of education can be broadly categorised based on the general goals of these activities – improving the academic performance of students in the surrounding schools, promoting interest in Science, Technology, Engineering and Mathematics or STEM subjects among school students, and encouraging the involvement of UTP undergraduates themselves in community and social projects. These CSR activities will be detailed at the start of this chapter.

However, more can and needs to be done in the area of education if the vicious cycle of poverty is to be broken, and that is what UTP hopes the new phase of its social responsibility endeavours will accomplish. The approach of this new phase is detailed in the latter half of this chapter.





## Teaching and helping your neighbour



**UTP'S** social responsibility activities in the area of education began not long after the university relocated to its current premises in Bandar Seri Iskandar, Perak. That the rural communities surrounding the university were from disadvantaged socio-economic backgrounds was apparent from the start.

It was unsurprising then that the early proponents of CSR activities in the area of education saw that the university had a role to play in bettering the lives of these communities. And there is no better platform to bring about economic growth than education.

In those early years, the social responsibility activities were modest – lecturers saw an opportunity to respond to the neighbouring communities' needs by offering motivation talks and later, tuition classes for students in the surrounding schools.

Deputy Vice Chancellor (Student Affairs & Alumni) Mohamed Noor Rosli Baharom who in 2004 was the Head of the Management and Humanities Department was one of the pioneers of UTP's education CSR activities.

The willingness of the academic staff to lend a hand was natural especially in view of the fact that many of their children were enrolled in these schools. Mohamed Noor Rosli was himself the Chairman of the Parent Teachers Association (PTA) of his daughter's school, St Bernadette Convent in Batu Gajah for three years.

"We started with motivation talks for the local schools and also offered free tuition to students in the nearby primary and secondary schools, initially for subjects like English and later Maths," recalls Mohamed Noor Rosli who currently spearheads UTP's CSR programmes on education.



*UTP CSR Rotaract Club in Cambodia*



**ABOVE** Pupils at a science camp  
**ABOVE RIGHT** Mohamed Noor Rosli Baharom





**TO** this day, UTP staff continue to play a leading role in the PTAs. Associate Professor Dr Hilmi Mukhtar, who is Director of the UTP Transformation Office, is currently the Chairman of the PTA for SMK Raja Dr Nazrin Shah in Kampung Gajah. His daughter is enrolled in the secondary school, and he saw the opportunity to contribute. "I would like to see the school becoming one of the top ten best schools in Perak," he says.

Jamaluddin Ibrahim who is Manager of UTP's Quality Management Unit is as motivated. Jamaluddin, who is the Chairman of the PTA for SK Bota Kanan says the aim of getting on board the PTA was to enhance and to continually improve the school and the students' academic performance as well co-curriculum achievements.

Dr Hilmi acknowledges that there are challenges. He points out that one of the problems faced by rural schools is the lack of specialist teachers particularly for science subjects. One of the PTA's key initiatives therefore is to organise tuition classes and secure specialist teachers to conduct these classes. "We also carry out special sessions on how to answer exam questions," he adds.

The challenges faced by these rural schools notwithstanding, what is especially gratifying about the involvement of UTP staff in the respective PTAs is their commitment to the cause. Despite their responsibilities at UTP and demanding schedules, UTP staff who play a leadership role in their respective PTAs go the extra mile in coming up with targets and strategic plans to raise the standard of the schools.



**ABOVE** Associate Professor Dr Hilmi Mokhtar  
**RIGHT** Jamaluddin Ibrahim

## Raising standards day by day

Jamaluddin, for example is putting his experience in UTP to good use. "In reviewing the UPSR results and to determine the area for improvement, I conducted a workshop. The workshop began with a motivational talk for the teachers and PTA committee members. Then, it was followed by a review on the school vision, mission and activities.

"It was observed that the school vision was still relevant, but the mission did not seem to support the vision. It was also not in tandem with the criteria to measure the overall performance of the school as set by the Ministry of Education," he says.

A strategic plan was then developed, with clear targets, key performance indicators and action plans.

"For the UPSR students, there are tuition classes conducted on a daily and weekly basis by teachers under the sponsorship of PTA," he says, adding that as an incentive, students who score all As (not only for UPSR but also periodic assessments) will be given monetary rewards.

The plan appears to be paying off – since it kicked off in 2011, there is already an improvement in the students' academic performance. From five students scoring 5As in 2011, this has been improved to nine students in 2012 and 12 students in 2013.







**TO** improve co-curriculum performance, Jamaluddin says the school focuses on selected activities that the students are good at and show potential in, for example, handball and football. "The PTA, for example, sponsored the refurbishment of the handball field (students are good at), and engaged a trainer to train students in football on a weekly basis (students show potential).

"On top of that, the PTA rewards students who represent the school at zone, district, state and national level and who won at least third place," he says.

Apart from students, several programmes were also conducted for parents and their children. Most of these were held on occasions such as Hari Ikrar Pelajar (Students Pledge Day), Hari Menandatangani Kad Rekod Pelajar (Students Report Card Signing Day), School Sports Day, and Teachers Day, to name a few.

"These programmes enable us to give input to the parents on how to guide their children towards achieving academic excellence and best performance in co-curriculum activities," he says, adding that these also hint to parents that it is advisable to reward their children accordingly once certain success has been achieved.

The achievements aside, Dr Hilmi says that by and large, the change will be gradual. "It's all about the journey, not the destination," he says.





Co-curriculum not overlooked





## A stem to bloom on



**GIVEN** its focus on technology and engineering, the majority of UTP's CSR activities in education are clustered around the promotion of Science, Technology, Engineering and Mathematics or STEM subjects among school students.

A key aspect of these programmes is the nurturing of young minds to the possibilities and opportunities offered by the study and appreciation of maths and science. This is to counter and address the general phobia towards maths and science, as evidenced by the declining STEM enrolment at institutions of higher learning.

Societies and clubs such as the Society of Petroleum Engineers, the American Society of Mechanical Engineers, the Electrical, Electronics & Engineering Club, and Syntech Club are especially active in conducting programmes on science and maths for school students. Members of the Society of Petroleum Engineers for instance, actively conduct talks on careers in oil and gas and how such careers can be achieved by pursuing courses such as petroleum engineering and mechanical engineering. These activities are followed up with specific tuition classes on maths and science subjects.

School students are also invited to UTP to gain an insight not only into the STEM fields but more broadly, university life. Under a recent programme called Youth Social Responsibility (YSR) organised by the Society of Petroleum Engineers and the American Society of Mechanical Engineers, school children were invited to the UTP campus to experience the learning of science in a fun manner.

"When these children come to the campus, the visit opens up their minds, and they ask themselves what does it take for them to one day be enrolled in the university. And this is where our undergraduates play a role in nurturing these young minds," says Mohamed Noor Rosli Baharom.

As a result of UTP's CSR activities in education, in particular outreach programmes to instil a curiosity and love for the sciences, the university today boasts many undergraduates from schools in the community. These include schools such as St Bernadette's Convent and SM Sultan Yusof in Batu Gajah.



*UTP's team was overall champion at the 3rd Indonesia Chem-E Car Competition 2014 held in Surabaya.* Competitors came from Indonesia, Malaysia, India, Iran and Singapore.

The competition consists of a poster presentation and a car race. UTP's car, named Vermi Energizer 4.0, is powered by vermi battery and uses hydrogen peroxide decomposition as a stopping mechanism. It can last about 12 hours at a constant speed of 0.28 metre per second, and cover a distance of 12.1km.



## *A taste of engineering*

A conference was organised by the American Society of Mechanical Engineers (UTP Student Chapter) to introduce secondary school students to the field of engineering and ignite their interest in Science, Mathematics, Physics and Engineering. This inaugural event held from 27-29 April 2014, included talks on engineering as well as games and quizzes to test the participants' fundamental understanding of science and mathematics.

A total of 85 students from Methodist Girl's School in Ipoh, SMK Simpang Pulai and SMK Sri Iskandar participated in this programme.





### *The numbers game*

The annual UTP Fun Math Camp attracts hundreds of pupils from primary schools in and around Tronoh, Perak. Various math activities such as Fun Box, Sudoku, Long Quest, Shinchan Adventures and Math-Quest Challenge are conducted for students to experience teamwork and the wonderful world of mathematics.



## Science camps

Initiated in 2007, the MRSM Science Camp is an annual programme aimed at instilling and developing students' interest and passion in science subjects, inculcating a research culture among students, developing students' creativity and innovation in research as well as to provide opportunities for students and teachers to learn about new research techniques.

The 2012 MRSM Science Camp, the sixth edition of the camp, was jointly organised by UTP's Fundamental and Applied Sciences Department, Faculty of Science and Information Technology (FSIT) and Majlis Amanah Rakyat (MARA).



The three-day event saw the participation of 144 Form 4 students from 39 MRSM all over Malaysia. Participants were involved in lab activities and research at UTP's chemistry and physics laboratories, and were also exposed to various activities and programmes such as online literature search, hands-on lab research, report writing and poster presentation techniques facilitated by UTP lecturers, staff and technicians. Since 2007, about 700 students have benefitted from the MRSM Science Camp.



## Chemistry exposure symposium

Organised by the Institution of Chemical Engineers-UTP Student Chapter (IChemE-UTP), the Chemistry Exposure Symposium or Chexposium offers secondary schools an insight into chemical engineering.

The 2013 edition of Chexposium was held on 10 April in SMK Tronoh and saw the participation of 63 students. The invited speaker, Dr Oh Pei Ching from UTP's Chemical Engineering Department gave a talk on the contributions of engineering to mankind, the benefits of studying engineering and the career options available.





**ABOVE** In Mad Math Minutes, students learned quick tricks for calculations including multiplication and division of large numbers. In Sci-Hunt, students looked for clues by answering science related questions and in Fun Movie Making, participants learned to create simple multimedia presentations using Windows Macromedia software.

**BELOW** SEDEX 32 was officiated by UTP Deputy Vice Chancellor (Students Affairs & Alumni), Haji Mohamed Noor Rosli Baharom. Also present during the opening ceremony was PPD Perak Tengah officer, Khuriza Shuib as well as Dr Masoud Rashidi and Norshuhani Zamin and the Project Director of SEDEX 32, Kong Chin Zheng.

## *Maths, science and so much fun*

SEDEX is a biannual event in UTP. Organised since 1997, Science & Engineering Design Exhibition (SEDEX) showcases inventions and innovations from primary, secondary and university students from UTP's surrounding community. Participation in SEDEX provides a platform for UTP students to demonstrate their creativity and cultivate innovativeness, in line with UTP's vision to become a leader in technology education and a centre for creativity and innovation. SEDEX has successfully produced potential future inventors and innovators, delivered in the form of prototypes, inventions, new research methodologies and approaches in multiple fields of expertise.

SEDEX organised two CSR Programmes, 1Malaysia Kids (1MKids) 3.0 Youth Social Responsibility (YSR) Project where over 200 primary school students around Perak participated. Organised since 2012, the event serves as a platform to create racial unity among school students, encourage learning of Science, Mathematics and English through fun educational activities and educate the younger generation of environment conservation.

The 1MKIDS programme aims to create awareness of cultural diversity in Malaysia among school children, promote science and technology among primary students, build interest in learning Science and Mathematics through fun and simple ways, as well as expose the students with multimedia development skills.





## Alumni power is global

In order for Universiti Teknologi PETRONAS (UTP) to play a more meaningful role in propagating the STEM (Science, Technology, Engineering and Mathematics) fields, the potential of the UTP Alumni cannot be overlooked.

Deputy Vice Chancellor Mohamed Noor Rosli Baharom who oversees UTP Student Affairs and Alumni says the alumni have a different role to play compared with the undergraduates.

“The alumni support what we are doing at the local community, so what the alumni have done is to mirror similar projects in the area around their chapters, focusing on motivation talks, career talks in oil and gas and education opportunities in UTP. Given that 80% of our alumni are in the oil and gas sector, the focus is creating awareness about careers in oil and gas,” he says.

There are, in all, 14 UTP Alumni chapters in Malaysia and 10 international chapters located in Cambodia, Indonesia, Vietnam and Thailand, to name a few.

Undertaken on a regular basis, these programmes have the support of UTP in terms of funding and logistics. The university also offers support to its international alumni. For example in 2012, UTP lent financial support for its international alumni in South Sudan to undertake education-related CSR programmes at selected schools in the country. Similar programmes have been conducted in South Africa, Thailand, Vietnam, Cambodia and Indonesia, and recently in Pakistan.

