

ASEAN Chairmanship a platform to elevate local universities

UPM proposes setting up AUN-AFS under AUN-QA to bring universities together in addressing regional challenges in agriculture and food security

FOOD security challenges, especially those caused by climate change and global political uncertainties, are among the issues ASEAN must address to ensure sufficient, safe and nutritious food supply for its 680 million population.

As such, Malaysia must take full advantage of its ASEAN Chairmanship this year to highlight governmental efforts in building the country's food system resilience, particularly through local universities that are not only active in research and development (R&D) but also in producing skilled human capital to meet the needs of the food sector.

Recognised as a leader in agriculture and food science, Universiti Putra Malaysia (UPM) is among the higher education institutions with the potential to take a greater role in positioning Malaysia on the global map as an ASEAN food security hub.

As part of this effort, UPM recently launched the Food Security Blueprint, a strategic roadmap aligned with the National Agrofood Policy 2.0 and UNESCO's Sustainable Development Goals (SDGs). The blueprint aims to strengthen Malaysia's food security ecosystem while fostering broader regional collaboration on sustainable, technology-driven solutions.

Driving Food Security Agenda

Commenting on the matter, UPM's Institute of Tropical Agriculture and Food Security director Prof Dr Anjas Asmara Samsudin said the institution is ready to play the role of enabler in the food security agenda spearheaded by the Ministry of Agriculture and Food Security (KPKM).

He said by integrating modern technology, academic expertise and industrial collaboration, UPM is confident it can strengthen Malaysia's leadership position in ASEAN food security.

According to him, UPM's Food Security Blueprint aims to produce a competitive workforce in the sector, focusing on eight core competencies students must possess: Critical thinking, strategic thinking, collaboration, integrated problem-solving, self-awareness, ethical norms, systems thinking and anticipatory thinking — enabling students to forecast and respond to future challenges.

"This framework not only emphasises academic excellence in food security but also supports Education for Sustainable Development (ESD). The competencies embedded in the blueprint aim to produce graduates who are not only highly employable but also socially aware and capable of contributing to the food security sector sustainably," he told *Bernama*.

He added that UPM has presented the blueprint to ASEAN nations through visits and conferences, aiming to spark interest in structured human capital development to achieve a more systematic and holistic food security agenda.

UPM has also established the Higher Education Institutions (HEIs) Food Security Nexus, which brings together 21 public and seven private universities in Malaysia. This nexus serves as a national collaboration platform uniting universities, industries and



UPM's Food Security Blueprint aims to strengthen Malaysia's food security ecosystem while fostering broader regional collaboration on sustainable, technology-driven solutions

government agencies to collectively address food security issues.

"This nexus will not only strengthen research and innovation efforts but also serve as a hub for strategic initiatives that can enhance national food availability and safety.

"Through HEIs Food Security Nexus, UPM offers an engagement platform connecting diverse strategic partners from academia, industry and the community. This collaboration will be extended to the ASEAN level to create space for academic discourse and joint research and development (R&D) on regional food security," he said.

Enhancing Innovation, Research

In addition, Anjas Asmara said UPM has proposed the establishment of the ASEAN University Network-Agriculture and Food Security (AUN-AFS) under the ASEAN University Network-Quality Assurance (AUN-QA), to unite university efforts in tackling regional agricultural and food security challenges.

This initiative is expected to strengthen joint research between ASEAN universities, enhance knowledge and technology exchange in the food security sector, and provide regional academic guidelines to improve quality assurance systems in teaching, research and curriculum development.

"Through AUN-AFS, we want to ensure that ASEAN universities can work together in strategising responses to food security challenges, not just in research but also in technology transfer and capacity building," he said.

He sees this as a stepping stone for the ASEAN community to build a more resilient and sustainable food security system. He also believes that food security is not merely an issue of supply but also involves education, innovation and more strategic regional policy-making.

As part of its commitment to food security, UPM is also actively exploring research initiatives that address agricultural and food sector challenges in Malaysia and the ASEAN region.

Key studies underway include developing climate-resilient seed varieties to improve crop resistance to extreme weather, using Internet of Things (IoT) and artificial intelligence (AI) in agriculture to boost food production efficiency, and producing alternative protein sources such as Black Soldier Fly (BSF) larvae for animal feed.

UPM is also focusing on developing grain corn varieties for animal feed to reduce dependency on imported livestock feed.

"One of our biggest challenges is dependence on agricultural inputs that are mostly imported. Therefore, we are proactively developing alternatives such as BSF protein and more eco-friendly compost-based fertilisers and pesticides," he stressed.

Leading a Regional TVET Hub

Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) vice chancellor Prof Dr Yatimah Alias said the university can play a key role in attracting international students through high-quality programmes aligned with global industry and technology demands.

For instance, dual degree programmes in collaboration with institutions from Germany and China have increased the region's educational competitiveness. These programmes involve student exchanges, joint research and academic mobility that offer students and lecturers broader exposure.

"UMPSA's partnership with Universitas Indonesia in the Occupational Safety and Health (OSH) programme is an example of integrated efforts involving staff exchange and credit-bearing mobility programmes.