For the proponents of CSR activities, the involvement of the alumni is especially encouraging and affirming. “It gives me much satisfaction to know that we have produced graduates who are not only technically competent but who also possess a strong social obligation. It means that our graduates do not only focus on their careers but also have deep consciousness about their local community and care about giving back,” says Mohamed Noor Rosli.

And for UTP this is the heart of its CSR strategy – that not only is it educating students in an intercultural and international environment, it is also educating students to become socially responsible citizens after graduation.



**RIGHT** UTP CSR Rotaract Club in Philippines

WHAT  
THE ALUMNI  
SAY



**Aminur Rashid 27**

Executive, Career Services,  
Universiti Teknologi PETRONAS  
Bachelor Chemical Engineering  
(graduated 2010)

“I participated in the university’s CSR programmes during my undergraduate years, from community service activities to conducting motivational talks for school students. The experiences inspired me to help, and really showed me how blessed and fortunate I am. As a result, after I graduated I continued to do my part to help those in need – together with friends we distributed food for the homeless during Ramadhan. And I have not stopped helping. As a staff of UTP, I have the opportunity to help through the Menggapai Impian project, which is a sponsorship programme that provides school uniforms and stationery for underprivileged children. I take part in this programme every year, and it gives me great satisfaction.”



**M Wafi Mohamed 25**

Executive, Knowledge Management,  
Advanced Leadership Development Division,  
PETRONAS Leadership Centre  
Bachelor (Hons) Business Information  
System (graduated 2012)

“I was heavily involved in Students in Free Enterprise (now known as Enactus) since my first year. I was the pioneer of SIFE-UTP CSR Challenge in 2011-2012, a programme aimed at assisting and developing selected financial aid recipients from Jabatan Kebajikan Masyarakat and Baitulmal Perak Tengah. Seven families were selected based on the potential to improve their skills to become entrepreneurs. It was a very spiritual journey for all involved. I believe that the Alumni have a key role to play, especially given that many UTP graduates are working in PETRONAS. Leveraging on the PETRONAS network, UTP through its Alumni, can reach out to all around the world, and if the cause is significant, funding for CSR programmes will not be an issue.”



**Sermphon Klaiseengern 25**

Wireline Field Engineer, Schlumberger  
(based in Jakarta, Indonesia)  
Bachelor Petroleum Engineering  
(graduated 2013)

“Energy received, Energy returned is part of the PETRONAS slogan that kick-started my CSR journey in UTP, and was my inspiration to start participating in student activities. I joined the Mission Awareness Programme in 2010 and continued to support this programme while I was the president of the International Student Council (ISCUTP) and Vice President of Student Representative Council (SRCUTP) 2009/2010. Besides the soft skills obtained such as leadership, communication and problem solving skills, these experiences reaffirm my belief that the energy will never end if we learn to give and share opportunities with others. The activities inculcate the sense of belonging to society, which allow us to listen, understand and offer a helping hand to the community.”



## A life-changing experience



**UTP** Chancellor Tun Dr Mahathir Mohamad, in his foreword for the university's 12th Convocation Ceremony Book (held on 21 October 2012), said that a life of satisfaction has little to do with money and material wealth but what one accomplishes for one's own good and the good of others, including the community.

"It is now payback time," wrote Tun Dr Mahathir in his foreword to the graduating students, adding that "society has given you a head-start, so you need to return something to society."

And, this is what's driving UTP's CSR programmes and activities. Apart from fulfilling their obligations to society, what is especially heartening is the fact that by taking on leadership roles UTP undergraduates aren't just doing their bit to help society and the community but are in turn learning valuable lessons on leadership and organisation.

So it's a win-win for everyone.

One of the flagship CSR programmes conducted by the undergraduates, under the banner of the Student Representative Council, is Titian Budi. The main objective of the programme is to instil racial integration between university students and the local communities. The programme also acts as a means to inculcate the awareness and sensitivity among UTP students on the importance of helping the needy and giving back to society.

Similar programmes organised by the university's international students, and the various residential colleges, respectively called Mission Awareness Programme and RC Mesra Outreach, boast the same concepts and goals, and have also been successful in harnessing the talents of the undergraduates for the good of the community.

The valuable experiential learning that is obtained from these programmes is undeniable – undergraduates involved in programmes such as Titian Budi and the Mission Awareness Programme for example, are exposed to the problems faced by the communities and villages.

For educationists like Deputy Vice Chancellor (Student Affairs & Alumni) Mohamed Noor Rosli Baharom, these experiences are invaluable and lie at the heart of a life-changing university education. "Our undergraduates develop a deep sense of consciousness about the social issues and challenges faced by the community, and this is important because very often we find that undergraduates today are somewhat detached. They have also enjoyed a protected and sheltered upbringing, so these programmes in a way, throw them into the deep end, to immerse them with real-life society challenges," he says.

As a result of these experiences, many realise that life can be tough for some communities. Beyond an appreciation of one's blessings and the inculcation of empathy, they develop a strong moral obligation among the undergraduates and to

an extent play a role in shaping socially responsible citizens.

The changes have been apparent and distinct. "We do see changes, we see maturity in their thinking and they are able to appreciate the difficulties in life and they realise what they have at home. For some it's a life-changing experience," says Mohamed Noor Rosli.

In the long run, these programmes also contribute to character building – faced with challenges, UTP undergraduates are stronger and more resilient. These programmes develop communication and problem solving skills, which are critical assets in today's challenging environment.

When asked, UTP graduates often attribute their success to their participation in these CSR activities. They say the values that they get out of these programmes are tremendous. They feel the programmes made them more mature, enriched their experience and opened up their worldview, all of which very much enhanced their employability and attributes as well.

These results are in sync with the university's mission statement, that is, to produce well-rounded students and leaders of industry. And that first step to becoming an industry leader often begins with CSR activities.







### *Creativity for real life*

Initiated in 2002, Residential College Mesra Outreach (RECMO) is a charity programme that exposes UTP students to practical social interactions with communities beyond the campus gates.

Similar to Titian Budi and Mission Awareness Programme, RECMO's goals include among others, fostering creativity and innovation among participants, providing undergraduates exposure to real-life challenges and steps to overcome them, and expanding the use of technology and information among the communities involved.

Over the years, the programme has been conducted at Kampung Tersusun in Taiping, Tampin in Negeri Sembilan, Kampung Jelempek in Arau, Kampung Felda Ijok in Selama, and Kampung Telaga Nenas in Ayer Tawar.

### *A taste of village life*

Titian Budi is an annual community programme organised by the university's Student Representative Council in collaboration with UTP Student Support Services Department. The main goal of the programme is to encourage integration between university students and the local communities. Secondly, it offers undergraduates an opportunity to experience village life by staying with their respective foster families.

Introduced in 2004, the maiden Titian Budi programme was held at Tasik Chini in Pahang. A total of 80 undergraduates participated in the programme, which included activities such as motivational talks, academic and IT literacy workshops, and community service.

In recent years, the focus of Titian Budi has been concentrated on communities within Perak, namely Kampung Jeliang, Felcra Nasaruddin and more recently, Kampung Aji.



**RIGHT** Date : 24-26/10/2015  
Venue : Kampung Nelayan Kuala Kurau

## *My home is your home*

Initiated in 2005, the Mission Awareness Programme (MAP) is aimed at fostering integration between UTP's Malaysian and international undergraduates, and to expose them to Malaysian culture.

In 2012, the theme of the MAP was "Welcome Home – My Second Home". It was held at Kampung Rungkup Kechil, Bagan Datoh, Perak from 15-19 May. A total of 56 students (including 28 international students from Cambodia, Chad, Mozambique, Pakistan, South Sudan, Sudan, and Vietnam) participated in this 5-day home-stay foster family programme.

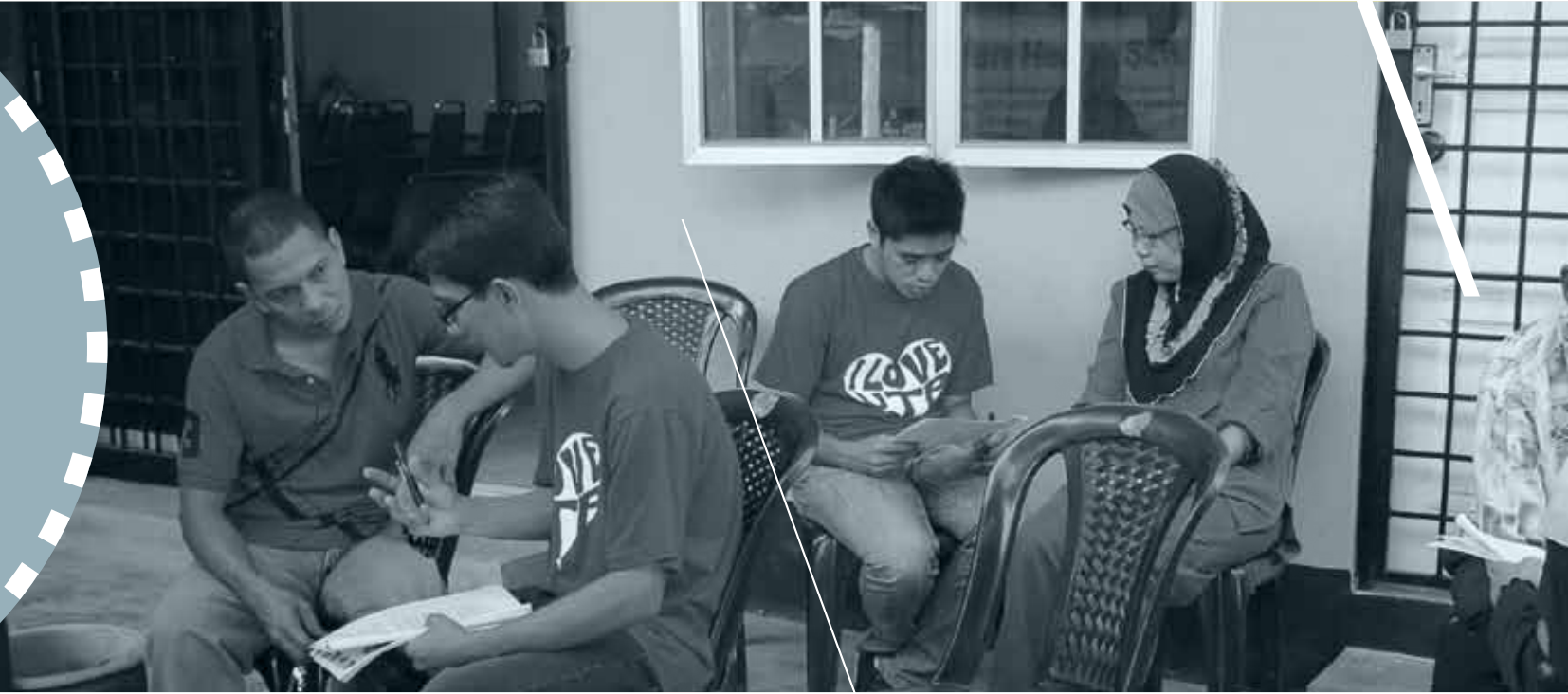
Various activities were organised, including community services such as PETROSAINS programmes for Standard Four to Standard Six students from SK Rungkup, SK Sungai Balai, SK Sungai Betul, SJKC Hwa Nan, SJKC Hua Hsia Kechil and SJKC Simpang Tiga. The PETROSAINS session was officiated by Minister of Defence, Dato' Seri Ahmad Zahid Hamidi.

An educational excursion was also arranged for the undergraduates involving visits to various historical sites such as the Beting Beras Basah Beach, Bagan Datoh Night Market and Teluk Intan.





WHAT  
THE  
STUDENTS  
SAY



**Muhammad Akmalludin Abd Hair** 23

President, Enactus  
Third Year Petroleum Engineering



“As undergraduates, we have a lot to offer the communities we are in contact with; you don’t have to wait until you’re a successful engineer to start helping others. At Enactus, we champion and undertake projects that improve the community’s quality of life and standard of living – whether it’s an orphanage or a marginalised village such as Kampung Aji. We also work closely with youths – an ongoing project is Youth in Community, which we are conducting with students

at MRSM Taiping, MRSM Trolak and SM Sains Taiping. This project is aimed at instilling environmental awareness among school students. My involvement in CSR activities has taught me to be grateful and appreciative of what I have - some of these children and youths we come across have to face such adversities. It’s a humbling experience. I hope to continue to contribute. We’re always asking our members and students for new ideas to assist those in need.”

## Raynuga T Gunasegaran 20

Member, IChemE-UTP-Student Chapter  
Second Year, Chemical Engineering



“When I was in Kluang High School, I was an active member of the Interact Club, and the experience taught me to be a better person. I became more patient and was able to work well with others. So naturally when I came to UTP, I wanted to learn more. That was why I joined IChemE Student Chapter. In early 2014, I was appointed the Project Director for Chexposium 2014. We organised a massive event called Youth Social Responsibility

where we invited 80 students from four schools in our community. Throughout this event, I learnt that sometimes it’s about giving and not just taking. When we hosted the children and taught them science, I felt like I learnt more than them. The most important lesson that I learnt is that humility is man’s best quality. If given the opportunity, I would very much love to continue my work in CSR as I know it will only enhance me.”

## Mong Zhi Ling 19

Member, Rotaract Club  
First Year, Chemical Engineering



“Through CSR I have learnt a lot – people touched my life, leaving beautiful memories. Through activities we have carried out, I can tell that my life has changed. I have started to appreciate what I have, and don’t take things for granted. There are people out there who are far less fortunate compared to us and yet they are still happy. Sometimes, we don’t need all the trendy, branded things to be happy.”







### Muhammad Faris Shuhaimi 21

President, Student Representative Council  
Third Year Petroleum Engineering



“In 2012, I participated in the Titian Budi programme. I lived with a family at Felcra Nasaruddin in Bota. It was an eye-opening experience. This is a community of oil palm smallholders. They do not have much and struggle to make ends meet. The experience exposed me to the realities of rural life and the challenges faced by rural communities.”

### Muhammad Aiman Naim 20

EXCO, Student Representative Council  
Second Year, Chemical Engineering



“My involvement in the SRC is fairly recent having just joined in February 2014. One of the first projects I was involved in was a gotong-royong project in Kampung Aji, conducted in collaboration with the Management and Humanities Department. Our task was to clean and renovate the homes of three senior citizens in the village. I confess, I was shocked when I first saw the house of this one particular pakcik. I think it was 10 years since the house was last refurbished. There was dust everywhere because this pakcik suffers from asthma and is unable to clean his house. I can't really express how sad I felt to see this pakcik live in such a state. We did our part, cleaned the house and have identified areas that can be refurbished, and are in the midst of collecting funds to undertake this.”

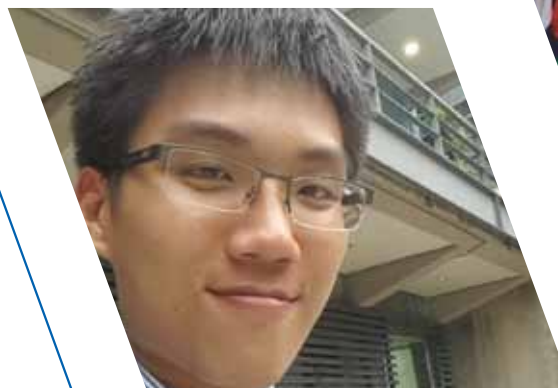




## Tamil Alagan 21

President, Society of Petroleum Engineers-UTP Student Chapter  
Third Year, Petroleum Engineering

“It was my dream to lead this club when I first joined as a committee member back in 2011. Over the years we have conducted activities such as motivational talks and lab visits to expose school students to the oil and gas industry, community service programmes for the underprivileged and a visit to an Orang Asli settlement to instil the importance of education. Through these activities, I discovered that we all have a role to play, especially in terms of education. CSR means to give the knowledge that we have to help someone to make his future better. I believe it’s a chain reaction – one helping another to succeed. I believe education can change one’s life, and this is why I support education-based CSR activities.”



## Wong Hoong Wei 21

Member, American Society of Mechanical Engineers-UTP Student Chapter  
Third Year, Mechanical Engineering

“Through CSR programmes, I learnt to work with a team. Sometimes, there is a limit to what one person can do but we can achieve far greater things together. The spirit of committee members eager to help the community improve can motivate you to become passionate towards a cause. When I first came to UTP, I felt so alone, but I have met some really great seniors and friends over the years. Their kindness motivated me to help others. This is what I think is so special about UTP. It is a chain reaction, you help someone, then the someone can help to change someone else, and finally we can all become better.”



## From low ambition to high performance



**DESPITE** some of the successes of the university's education CSR activities, the reality is that this is just the tip of the iceberg – to achieve long lasting impact a more focused approach is required.

A study conducted by UTP in collaboration with Universiti Teknologi MARA (UiTM) and Universiti Pendidikan Sultan Idris (UPSI) on the academic performance of state-funded upper secondary schools revealed that despite an improvement in the national standardised examination results (PMR), Perak remains one of the lower achieving states. One of the major findings highlighted a concern in literacy and numeracy proficiencies, with almost a quarter of the low achievers' performance being far below that of advanced learners in secondary schools.

Management and Humanities Head of Department Associate Professor Dr Shahrina Md

Nordin who led the study for UTP points out that a high number (15%) of these young students are working part-time to support their families financially. Furthermore, 40% of the low academic achievers' families earn less than RM1,000, and have more than four children, making it necessary for the young students to help their families.

The findings from this study worry UTP Vice Chancellor Datuk Ir (Dr) Abdul Rahim Hashim. "It's a vicious cycle – kids don't go to school, they come from poor families, they skip school to help parents and because of that, they lack sleep and subsequently don't do well in school, so it goes on. It is therefore important that we break that cycle," he says.

UTP's new direction in CSR is setting out to do just that by focusing on select groups identified using empirical data and a situational analysis of the surrounding communities.

However, even at the onset, there appear to be hurdles. Focus group interviews conducted with school children in Kampung Aji in Bota, which was selected as the pilot community under UTP's new CSR direction, found that most of the students are not open to the idea of having tuition classes. They were also lacking in ambition and aspirations, and even among those who displayed ambition, a major concern is their poor academic performance.

These results worry academicians like Mohamed Noor Rosli. "The low ambition and aspirations is consistent with students coming from similar backgrounds. I am not surprised with the low self-esteem of the students. Of course it does make the work to be carried out more challenging," he says.

He points out that the village was chosen as the pilot community because of the large number of school dropouts and youths who demonstrate an apparent lack of interest in improving their circumstances.

### ▼ Dare to dream

This is a smart learning programme to motivate students who have been identified as potential high achievers. Conducted in collaboration with Peer Helper Group, the motivation programmes will be carried out as part of the students' final preparation before examinations.

### Successful seeding programme ▶

Carried out in collaboration with UTP undergraduates who will offer tuition classes twice a week, this programme is targeted at primary school students and UPSR and SPM candidates. The focus of the programme will be on core subjects such as Bahasa Malaysia, English, Maths and Science.



## PUTTING THE FUN INTO LEARNING

The following are the first of the education-related CSR initiatives undertaken at Kampung Aji in partnership with Yayasan Siti Sapura Husin, which is providing the funding for these programmes.

### Science clinic

This programme offers coaching in answering techniques and will be conducted in collaboration with Associate Professor Dr Balbir Singh, Head of Fundamental Applied Science Department.

### Math quest clinic

Conducted in collaboration with the Computer Information Science Department, led by Associate Professor Dr Wan Fatimah Wan Ahmad, the programme will introduce study techniques for maths, as well as intensive camps for those with dyscalculia (mathematics learning disability).







### *Energising the eco-system*

To address the situation, Mohamed Noor Rosli says the school eco-system needs to be developed to ensure active participation by all involved. "All stakeholders will be engaged to ensure all fundamental issues, challenges and barriers are addressed. Thus, several focused and customised programs are being planned to meet the needs of students and teachers. The school environment will also be addressed to make it more conducive for learning.

"As for students, the main emphasis will be in character development and to develop a positive mindset. In this respect, UTP counsellors, 'Peer Helpers' group, members of Rakan Masjid and the Student Representative Council, and several academic clubs will provide the necessary input to bring about change among students in the school," he discloses.

UTP counsellors will also have dedicated sessions with the parents of the students. Equally important is the engagement with the headmaster and teachers of the sole primary school in the village, SK Kampung Aji. UTP recognises that securing the buy-in and support of the school is critical if the CSR programme is to succeed.

### *Setting targets for the children*

Other activities lined up include motivation and career awareness talks aimed at promoting the importance of education. "The students will also be taken on educational trips to open their mind on career prospects. UTP's Career Advisory Unit and UTP Alumni will also provide the necessary expertise to support this agenda," he says.

Essentially, the idea is to offer the children here more exposure in terms of what they can achieve and attain in life if they do well academically. Tuition classes are also in the pipeline, and these will be carried out in a creative and innovative way that encourages students to seek knowledge and perform better in school.

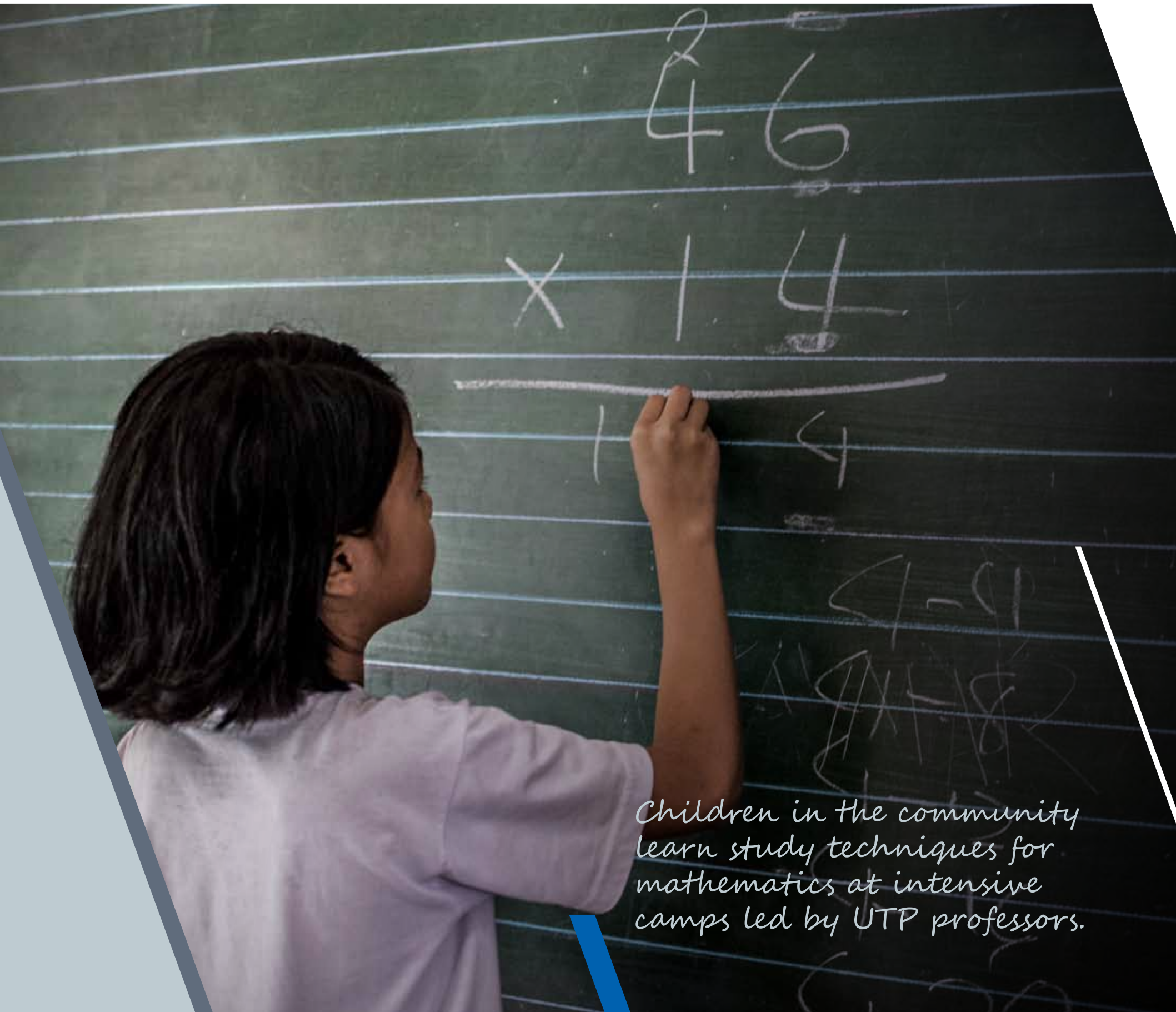
These will be followed by programmes to raise awareness on information technology and computing, as well as other programmes to be developed once the buy-in from the school is secured.

The university now plans to set-up an ICT resource centre for the use of the school children. To be located at the village community centre, the plan is to conduct activities for the children here to improve computer literacy as well as inculcate an interest in science and technology. The programme will be managed by UTP's SYNTECH Club with advice from Computer Information System (CIS) lecturers.