"Initiatives like the Global Classroom, which connects UMPSA with foreign institutions such as Mae Fah Luang University, Thailand, demonstrate how technology enhances remote learning experiences," she said.

UMPSA also aspires to become a primary reference centre for Technical and Vocational Education and Training (TVET) in ASEAN.

As part of the Malaysian Technical University Network (MTUN), UMPSA aims to be The ASEAN Advanced TVET Hub that produces highly skilled workers in sustainable energy, industrial automation and digital transformation.

Through this initiative, UMPSA not only produces skilled talent but also shapes future technical leaders.

"UMPSA is working towards recognition as a TVET institution by Asian-level accrediting bodies, including the Asia Pacific Accreditation and Certification Commission (APACC) based in the Philippines," she said.

To achieve this, UMPSA plans to expand strategic partnerships with universities in Indonesia and Thailand through joint research

labs and larger-scale student and staff exchanges. The goal is to enhance TVET quality by providing top-notch facilities and enriching research in the field.

Industry collaborations are also being strengthened to ensure that graduates meet ASEAN and global job market needs.

Edutourism Combines Education, Tourism

UMPSA is also capitalising on the concept of educational tourism (edutourism) to attract international students to Malaysia. According to deputy vice chancellor (Academic and International) Prof Ir Ts Dr Ahmad Ziad Sulaiman, edutourism not only enhances cross-cultural understanding among ASEAN students but also fosters academic exchange and idea-sharing.

Programmes such as student mobility, academic exchanges and edutourism provide opportunities for students to understand other cultures through direct experiences such as visits to historical sites, participation in cultural festivals and daily interaction with local communities.

It also enhances students' international communication skills by exposing them to regional languages such as Malay and English.

"UMPSA offers edutourism programmes through MyEduTravel, managed by UMPSA Advanced. The programme blends academic learning with tourism experiences, showcasing the culture and natural beauty of Pahang while delivering valuable academic insights through field studies, industry visits and hands-on workshops. It also helps build leadership, critical thinking and teamwork among international students," he added.

Additionally, the Student Affairs and Alumni Department (JHEPA) offers edutourism packages such as "Moh La Weh" (Nature and Adventure Package), Explore The Beauty and History of Pahang, Language, Culture and Heritage, and Tioman Island — Learn, Explore, Preserve with Us. Special programmes during Ramadhan and Aidilfitri were also introduced to offer international students firsthand experience of Malaysian culture.

As a result of these initiatives, in 2024 alone, UMPSA attracted 159 international participants from China, Indonesia, India, Yemen, Iran, Palestine and Egypt. With continued efforts in strengthening edutourism, UMPSA has the potential to become a top destination for international students seeking

knowledge and cultural enrichment in Malaysia.

Overall, UMPSA's efforts to improve education quality and promote edutourism align with ASEAN's aspiration to build a highly skilled, competitive workforce. Through its wide range of programmes, UMPSA not only strengthens its position as a regional education hub but also plays a key role in empowering Malaysia as an academic excellence centre in ASEAN and beyond.

Leading Student Mobility Initiatives

Furthermore, Malaysia is strategically positioned to become a leader in student mobility programmes and cross-university collaborations that strengthen the regional higher education network. This initiative is in line with Malaysia's commitment to building an inclusive, progressive and competitive ASEAN in education.

According to the International Islamic University Malaysia (IIUM) International Affairs Office deputy director Assoc Prof Dr Siti Hajar Yusoff, one of the key programmes reflecting this aspiration is the ASEAN Student Mobility Programme Familiarisation Visit, organised by IIUM's Kulliyyah of Engineering in collaboration with the International Office.

This programme is part of the ASEAN Universities Exhibition and Forum 2025 (AEF 2025), which brings together representatives from 84 ASEAN universities, academic leaders and industry players.

More than just a student exchange programme, she explained that such initiatives can serve as catalysts for broader collaborations in research, innovation and youth leadership development.

Activities such as the ASEAN Future Innovators Challenge Workshop, Leaders' Luncheon, ASEAN Unity Night and academic forums on sustainable development reflect a holistic approach to strengthening ASEAN's higher education ecosystem.

She also emphasised that this holistic strategy provides room for cross-cultural understanding, builds cross-border professional networks and supports the regional education agenda aligned with the SDGs.

"One of the key focuses of this initiative is nurturing creative and forward-thinking ASEAN youth leaders. In the ASEAN Future Innovators Challenge Workshop, students are encouraged to develop solutions to SDG-related challenges based on three main themes: Youth leadership for a sustainable future, inclusive development cooperation and ASEAN climate action.

"Participants are guided in areas such as critical thinking, social innovation and problem-solving, and are given opportunities to engage directly in strategic dialogues with academic leaders through events such as the Leaders' Luncheon and One Vision, One Identity, One Community Forum," she said.

Interestingly, some ideas proposed by students during the workshop have the potential to be developed into research projects, regional policies, or even commercial ventures — making students not just participants but real agents of change for the ASEAN community.

Despite the wide range of regional collaboration opportunities, several challenges still need to be addressed, including curriculum harmonisation, the digital divide, financial constraints and the need for more active involvement from industry and government. — *Bernama*