In addition to the various education programmes, this area of social responsibility will also focus on equipping the students in the pilot community with adequate learning resources such as revision books and reading materials, paying particular attention to improving the standard of English among students, developing critical thinking skills and inculcating good reading habits and study skills.

To ensure that the intervention programmes undertaken by UTP hit the mark, targets have been identified, which include securing an increased percentage of passes by 2015 and improvements in the quality of students by 2017. Periodic assessments will also be carried out to ensure the efficacy of the intervention programmes.

For UTP, this new phase in the university's social responsibility approach promises to be an exciting one for all involved. The hope is that the seeds planted through this CSR endeavour will one day break the vicious cycle of poverty and unfulfilled ambitions.



*Children in the community learn study techniques for mathematics at intensive camps led by UTP professors.*





# 3

CHAPTER

## TEACHING A COMMUNITY **HOW TO FISH**

As an organisation, the university has always strived to lend a hand to those in need and this has been reflected in the social responsibility initiatives since 1996.









**ABOVE** A traditional house in Kampung Aji

**I**T has been almost two decades since Universiti Teknologi PETRONAS (UTP) established its campus in Bandar Seri Iskandar, Perak, and in that time the university has grown in stature, received recognition and accolades for the educational programmes and even architectural awards for the campus buildings. Step onto the campus grounds and you will be greeted by modern – some will say architecturally stunning – structures, pockets of greenery and a thriving community of professors and lecturers, students and UTP staff.

It is however, an altogether different picture outside the campus. Although Bandar Seri Iskandar itself has grown in the last few years, and the road network has been given a boost, the reality is much of this area still remains underdeveloped, and sadly its people economically depressed.

As an organisation, the university has always strived to lend a hand to those in need, and this has been reflected in the social responsibility initiatives and programmes undertaken since the campus was established here in 1996. However the university recognises that because these programmes are primarily philanthropic in nature, the impact may not be significant enough to effect long-term, sustainable change in the lives of the surrounding community.

Under the guidance of Vice Chancellor Datuk Ir (Dr) Abdul Rahim Hashim the university has refocused its corporate social responsibility (CSR) initiatives to emphasise capacity building for empowerment, access to information, improving the health and wellbeing of local communities, and providing an avenue for growth through the university's research and innovation capabilities.







## From handouts to hands-on

**THE** refocused social responsibility approach is the university's response to playing a meaningful and impactful role in creating developed communities in the surrounding areas – reflected by the presence of sustainable economic growth, social wellbeing and knowledge-driven culture in these communities.

This new direction encompasses two main areas: education, which was detailed in the earlier chapter; and socio-economic wellbeing, which will be the focus of this chapter.

UTP's social responsibility initiatives to improve the socio-economic wellbeing of the community is essentially aimed at igniting a shift in the mindset of the communities – from that of recipients of donations to active participants in income generation.

Associate Professor Dr Shahrina Md Nordin, Head, Department of Management and Humanities, who is leading UTP's CSR activities in the area of socio-economic wellbeing is well aware of the significant task at hand.

To this end, Dr Shahrina and her team are guided by a framework and roadmap developed specifically for this mission. It is a structured approach – the socio-economic framework is aimed at developing a holistic approach in implementing community programmes for sustainable long-term growth in the target communities, and the roadmap details the strategies required to achieve the desired aspiration by the year 2020.

The CSR roadmap capitalises on three key strategies – capacity building, infrastructure development and economic development – to achieve the desired aspiration by 2020.



**RIGHT** Associate Professor Dr Shahrina Md Nordin, Head, Department of Management and Humanities

**OPPOSITE PAGE, FAR RIGHT** Professor Dr Abdul Rashid Abdul Aziz, Deputy Vice Chancellor (Research & Innovation)

The CSR framework is closely aligned to the university's goals, chiefly the important role of technology. The mission of UTP's Research and Innovation Office states that research and development (R&D) and consultancy is expected to be an integral function of UTP that creates social and economic value and enhances community competitiveness through technology and innovation by generating, applying and transferring knowledge.

As an institution of higher learning striving to become an internationally recognised research university, UTP feels there can be no better way to effect change in the community than by using the fruits of its research capability.

Deputy Vice Chancellor (Research & Innovation) Professor Dr Abdul Rashid Abdul Aziz believes that the key to successfully harnessing technology for the betterment of the target communities is to match the technology with the needs of these communities. "There is a lot that technology can achieve but the key is matching it to the needs," he stresses.



*Finished curry puffs by the women of Kampung Aji. In UTP's CSR initiative, technology was matched with community needs. The result is viable income generation.*







**ABOVE** Women in Kampung Aji were taught basic computer skills.

**OPPOSITE PAGE TOP** PETRONITA We Care We Share programme

**OPPOSITE PAGE BELOW** Kampung Aji is an idyllic traditional village.

**INVIGORATED** by the new CSR direction, Dr Shahrina and her team hit the ground running in 2013, and one of the team's first tasks was conducting a needs analysis.

"We went to Jabatan Kebajikan Masyarakat Perak Tengah (Perak Tengah Community Welfare Department) and also to the Perak Tengah district office to find out more about the population of Perak Tengah. We wanted to identify the communities that could benefit from the social responsibility initiatives. We then zoomed into the communities that had been identified as the poorest," she says.

Statistics from the Perak Tengah Community Welfare Department revealed two poverty hotspots, Zone A and Zone B.

In mapping out these zones, Dr Shahrina found that all five villages identified in Zone A encircled the university. Of these, one was selected as the pilot community, Kampung Aji in Bota, and another less vulnerable village, also in Bota, Kampung Padang Marhom was selected for comparative purposes.

The plan is to carry out CSR projects at both villages, and subsequently measure the impact of the intervention programmes undertaken. Given the vulnerability and the large number of abject and hardcore poor in Kampung Aji compared with Kampung Padang Marhom, it's been easier to secure funding for the former, Dr Shahrina concedes. Nonetheless, intervention programmes have kicked off at both villages.



## Mainstreaming the marginalised







**KAMPUNG** Aji looks much like any rural community in the country – wooden shophouses, pockets of kampung houses located off narrow lanes and verdant agricultural lands, which in this case are padi fields. It is a pastoral, and some may even say, an idyllic setting. The harsh realities of life faced by the people who call Kampung Aji home though belie these bucolic scenes.

UTP's research in Kampung Aji revealed sobering facts about this rural community. The findings show that of the 200 families residing in this village, 75% have a monthly income of less than RM1,000 a month, and of this, 46 families are getting by with less than RM500 a month. What is a concern is that nearly 100 of the 625 villagers here are single mothers – mostly widows and the elderly – and of these one-third earn a mere RM100 a month.

It was against this sobering backdrop that UTP embarked on its social responsibility initiatives in this village – what better way to realise change than to select a community that needed change the most and, as demonstrated by interviews with some of the villagers, desperately wanted change.

Dr Shahrina and her team commenced work in Kampung Aji with focused group sessions – speaking to single mothers, the elderly, families with income less than RM500 a month, and the children.

Four target groups were identified under the domain of socio-economic wellbeing namely, the farmers, women, entrepreneurs and youth. "We would like to touch the lives of these people through four main focus points which are capacity building for empowerment, growth through innovation, access to information and through health and wellbeing," says Dr Shahrina.

Intervention programmes were drawn up for each of these target groups, with UTP playing the role of facilitator. The underlying idea is that these villagers and the targeted groups possess the necessary skills required to make a living and are already entrepreneurs, albeit on a small scale.

What's required to propel these groups to an improved state of economic wellbeing are access to markets, financing and funding, as well as courses and training.

**ABOVE LEFT** Sorting chillies at the micro factory

**ABOVE RIGHT** Small businesses help single mothers earn a living

**OPPOSITE PAGE LEFT** Women at the Kampung Aji sewing centre

**OPPOSITE PAGE RIGHT** Associate Professor Dr Shahrina Md Nordin

One community at a time







**WHERE** it's possible, the university lends its expertise but if the expertise is unavailable then it links the target groups to relevant agencies such as MARA, SIRIM Bhd and the state government.

"We orchestrate and coordinate the development by creating awareness about the underprivileged communities to agencies that can possibly contribute. We also create opportunities for growth by helping the community to develop skills provided by specialist agencies such as GIATMARA," says Dr Shahrina.

For agencies such as GIATMARA, which was set up to provide technical and vocational training to the youths in the rural and city areas to enable them to gain the necessary skills for employment, the opportunity to play a role in empowering the rural community of Kampung Aji was one that it could not forego.

According to Director of GIATMARA Perak Kapt (B) Azman A Samad, the courses undertaken at the village to date include, Fashion and Dressmaking, Confectionery and Bakery, Welding and Metal Fabrication, and Building Construction. "We hope that through this CSR project, the villagers will be able to better themselves, improve their incomes and livelihood," says Azman.

The Perak State Development Corporation (PKNP) through its Entrepreneur Development and Socio-Economic

Division is another partner. General Manager Mohd Khairi Nasaruddin says the agency, which is tasked with assisting cottage industries to market their products will be doing the same for some of Kampung Aji's entrepreneurs.

"One of the problems encountered by those undertaking cottage industries is the difficulty in marketing their goods and as a result they are not able to get the necessary returns. This is where we come in. We undertake this responsibility – we buy the products from the villagers, pay them in cash, which means they then receive the returns upfront. It is then our responsibility to sell the products," he says.

To ensure the marketability of the products, Mohd Khairi and his team look at the entrepreneurs' capabilities – ensuring that they have the necessary food safety requirements and offering advice on how to improve.

SIRIM Bhd for example, is lending its expertise in designing the floor plan of the chilli sauce production facility, to ensure that the products are manufactured based on Good Manufacturing Practice criteria.

In addition to these partners, UTP's undergraduates are also lending a hand through student clubs such as Enactus, Rakan Masjid and the Student Representative Council. These clubs play an active role in selected intervention programmes as well as a mentoring role for the children and youths in the community.

## Good partners, best practices



**ABOVE FROM LEFT** Associate Professor Dr Shahrina Md Nordin at the sewing centre; curry puffs ready to go; bottled chili sauce

**LEFT** Visit by YB Dato' Rusnah binti Kassim, Women Development, Family, Community Welfare and National Integration Committee Chairman

**OPPOSITE PAGE RIGHT** Mohd Khairi Nasaruddin, General Manager, PKNP

**OPPOSITE PAGE LEFT** Kapt (B) Azman A Samad, Director, GIATMARA





**IT'S** been only a year since the university embarked on this CSR journey, and already it has scored some early wins, namely the establishment of new businesses for the women entrepreneurs, the revival of a stalled business for one of the women that is expected to provide employment opportunities to the villagers, and the refurbishment of a dilapidated surau that today serves as the village community centre.

The goal of encouraging the target groups to stand on their own feet appears to be bearing fruit as well, with a few of the women entrepreneurs – spurred by the Internet marketing course offered at UTP – already starting their own social media and blog pages to market their products and services. These are small steps but certainly a move in the

right direction – validating the university's belief that given the right tools and encouragement, the poor can improve their circumstances.

The boost that the project has given to the morale of this community also deserves special mention, with many of the participants eager to put to use new skills to improve their standard of living.

The university's intention for research and technology to play a role has also yielded positive results.

The Research and Innovation Office's Design and Prototype Centre for instance has helped the farmers in Kampung Aji and Kampung Padang Marhom tackle problems relating to pests.

Still early, but already some success



Dr Abdul Rashid sees significant potential for research and innovation to play a role in offering solutions for the target groups. The key, he says, is to ensure that the solutions meet the needs of the groups. "Technology matching is important, which is why we first need to study the needs of the community," he says.

Other areas of research are currently underway, which the university hopes will make a positive impact on the lives of the villagers. These include reengineering of the drainage system, a study into environment-friendly pesticides and the use of portable eco-friendly generators.





**THE** wins aside, the journey has not been without challenges – in particular managing the villagers and target groups. “Managing the village folk is very different from managing organisational and workplace personnel. There are cultural matters that the team needs to be aware of. Sensitivity when addressing the elderly in the village should always be taken into consideration,” says Dr Shahrina.

Another consideration is the element of pride, she adds. “We need to be tactful in handling the projects with them. We must not be seen as helping them but instead as working together with them,” she says, pointing out the importance of using the participatory approach.

Despite these hurdles, there is a sense of optimism that the approach the university is taking will yield change that can be sustained in the longer term. The optimism however is tempered with a measure of realism.

“We are not ambitious in wanting to change the entire community but the hope is that we can change 20% of the community and hopefully eventually others will follow suit. In every organisation if there is change there will be laggards, which is why we are focusing on those who are interested in change and hopefully there will be spillover effects.

“We hope that the aspiration will materialise – that these villagers are economically independent and there are job opportunities for them through the small business,” says Dr Shahrina.

Abdul Rahim is confident that when the framework bears success for the target groups and community at Kampung Aji, the model can be easily replicated at the other surrounding villages.

“It’s not rocket science, it just requires focus and patience as well as a lot of networking. If we get the framework right then for the next village we know who to approach and hopefully get more businesses and the corporate sector to come on board. And if we do it well, who knows, perhaps the state government can adopt a similar model to assist the rest of the state,” he says.

“We want to be a partner who can contribute and make a difference to the community, and that’s in line with the university’s aspirations,” adds Abdul Rahim.

## Micro projects, macro transformation





## TOUCHING LIVES

### THE PROJECTS

WOMEN'S  
EMPOWERMENT  
THROUGH BUSINESS  
OPPORTUNITIES



*In the past, the biggest issue we tailors had was how to market our services. Today we have orders from UTP staff and students, and I hope that we can further expand our business.*

Nor Shamsiah Ismail

### **Silky smooth**

A sewing circle led by  
**NOR SHAMSIAH ISMAIL, 48**

Nor Shamsiah Ismail has six children, of whom three are still schooling. She falls under the abject poor (Miskin Tegar) category and receives RM300 a month from the Welfare Department. Shamsiah has always had an interest in dressmaking and in the past had taken a sewing course under the auspices of MyKasih Sentuhan Harapan. For the past two years, Shamsiah together with a small group of women have been sewing scarves or telekung for a vendor, and are paid RM3 per telekung, which takes each seamstress about two days to complete. It is a meagre living, and Shamsiah concedes that it's been a challenge making ends meet.

Under UTP's CSR programme, Shamsiah and a group of nine other tailors have been grouped together as a sewing circle, and the business registered as D'Aji Tailor. Thanks to the generosity of two philanthropists who donated a total of RM12,000, sewing machines were purchased and placed at the newly refurbished village community centre.

The women have also undergone several training sessions including online marketing and scarf sewing (offered by the Perak Women's Development Department), entrepreneurship courses (offered by MARA), as well as structured training courses such as Fashion and Dressmaking that were offered by GIATMARA, a training institution administered by Majlis Amanah Rakyat or MARA.

Today, from not earning any income, each member of the sewing circle earns about RM700 a month.



# TOUCHING LIVES

THE PROJECTS

WOMEN  
EMPOWERMENT  
THROUGH BUSINESS  
OPPORTUNITIES



## Cakes and bakes

A baking endeavour led by  
MAI NURIZWANA AKMA, 20

Mai Nurizwana Akma, affectionately known as Wana, exhibits youthful exuberance and steely determination. She is the leader of the village's baking project which began from scratch thanks to this CSR initiative. The eldest child of four, Wana has entrepreneurial blood running through her veins – her parents own a small eatery in the village, and she too has sold traditional cakes or kuih in the village.

Under the UTP CSR programme, Wana and three other women have embarked on a kuih baking project. The business, which has been registered as D'Rasa Aji Enterprise sells several types of traditional Malay cakes – the specialty being kuih bingka or baked tapioca cake – as well as a variety of frozen cakes and savouries such as curry puffs, samosa, kuih kasturi or mung bean cakes and kuih keria or sweet potato doughnuts.

The production of these sweet and savoury delicacies is carried out at the village community centre that has been equipped with all the necessary mod-cons such as an industrial oven, industrial mixer, steamer and a chiller. The fit-out was made possible thanks to generous donations from UTP philanthropists, the state government, private corporations and through Dato' Rusnah Kassim, Women Development, Family, Community Welfare and National Integration Committee Chairman of the Perak State Exco as well as the Perak Tengah District Agriculture Department.

The women participating in this project have also undergone a Confectionery and Bakery course conducted by GIATMARA.



D'Rasa Aji Enterprise's first customers were UTP and UiTM, which ordered the cakes for their cafes on campus and also for special functions and occasions. By offering frozen curry puffs and samosas, the business has been able to expand its market – scoring a milestone recently when it secured a deal to supply 1,000 frozen curry puffs a week to a frozen food wholesaler in Ipoh. At press time, the order of the supply has increased to 4,000 per week.

In addition, Wana and her team of women entrepreneurs have secured a deal to supply the Lumut Naval Base with around 200 frozen curry puffs and samosas a day.



The challenge now is to ensure that the group is able to meet demand and at the same time maintain the quality and consistency of the products. In this, the group has the assistance of UTP as well as the various agencies collaborating on this project.

There is undeniably optimism among the group members, who are hoping that this venture would be the pathway to a sustainable income and an improved standard of living.

Recently, UTP provided Wana with a foundation and has inspired her to carry on and pursue her own business. She is also helping with her parents' business.

*I would very much like to expand this business and eventually be able to stand on my own two feet without the help of UTP. Through this project I hope we've shown that young people can succeed and even though we're village folk, nothing can hold us back.*

*Mai Nurizwana Akma.*



## TOUCHING LIVES

### THE PROJECTS

WOMEN'S  
EMPOWERMENT  
THROUGH BUSINESS  
OPPORTUNITIES



*I am thankful for all the help given; without UTP helping us we would not have been able to afford all this machinery. I hope that once we've started, the business won't just be a success but we'll be able to help other villagers as well.*

*Aishah Ahmad Nawawi.*

### Hot like chilli

This endeavour was established by  
**AISHAH AHMAD NAWAWI, 55**

Aishah Ahmad Nawawi began the chilli sauce business several years ago, under the auspices of the district agriculture department. She called the business Tepi Tebing Enterprise, due to the location of the production workshop, which was by the river. The business had a promising start – sales hit about 500 bottles of sauce a week, and the sauce was even named 'best chilli sauce in Perak' at one time.

However after three years in business, Aishah fell ill and was subsequently bedridden for two years. The business was halted, and the wooden structure that was the chilli sauce workshop was abandoned.

The revival of Aishah's chilli sauce business has been one of the highlights of UTP's CSR programme. A gotong royong involving GIATMARA, the village folk, UTP staff and students was carried out in December 2013, resulting in the refurbishment of the chilli sauce workshop to meet health

and safety requirements set by MeSTI (Makanan Selamat Tanggungjawab Industri) under the Ministry of Health.

Today, the workshop stands proudly by the riverbank, and the premises are equipped with a packaging machine and cooking pots. MARA and the Perak Women's Development Department are providing training courses and SIRIM is lending its expertise in designing the floor plan to ensure process flow. The funding to purchase the machines came from

various sources including the Women Development, Family, Community Welfare and National Integration Perak State Exco led by YB Dato' Rusnah Kassim.

In terms of marketing, there are plans to facilitate linkages with various retail outlets and supermarkets, as well as securing halal certification for the chilli sauce.

Aishah, who plans to hire about four workers for a start, is glad for the assistance that's been offered, and hopes that once the business is in full swing she will be able to offer employment opportunities to the single mothers in the village. Eager to commence her business, Aishah has already advertised her products on social media and the Internet.



# TOUCHING LIVES

THE PROJECTS

BUSINESS OPPORTUNITIES FOR THE YOUTH

## Cycle rollout

This pilot project is the brainchild of Vice-Chancellor Datuk Ir (Dr) Abdul Rahim Hashim who noticed that there were many abandoned bicycles on the campus grounds, left behind by students who had graduated. The project aims to repair these bicycles using parts of other abandoned bicycles. These refurbished bicycles will then be sold.

The team engaged two youths – Zulfadli Abd Wadud and Samsul Alwi Samsudin both aged 21 – who were eager to take on the pilot project. The abandoned bicycles were collected and sent to the project leader's home in April 2014.

Through this CSR programme, UTP hopes to collaborate with the relevant agencies to provide training and the skills required to successfully undertake the project, secure the appropriate machines and equipment, and publicise and promote this venture.





## TOUCHING LIVES

### THE PROJECTS

#### BUSINESS OPPORTUNITIES FOR THE YOUTH

### Vroom power

Although most of the projects have been conducted in Kampung Aji, the CSR programme ventured into Kampung Padang Marhom with a pilot project to establish a motorcycle repair and service workshop in March 2013. Two entrepreneurs – Mohd Fadil Alang Ibrahim, 29 and Nur Shahida Mohd Zain, 23 – bravely took on this experiment.

They demonstrated that collaboration with relevant agencies to provide proper training, secure the machines required and publicise and promote this venture, a motorcycle repair and service workshop can be a good business. To date MARA and the Perak Women's Development Department have come on board to respectively provide entrepreneurship and online marketing training.





# TOUCHING LIVES

THE PROJECTS

LENDING A  
HAND TO THE  
FARMERS

## Saving our farmlands

This project is one of the more challenging programmes undertaken in Kampung Aji and Kampung Padang Marhom as a result of several unresolved problems that have plagued the farmers over the years.

In itself, the padi-growing region of Perak Tengah is insignificant compared to other areas in the state – the 525 farmers here make up only 3.3% of the state's farming community. The farmers in these villages are not part of the granary areas and as such are not given priority by the relevant agencies such as the Agriculture Department.

Over the years, the farmers have been faced with critical, unresolved agricultural problems that have affected their yield and income.

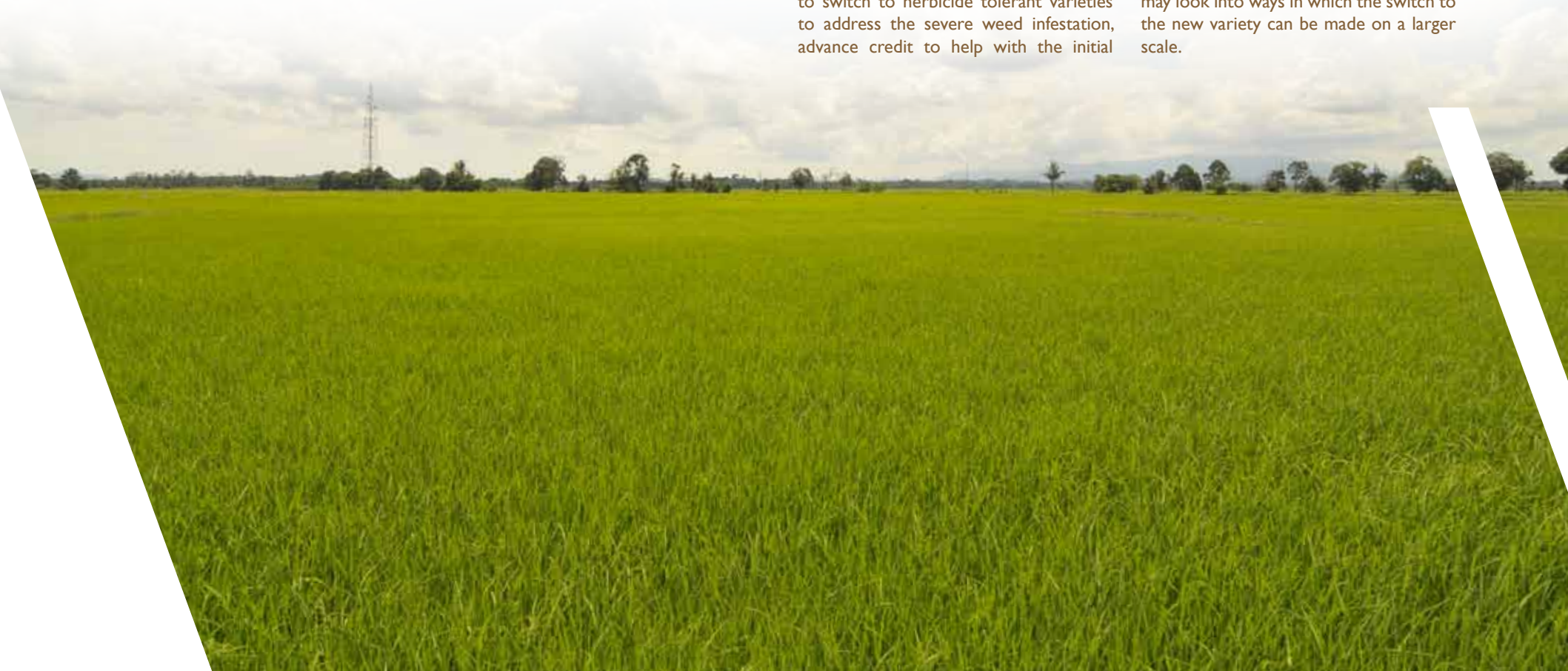
Some of the issues faced by the villages include pests and disease, and inefficient irrigation. If in the past these farmers were able to earn RM1,040 per acre (0.41 hectare) per season, today income has dropped drastically to RM30 per acre (0.41 hectare) per season. But even before the area was plagued by disease and pests, it's worth noting that yields here are much lower than other padi producing areas in the country – three to four tonnes per hectare here compared with eight tonnes per hectare in Sekinchan, Selangor.

A visit by officers from Malaysian Agricultural Research and Development Institute (MARDI) highlighted the root cause of the problems faced by the farmers, and several recommendations were made. Among them was a proposal to switch to herbicide tolerant varieties to address the severe weed infestation, advance credit to help with the initial

cost of seeds, and training from MARDI on the proper planting method of these herbicide tolerant varieties.

A key challenge of this project is the cost of switching to the new variety. The variety currently used is RM30 per pack compared with RM120 for the new variety. Discussions with the Agriculture Department, Department of Irrigation and Drainage, and MARDI are currently ongoing to determine the next course of action.

In the meantime, one of the lecturers at UTP has agreed to sponsor a pilot project to test the use of the new variety in Kampung Aji. The university has identified two acres (0.82 hectare) of padi land for this pilot project, and if it's successful it may look into ways in which the switch to the new variety can be made on a larger scale.





**THE** university on its part meanwhile is addressing one of the issues relating to pest control. UTP, through the Design and Prototype Centre (DPC) have designed and fabricated owl houses for farmers in Kampung Aji and Kampung Padang Marhom.

The project was led by DPC head Dr Mark Ovinis, who together with Nor Shahrul Abu Bakar and a few technologists have created owl houses that are critical for rat control in the padi fields.

Although the use of owl houses is not new and the farmers had used owl houses supplied by the Agriculture Department, Dr Ovinis points out that these were wooden structures that were easily damaged by vandals.

Two pilot tests had been done earlier and rectification was made to the initial design based on the findings. The owl house now boasts an installation height of three metres (45cm piled into the ground) and measures 76cm long, 61 cm wide and 45cm high.

“It took us several weeks to come up with the final design. The design went through a couple of alterations and after a successful field trial, we settled on the current one. Among the improvements made were to reduce glare from the sun, improve ventilation and durability. The inspiration came from the design of our very own campus buildings. However, as it was not practical to build an owl house with a glass and steel structure, as an alternative, we choose perspex,” says Dr Ovinis.

To date six owl houses have been installed at the padi fields in Kampung Padang Marhom with another four to be developed and installed in Kampung Aji. The owl houses will be placed within 400 metres of each other.

## OWL HOUSES



**TOP LEFT** Dr Mark Ovinis and Ketua Kampung Padang Marhom

**ABOVE** Inspecting owl houses

**THE** portable eye test tool, My Eye Test, is testament to the role that technology can play in improving the socio-economic wellbeing of the underprivileged, and exemplifies the key role that UTP can play in this respect.

The tool is being developed by Deputy Head, Electrical & Electronic Engineering Department Associate Professor Dr Fawnizu Azmadi Hussin with team member Yee Zen Ming and in collaboration with eye specialists from Hospital Selayang, Dr Elias Hussein and Dr Farah Wahidah Hashim.

The researchers recognised that it would be inconvenient for the villagers at Kampung Aji to go for regular eye check-ups particularly given that many of the elderly folk live on their own and have no means of transport. My Eye Test hopes to address these concerns – it is a simple, user-friendly Android application that can help users find out the existence of vision deficiencies which may be linked to early symptoms of age-related eye diseases such as cataract, glaucoma or macular degeneration.

The user-friendly application that can be installed on a mobile phone offers visual acuity eye test and the Amsler's grid test. Once the tests are completed, users will be presented with a recommendation on whether or not they should proceed for a full eye examination at the hospital.







## APPROACH TO WELLNESS

A health check was organised by UTP on 12 April 2014, aimed at promoting the importance of a healthy lifestyle among the villagers. The pilot programme conducted at Kampung Aji featured health screenings, health talks on diabetes, blood pressure, and the importance of hygiene and sanitation, and gotong-royong aimed at cleaning the homes of the elderly. The health check in April was undertaken in collaboration with Hospital Selayang, MOR Biomedicine-CISIR, Teluk Intan Hospital, Perak Tengah Health Clinic and Kampung Gajah Dental Clinic. Other programmes planned include periodical medical supplies for the poor and elderly as well as regular trips to clinics for selected poor elderly villagers.

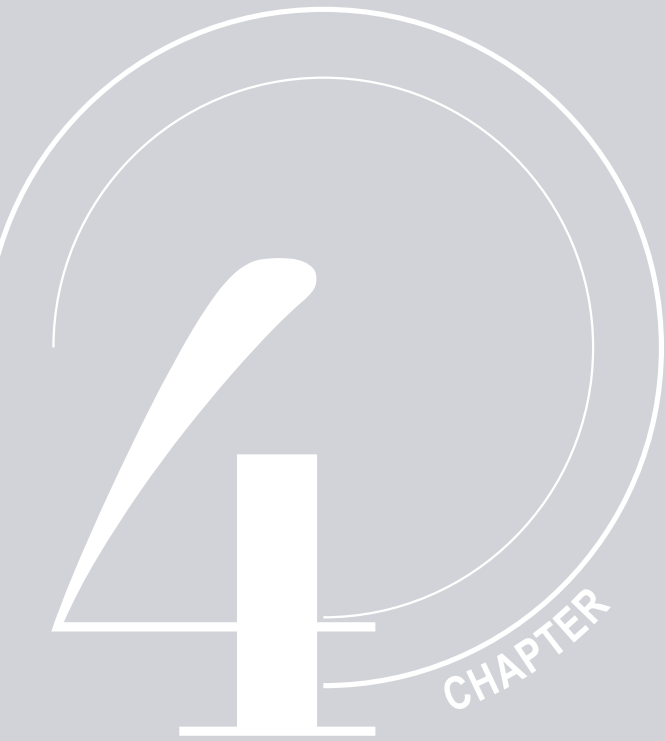
## SURVEYING THE HEALTH LANDSCAPE

**ADDRESSING** health concerns forms an integral part of improving the socio-economic wellbeing of the targeted communities. The university began this phase of the social responsibility programme by collecting data through surveys as well as records from Hospital Changkat Melintang and six health clinics in Perak Tengah located in Parit, Kampung Gajah, Changkat Lada, Ulu Dedap, Lambor Kiri and Bota Kiri.

The top four diseases and illnesses reported by the Perak Tengah District Health Department were acute upper respiratory infection, hypertension, diabetes mellitus, and dermatitis and eczema. The top four diseases and illnesses reported by Changkat Melintang Hospital were pneumonia, diarrhoea and gastroenteritis, unspecified diabetes mellitus, and asthma.







# CARING FOR THE FORESTS & HEALING THE LAND

For the university, social responsibility for the environment is important given the rich natural resources on campus, including four endangered tree species.







**A**S UTP continues to grow and develop its campus, one area that cannot be overlooked is the environment.

For the university, social responsibility in the area of environment is of significance given the rich natural resources found within the campus. Here, there exist four endangered tree species namely *Vatica flavida* (resak padi), *Shorea hemsleyana* (cengal pasir daun besar), *Shorea macrantha* (kepong hantu) and *Aquilaria malaccensis* (karas) that have been touted as the country's heritage. With almost half of the university's 1,000 acres (405 hectares) already developed, and an expansion plan on the cards, the preservation of these tree species is critical.

"Conscience hits you and we asked ourselves what could we do. We have an expansion programme but at the same time we need to ensure that these trees are protected. This is part of our heritage and as an institution of higher learning we have to walk the talk when it comes to conservation," says UTP Vice Chancellor Datuk Ir (Dr) Abdul Rahim Hashim.

In its effort to promote sustainable forest management and the optimal use of forest resources, the university sought the assistance and expertise of the Forest Research Institute of Malaysia (FRIM). On 21 November 2013, a memorandum of understanding (MoU) was signed between UTP and FRIM – paving the way for the two parties to collaborate on the preservation of UTP's forest.

"To give back by collaborating with FRIM is a privilege as it ties in with our aim to nurture creativity and innovation, and expand the frontiers of technology and education for the betterment of society. Forests play a vital role in preventing global warming and building sustainable societies. So the need to protect and develop them can never be stressed enough," says Abdul Rahim.

Through the collaboration, the university provides FRIM access to the forest areas to carry out research activities, the findings of which will be shared with the UTP community in the future. Through this initiative, it is hoped that the campus community would further appreciate the importance of conserving threatened species and its habitats, and the benefits of rehabilitating degraded sites.

It is further hoped that with this alliance, the friendly relations between the two parties are strengthened and further developed especially in the field of forestry, forest products and environmental research and development.

Under the MoU, FRIM and UTP will collaborate on two areas namely zonation of forest areas at UTP for the purpose of conservation based on the density of rare tree species, and greening and flora diversity conservation based on rehabilitation and restoration of the ecosystem at UTP.







**ABOVE**

*Vatica flavida* (resak padi)  
*Shorea macrantha* (kepong hantu)  
*Shorea hemsleyana* (cengal pasir daun besar)  
*Aquilaria malaccensis* (karas)

**OPPOSITE PAGE**

MoU Signing Ceremony between UTP and FRIM on 21 November 2013



## Zones of hope for conservation



**THE** university is extremely fortunate to possess a forest patch that is home to some of Malaysia's rarest tree species. With this ownership come elements of responsibility and challenges; given the extreme rarity and threatened status, each species qualifies for national heritage status. As such, conservation and the need for the university to carry out responsible and sustainable development and management of these resources is crucial. And to achieve this, baseline information on the density, abundance and gross spatial distribution of rare species in the campus is needed.

This is, in essence, the very aim of the proposed zonation of forest areas. The proposal will come up with an inventory of the identified sites, which is aimed at providing UTP with a vegetation map classified according to the density of the four threatened tree species.

The proposal also aims to assist UTP to establish a network of protected in situ conservation areas. This is expected to achieve multi-fold benefits that include sustainable balance between campus development and conservation of rare and threatened tree species and its habitats, maintenance of a functional green lung, promotion of awareness and education and the enhancement of its reputation as an institution of higher learning that contributes to upholding the country's natural heritage.

Dr Lillian Chua, Senior Researcher (conservation biology) at FRIM's Forest Biodiversity Division who is undertaking the

zonation of UTP's forest areas offers background on the collaboration and the importance of conservation.

In 2006, FRIM had discovered at least three rare and highly threatened species of Dipterocarpaceae in the campus of UTP. The family of Dipterocarpaceae is renowned for its highly sought-after tropical hardwood timber and has, for almost six decades contributed significantly to the national revenue, she says.

The family comprises 165 taxa of which 34 are endemic (confined to Peninsular Malaysia). Although many species are traded in the world market, there are a significant number that are extremely rare, have restricted distribution and are low in numbers. Such species are not logged and the immediate threat, as opposed to harvesting, is the loss of natural habitats.

It's worth noting that the Malaysia Plant Red List Peninsular Malaysia Dipterocarpaceae, which has published the category for each species based on the World Conservation Union Red List Categories and Criteria, has indicated Perak as the most vulnerable state. This is because it has the highest number – 10 – of critically endangered dipterocarp species. Of the 10 species, two – *Vatica flavida* (resak padi) and *Shorea hemsleyana* (cengal pasir daun besar) – were found on the university grounds.

**ABOVE** Dr Lillian Chua and her team at the forest near UTP. Photo by Yong Sze

**OPPOSITE PAGE** Seated in front from left, Chan Yoke Mui and Dr Ching-I Peng. Back row from left, Dr Ruth Kiew and Dr Lillian Chua Swee Lian. Photo by Peng Ching







## The web of life

**PRELIMINARY** work indicated that UTP is home to a thriving population of resak padi, cengal pasir daun besar, and karas. Since observations began in 2006, FRIM has documented 226 trees of resak padi, 59 cengal pasir daun besar, 41 karas and 18 kepong hantu.

Resak padi is hyper-endemic and occurs only in Perak Tengah, and apart from UTP, the only other known areas where this species is found are Parit Forest Reserve and the forested campus areas in Universiti Teknologi MARA (UiTM) Perak, which are adjacent to UTP.

Cengal pasir daun besar meanwhile occurs in the districts of Manjung and Perak Tengah, and is not endemic – occurring in Southern Thailand and Sumatra, Indonesia.

UTP is also home to an endangered and vulnerable species – *Shorea macrantha* (kepong hantu) – that is slightly more widespread in Peninsula Malaysia and can also be found in Sumatra. In 2011, FRIM also discovered another threatened species – *Aquilaria malaccensis* (karas) – listed as vulnerable and is threatened by illegal harvesting because of its highly sought-after resins and essential oils.

“The project came into being because the university is concerned about the environment and saw the need to safeguard rare species,” says Dr Chua.





## Balancing development and conservation needs



**IT** is impractical for UTP to set aside very large forest areas for conservation so this is where the vegetation map (which is expected to two years to produce) comes in – to assist UTP in delineating zones for conservation and for other specific uses.

Dr Chua points out that through zonation, site choices for future infrastructure development activities can be appropriately identified, and these decisions will ultimately lead to responsible and sustainable development.

“Conservation must come in tandem with development needs, and this is one approach which private land owners can use to balance conservation with their needs. This is a win-win situation for all,” says Dr Chua, pointing out that the success of this collaboration will raise awareness on how the needs for development and conservation can be balanced.

**ABOVE FROM LEFT** *Aquilaria malaccensis*, *Shorea hemsleyana*, *Shorea macrantha*

**LEFT** Dr Lillian Chua

**OPPOSITE PAGE** *Shorea hemsleyana* tree planting in earnest



## From tin tailings to lush forest

**THIS** area of collaboration focuses on the rehabilitation and restoration of the ecosystem at UTP, which is primarily composed of former tin mining land. “The land here is dead, there are no nutrients in the land which renders it impossible for plants to grow. So the question then is what can we do about it?” says Abdul Rahim.

The answer and inspiration came from FRIM, and its success in rehabilitating and reforesting 121.5 hectares in Bidor, Perak that was once a tin mine. The Bidor research station, also known as the Tin-Tailings Afforestation Centre (TTAC) stands as a prime example of a successful reforestation project.



**LEFT** Dr Ang Lai Hoe, Senior Research Officer (forest plantation programme) at FRIM's Forest Biotechnology Division

**RIGHT** Hasbullah Ihsan, UTP Chief Financial Officer





“What’s been achieved there is incredible – on this ex-mining land, which was once barren today there is a thriving secondary forest. We hope to replicate this at UTP and show that ex-mining land can be rehabilitated,” adds Abdul Rahim.

UTP Chief Financial Officer Hasbullah Ihsan discloses that two hectares of land near the UTP mosque, at the entrance of the campus has been earmarked for the reforestation project. Through the project, he says, UTP hopes to create a man-made forest that can be used for educational purposes.

Hasbullah adds that UTP students and members of the public, especially those from the surrounding areas will benefit from this green lung.

“The main goal is to instil awareness of the importance of conserving biodiversity to face the challenges of global warming,” he says. Apart from it being a showcase for students and the wider community to appreciate, Hasbullah also does not discount the possibility of other pockets being rehabilitated using the same approach.

The lead consultant for the project is Dr Ang Lai Hoe, Senior Research Officer (forest plantation programme) at FRIM’s Forest Biotechnology Division who was the man behind the successful rehabilitation and reforestation of the Bidor research station, also dubbed Rimba Bidor.

The project took Ang and his team 16 years to accomplish, but UTP aims to achieve the same results in three years. Ang admits that the tight time frame is a challenge but is nonetheless confident that the project can be achieved within the stipulated time period.

**FROM LEFT**  
Shorea hemsleyana  
Vatica flavida  
Shorea macrantha  
Aquilaria malaccensis



## Fast-tracked forest



**THE** first step in rehabilitating the land is site improvement, which involves changing the soil properties so that it is more suitable for tree planting. “The soils may contain heavy metals such as cadmium and arsenic that are harmful to plants, so the first thing we need to do is soil investigation. We need to map out microsites to determine what needs to be done, and once this is completed we can start ameliorating the site properties,” explains Ang.

This will then be followed by plant selection, he says, adding that some 30-40% will be cultivated from the seedling stage and will comprise lowland species that are already fast disappearing. Given the tight time frame, an intensive cultivation technique will be employed.

Unlike the Bidor research station where the methods applied were inexpensive – such as the large-scale use of agricultural and animal waste – admittedly the fast-track approach at UTP will require significant investments.

It is crucial that the species chosen for planting are tolerant of drought and harsh conditions. They should provide a more conducive microclimate after the canopy closure. Under the canopy layer of the trees a more efficient nutrient-cycling is envisaged, and this will improve the site properties for the further establishment of a more sensitive endangered tree species.

Plants selected will also include those that can attract birds and small mammals which are known to be efficient seed dispersal agents, so that at the end of the day natural regeneration would take place in the man-made forest. This would further contribute to the increase of plant diversity.

The end result will hopefully be a thriving secondary forest ecosystem enriched with primary climax forest tree species that are sustainable. In all, some 150 plant species are to be planted on the tin tailings.

Once the project is completed, it will be handed over to UTP with a complete maintenance protocol, from pruning, weeding to fertiliser application based on a proposed regime.





## A garden out of waste

About two hours away from Kuala Lumpur is a 121-hectare secondary forest so rich in variety of flora and fauna that it's difficult to imagine that less than two decades ago this was a barren land comprising sand, slime and sandy slime, which were the vestiges of the tin mining industry.

In 1996, FRIM embarked on a grand plan to restore the area to its natural state – leasing the land from the Perak state government for 99 years. Dr Ang Lai Hoe, Senior Research Officer (forest plantation programme) at FRIM's Forest Biotechnology Division led the project, and initial planting began in 1998.

The methods used in this greening project were inexpensive – although commercial fertilisers were used, much of the land was enriched with agricultural and animal waste.

Big-hole planting techniques and raised-bed techniques were applied to help tree growth, and this was followed by the planting of exotic acacias, which were chosen because of their tolerance towards heat and harsh conditions. Other indigenous trees that could grow on the denuded land were also used.

Eventually these trees changed the microclimate and climate of the area, providing a cooler environment. Leaves and branches shed by the trees created a thick layer of forest litter that gradually enriched the soil as it decomposed – and slowly this encouraged the natural regeneration of the forest.

Mammals and birds helped nature along by scattering seeds that passed through their digestive tract, and soon these seeds germinated and added to the diversity of plant life.

Today Rimba Bidor boasts 10 commercially important timber trees, which form the upper strata of the forest. The middle and ground levels are filled with 20 species of trees and shrubs. Migrating flocks of water birds such as sandpipers have begun to frequent the ponds, and in addition hornbills, leopards, wild boar, civet cats and cobras have also been spotted in the regenerating forest.

Source: *Rimba Bidor: A Gift to Nature*



**CLOCKWISE FROM TOP LEFT** Dragonfly; Leopard cat; wild honey bee; male Scarlet-backed Flowerpecker; and, fungus





# LINKING HANDS FOR THE COMMUNITY

The university's social responsibility programmes are designed to be holistic, long lasting and to have a life-changing impact on their target groups.









**I**n the years since Universiti Teknologi PETRONAS (UTP) began its corporate social responsibility (CSR) journey, one of the most important attributes in ensuring the success and positive impact of the social responsibility initiatives is the engagement with all stakeholders.

There is no doubt that many early social responsibility programmes in the area of education for instance, were possible because of the support of the stakeholders such as the district and state education offices, headmasters and teachers of the respective schools and the Parent Teacher Associations, as well as UTP staff and undergraduates.

From 2013, the university has taken a different approach in its social responsibility initiatives – evolving from mainly philanthropy-based CSR programmes to those that facilitate and enable target groups to build the skills necessary to be self-sufficient. It is an approach that will require significant investments in terms of time and effort as well as funds.

Sustainability is key in ensuring that the social responsibility programmes introduced have the desired impact. Rather than mere “touch-and-go” type of CSR initiatives, UTP wants its programmes to be more holistic and to have a long lasting, and to an extent, a life changing impact on the targeted groups and communities.

UTP recognises that for this new approach to work, securing the buy-in and participation of all stakeholders is vital, and has secured committed partners in this new phase of the CSR journey.







## Meaningful social enterprise

**JUST** over a year after UTP began this new CSR journey, the programmes implemented have scored some early gains. Thanks to the assistance from partners, its pilot community, Kampung Aji now has a community centre that will serve as a focal point for community programmes such as health checks, computer lessons and skills improvement courses.

The community centre also serves as the home for two of the village's entrepreneurial ventures – baking and tailoring. With the help of partners in the state government, GIATMARA and the Perak Tengah District Agriculture Department as well as generous philanthropists at UTP who have donated their time, expertise and funds, UTP has also been able to refurbish and equip the community centre with the required equipment for the villagers to undertake the two business ventures.

There has not been any shortage of training and development courses offered, most conducted without any cost to the participants. These courses, from entrepreneurship, online marketing and book keeping to those that are structured for a particular business venture, have been a boon to the participants both in terms of strengthening their skills and boosting morale.

These are the early wins. The battle however has not been won, particularly if it is to achieve the aspiration set out, which is to create developed surrounding communities with sustainable economic growth, social wellbeing and knowledge-driven culture. There is more to be done, both in the area of education and socio-economic wellbeing.

As set out in the roadmap, in the years to come there will be more intervention programmes introduced to build capacity and improve the infrastructure whether it's developing academic programmes and introducing mobile learning or facilitating technology matching, improving business facilities and capitalising on the Internet to expand markets.

There are clear targets for the intervention programmes in education and socio-economic wellbeing.

In the near term for example, UTP hopes to see increased passes in public examinations, and for the target businesses to have developed capabilities and the ability to expand their reach locally. In the medium term, the target is to have an increased number of students who excel in school, and for there to be a greater number of skilled entrepreneurs who can boast of regional market expansion.

And by the end of the project in 2020, the aim is for an increased number of students enrolled in universities and institutions of higher learning. In the area of socio-economic wellbeing, the target is to have a community that possesses a competitive culture and is at the same time ecologically conscious.





## *A hub for the community*

An old surau, used for religious studies in the evenings, has been given a new lease on life as the Kampung Aji community centre, thanks to the efforts of UTP's electrical engineers and generous benefactors.

A two-storey building, the ground floor of the community centre is already being used for the baking and sewing activities, and there are plans to conduct more programmes on the premises such as computer classes for the children in the community.

However, the current electrical design cannot accommodate any additional capacity as it is only equipped with single-phase wiring – insufficient to cater to all the electrical appliances in the centre.

To address this problem, UTP approached its in-house engineer to re-design the wiring of the community centre – or upgrade it to three-phase wiring. UTP electrical engineer, Ir Mohd Fatimie Irzaq Khamis and his assistant Rohaizan M Ali Piah from the Maintenance Department came up with a new electrical design

appropriate to the current and future requirements of the community centre.

Although UTP came up with the new wiring design, funding was still required for the electrical works, estimated at RM12,000. Fortunately, two appointed in-house electrical contractors, MNM Khidmat Elektrik Sdn Bhd and MZ Nusantara Sdn Bhd agreed to render their services for all the electrical works in this project without any charges. A philanthropist from UTP meanwhile contributed RM3,000 for the deposit required by Tenaga Nasional Bhd.

Prior to the re-wiring works, GIATMARA undertook repairs of the community centre that amounted to RM6,000. The repairs were carried out in early 2014.

The successful refurbishment of the community centre demonstrates the multi-stakeholder approach of UTP's CSR programme, and it is hoped that this space will be the hub and heart of the community for a long time to come.

**ABOVE** Datuk Ir (Dr) Abdul Rahim Hashim and the UTP management committee with village folk in Kampung Aji



## Working in concert with community



**THERE** is an old proverb that says, it takes a village to raise a child, which means that the work of raising a child cannot be done alone, but rather the entire community must participate. It is in this spirit that the intervention programmes planned and carried out within the pilot community have been built upon a multi-stakeholder approach, with UTP playing a key role as facilitator.

"This is the approach we have taken. The premise is that people want to better themselves but do not know how to get the help. That's where we come in, we facilitate that process," says Vice Chancellor Datuk Ir (Dr) Abdul Rahim Hashim.

With the multi-stakeholder approach, smart partnerships are built among higher learning institutions in the area, the state government and the corporate sector.

To date, partner institutions of higher learning include UiTM, whose Perak Branch campus is not far from UTP. Government stakeholders span two levels, local and state, and include agencies such as the Women Development, Family, Community Welfare and National Integration Committee, Perak Tengah District Office, Women Development Department, Perak State Development Corporation (PKNP), Perak Tengah Health Department, GIATMARA, MARA, SIRIM and MARDI.

For these Government stakeholders, the intervention programmes being undertaken at Kampung Aji fit into their respective objectives and strategies.

PKNP through its Entrepreneur Development and Socio-Economic Division for example, has thrown its support behind the project, and will be marketing some of the products made in the village. General Manager Mohd Khairi Nasaruddin says that it is the duty of the organisation to assist small-scale entrepreneurs in marketing their products irrespective of their location, and as such the villagers at Kampung Aji merit assistance.

Organisations like PKNP also offer invaluable advice on improving the capabilities of the entrepreneurs, in terms of securing the necessary certifications to make the products more marketable, and offering customer feedback. "Most of these are cottage industries, so it's important to look at their requirements and advise them on how to improve their capabilities so that the products are halal certified, and meet health and safety requirements set by MeSTI (Makanan Selamat Tanggungjawab Industri) under the Ministry of Health," adds Mohd Khairi.



## Win-win for all

GIATMARA Perak Director Kapt (B) Azman A Samad sees the training institution's collaboration with UTP in Kampung Aji as a win-win for everyone. He uses the refurbishment of the Kampung Aji community centre as an example: "This is an exciting project for us because it relates also to what we do – provide training. In repairing the community centre, GIATMARA trainees undergoing the building and construction course were able to get hands-on experience, something that is valuable to their training."

The GIATMARA trainees, with the assistance of a group of UTP students, were also responsible for the refurbishment of the chilli sauce workshop. In all, almost RM20,000 was spent for the repairs on both the chilli sauce workshop and community centre, says Azman.

Apart from lending a helping hand with the repairs, GIATMARA also offered structured training for 20 entrepreneurs in the village. Courses include Fashion and Dressmaking, and Confectionery and Bakery. In addition, GIATMARA also provided training on Welding and Metal Fabrication, and Building Construction.

Azman adds that the collaboration with UTP is in tandem with its mission of providing technical and vocational training to youths to equip them with the necessary skills.

Similarly, the Perak State Development Corporation's (PKNP) collaboration with UTP through its Entrepreneur Development and Socio-Economic Division is also in step with its goals of assisting small-scale entrepreneurs. "It's our duty to assist entrepreneurs, and we do this by helping them market their products," says the division General Manager Mohd Khairi Nasaruddin.

PKNP has to date taken on the role of marketing the chilli sauce and frozen food products manufactured by the Kampung Aji entrepreneurs. "We buy the products directly from these entrepreneurs, pay them in cash, which they receive upfront. It then becomes our responsibility to sell the products," he says, adding that for a start the frozen food will be sold to a food wholesaler in Ipoh.

He does not discount the possibility of the products even retailing at hypermarkets, adding that to improve the marketability of the products, it's important that the entrepreneurs meet the necessary food safety requirements.

"For most of these cottage industries, production is carried out in the backyard so it's important to ensure that the premises meet health and safety requirements. We offer advice and at the same time also collaborate with other agencies such as the Ministry of Health and JAKIM (Jabatan Kemajuan Islam Malaysia for the halal certification)," he adds.

The potential for the entrepreneurs at Kampung Aji, he says, is promising. "The people in this village have been waiting for this opportunity, and we believe that once we begin marketing the products we will start to see tremendous change in their lives," he adds.



**LEFT TOP** Kapt (B) Azman A Samad, Director of GIATMARA, Perak

**LEFT BELOW** Mohd Khairi Nasaruddin, General Manager of PKNP





**ABOVE AND RIGHT** Computer classes for children and adults

## *IT community centre*

Computer classes for the children and youths of Kampung Aji are among the education programmes proposed by UTP's Computer and Information Sciences Department. These classes, which will use mobile apps and other IT solutions, are aimed at igniting an interest towards science and mathematics among the rural children of this village.

The computers have been repurposed and pending the approval from the village head, will be placed on the ground floor of the community centre. The classes will be conducted by members of UTP's Syntech Club and IEM Club, and the proposed learning module will also include field trips to PETROSAINS and Kidzania.







The university has also been fortunate to have the support of the corporate sector, in particular Yayasan Siti Sapura Husin, which has agreed to fund RM197,000 for the education and socio-economic activities over a one-year period at Kampung Aji.

The funds will be channelled to three socio-economic intervention programmes, namely chilli sauce, sewing and baking enterprises. A portion of the funds is also allocated for educational programmes as well as for the elderly, in keeping with the foundation's key priority areas.

Management and Humanities Head of Department Associate Professor Dr Shahrina Md Nordin believes that the three-dimensional CSR partnership is vital in ensuring the success of the initiatives. Equally important, she adds, is the involvement of the target communities. "Local ownership of the respective projects is a pre-requisite to the success of the projects," she stresses.

**ABOVE** Traditional house in Kampung Aji

**LEFT** Dr Hartini Zainuddin, CEO Yayasan Siti Sapura Husin





## The right fit

Yayasan Siti Sapura Husin CEO Dr Hartini Zainuddin is optimistic that the foundation's partnership with UTP will yield positive results and make a difference to the people of Kampung Aji.

The foundation, established by the Sapura Group, is channelling RM197,000 towards various socio-economic development and education programmes to be undertaken at Kampung Aji.

The funds have been allocated for three socio-economic development projects, namely the sewing and baking enterprise, and the chilli sauce manufacturing business. This includes funding for the capital expenditure and start-up costs for the chilli sauce production, and the operating expenditure for the

community centre, where the baking and sewing businesses are carried out, for a one-year period.

In addition, a portion of the funds will be set aside to carry out educational programmes for the village children – including paying for the tuition teachers, teaching materials and the cost of sponsoring the children for the various science and motivational programmes.

The elderly, particularly those who live alone or are bedridden, are also not left out – funds have been set aside to provide food and meals for three vulnerable elderly folk. In addition, the funds will also cover the cost of ferrying the elderly for medical check-ups on a scheduled basis to the nearby medical centres.

The foundation is one of the few corporate partners joining forces with UTP to make a lasting difference in this vulnerable community. “We are making a social investment,” says Hartini, adding that UTP’s plans for this community appealed to the foundation, and are in line with the foundation’s goals of helping children the elderly, and other vulnerable groups.

“It fit the bill and we liked what they were trying to do, and I believe that these programmes are going to make a difference because it addresses the issue of empowerment, and I believe these programmes can improve the standard of living of the villagers,” she says, adding that the prospects of making a lasting impact, and “actually doing good”, are very real.

For Hartini, another positive aspect of the social responsibility projects is the involvement of the local community. “We see this especially among the single mothers, that there is a real effort among the community to help each other out,” she says. The setting up of the community centre, the creation of business opportunities among the villagers and the involvement of state development agencies, are other positive indicators.

The not-for-profit foundation, which was established in 2011, works with the poor and marginalised, focusing on the needs of children, the elderly and the blind.



## Creating a new mosaic

**WHAT'S** equally important is changing the mindset of the targeted communities, says Deputy Vice Chancellor (Research & Innovation) Professor Dr Abdul Rashid Abdul Aziz, from recipients of charity to active participants in shaping their futures. Although there may be sources for funding, he points out that it is also vital that the communities themselves shoulder some of the burden particularly for new technology or approaches that can potentially improve their livelihoods.

Often, there is an unwillingness to try new approaches or invest in new solutions, and cost is often cited as a hurdle even though the initial outlay can be recovered over time. Changing perception and opinion is important because ultimately the communities themselves have to be responsible, whether it's the running of a business that's been set up or continuing in the implementation of systems and technology.

A key aspect of engaging with the target communities and the stakeholders lies in communication – from informing and consulting the various stakeholders to involving and collaborating with them, with the ultimate goal being empowering the target communities.

The participation of the various partner agencies and the corporate sector is heartening, and Abdul Rahim believes successes achieved will spur others to help. "It's a question of pulling the resources together, and when people see a noble idea of helping a marginalised group they will be willing to come on board. That's why we want it to work," he says.

The success of the model implemented in the pilot community of Kampung Aji is also crucial if the university is to galvanise the resources that lie in its alumni. With UTP graduates numbering close to 12,000 since the university's establishment in 1997, the alumni are indeed potential agents of change that should be capitalised.

The success at Kampung Aji can serve as a guide for the various alumni chapters to roll-out similar social responsibility programmes and if this CSR framework is indeed expanded throughout the country, then the impact on underprivileged and marginalised communities will certainly be more apparent.

Equally, if not more heartening is the involvement of the university's staff. The willingness of the university's staff to go the extra mile to help the underprivileged has been apparent from the university's early days, and it appears that the passion and desire to help has not diminished over the years.

This new phase of UTP's CSR journey appears to have also galvanised all the departments to play a role, and this is especially gratifying to witness.

UTP believes that as it refines its social responsibility efforts, a platform has been created for UTP staff to forge closer ties with each other. By working together towards a common goal, the staff have become a tighter knit community. There is a cohesiveness here that is apparent, and this will be critical to the success of the university's CSR plans.



**RIGHT** YB Dato' Rusnah binti Kassim, Women Development, Family, Community Welfare and National Integration Committee Chairman





## Out-of-the-box ideas from the students

**THE** university is also heartened by the enthusiasm displayed by the undergraduates who are embracing and supporting the initiatives introduced. Three student clubs in particular are playing a key role in supporting the CSR projects at Kampung Aji, from assisting in the marketing to undertaking community service activities. These are Enactus, Rakan Masjid and the Student Representative Council.

What is particularly interesting is the fact that some of these clubs are using their experiences in other social responsibility projects to come up with solutions at Kampung Aji.

Take the case of Enactus, for example. Through the experience of the club's Youth In Community programmes – which aim at instilling environmental awareness among secondary school students – the club is proposing a solution for the baking project's waste problem. As sales increase for the baking project's tapioca cakes (kuih bingka) there will be more waste generated, in particular tapioca peel. Rather than relegate the peel as waste, the club has proposed that the peel be recycled into tapioca crisps.

The club is currently market testing the product and if successful it plans to present the idea to the university.

Such out-of-the-box thinking is promising, and it is hoped there will be more such innovative and creative ideas as UTP progresses on this CSR journey.





**IN** the year since the university embarked on this new CSR path, what is especially gratifying is that it has been able to align the social responsibility goals with that of UTP's strength and mission.

The CSR framework recognises the important role that technology can play, and right from the start the university felt that there can be no better way to effect change than by using the fruits of its research capability. And who better to reap the fruits than the community that is the closest to it.

In just a year, the lecturers and researchers have come up with various problem-solving tools aimed at the various groups within the target community, from vandal-proof owl houses to portable eye test tools.

Going forward, Dr Abdul Rashid, who oversees the Research and Innovation Office, says it is crucial that the technological solutions proposed match the needs of the community.

"On our end, we need to carry out more community related research, and this requires a mindset change on the part of the researchers – moving from academic or oil

and gas related research to those that benefit our target communities," says Dr Abdul Rashid.

The opportunities for technology to effect positive change is encouraging.

Already the university's Green Technology Group, Hybrid Energy Group and Sustainable Resource Group, are working on various projects aimed at making a difference to the target communities. For instance, the Sustainable Resource Group is looking into the recycling of waste material such as rice husk into biofuel. The Small Scale Power Generation Group is working on developing small turbines that can be deployed at the nearby Orang Asli villages.

In the areas where UTP lacks the expertise, it is encouraged by the support of its partners. UTP is privileged, for instance, to collaborate with the Forest Research Institute of Malaysia in its effort to help promote sustainable forest management and the optimal use of forest resources.



**TOP LEFT** Rice husk into biofuel is being studied by the Sustainable Resource Group.

**ABOVE** Erecting an owl house.



## People first, sustainable development always

**I**n any social responsibility effort of this nature, time will be the true test of the effectiveness of these initiatives. The university however is confident that it is on the right track.

“We know it’s a structured approach and it’s sustainable. Once the target groups and communities grow, then they are on their own. Our role is to nurture them and facilitate their development so that at the end of the day they can stand on their own two feet,” says Abdul Rahim.

Abdul Rahim is not alone when he expresses hope that the university’s approach will yield results, and pave the way for other organisations to adopt a similar approach.

“If we do it well, we can make a huge difference and break that vicious circle of poverty. And hopefully one day these same children will enrol in UTP as students and that is something we will certainly look forward to.

“After all, we want to be part and parcel of the community. We want to be a partner who can contribute and make a difference to the community. We don’t want the community to see us as exploiting the area ... that’s what the tin miners did, they left tin tailings and ponds, and we don’t want to do that,” says Abdul Rahim.

With this new CSR approach, UTP sees itself as a trail blazer of sorts. There will be challenges and lessons to be learnt from the hurdles that come its way. Ultimately though, UTP knows that it is on the right path, and is glad for the partners, faculty members, staff and undergraduates who are with the university on this momentous journey.











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