

# FOR THE LOVE OF SOIL

International consultant agronomist, Dr E. Pushparajah became a member of the Incorporated Society of Planters (ISP) in 1968, and since then has contributed immensely to fortifying the Planter Publication through the steering of its Editorial Committee (PEC) as its Chairman for many years, and to the strengthening of the Technical Education Scheme (TES) via his contributions to the TES Committee. In this interview, he shares the details to both endeavours, and in the process reveals his love for soil and his fastidiousness and commitment to research and education.

## Early Years

**D**r E. Pushparajah is a man of preparation. As he sat down for the interview, he reached over to the table next to him for a stack of papers. He carefully thumbed through the pages of the meticulously pencilled notes, detailing records that outline an illustrious career spanning several decades and continents.

Born in 1937 in the town of Kuala Lipis in Pahang, a fifth child of seven siblings, Pushparajah's father joined the government service as a junior clerk at the police department and rose up the ranks to serve as the State Financial Officer (then known as State Treasurer) of Pahang. His mother was a homemaker. Pushparajah's early schooling years were in Pahang, but for his secondary studies, he left home for King George V in Seremban,

Negeri Sembilan and later to Victoria Institution in Kuala Lumpur.

"I am not a Planter," declared Pushparajah, before proceeding to qualify his statement. "When I was pursuing my Bachelor of Science at the University of Malaya in Singapore, we were told that those who did well would be offered entrance into the second year of the professional degree of Bachelor in Agricultural Science at the newly initiated Faculty of Agriculture in the University of Malaya," said Pushparajah. "I had during vacation time taken up eight weeks of training assignment on rubber, and found that this field excited me because I was eager to explore the prospects the sector held. So, in 1960 I enrolled as the first batch but as a second year student for the B.Agr.Sc. course on a scholarship from the Rubber Research Institute of Malaysia (RRIM)."

## Gearing Up

Pushparajah completed his studies in the second week of January 1963. Two weeks later, on the first of February, he commenced his tenure at RRIM as a Probationary Research Officer. While working, he pursued his master's degree at the Faculty of Agriculture at the University of Malaya and graduated in 1966. Pushparajah spent the next few years at RRIM where he worked extensively on research and publication initiatives. In 1970, he was appointed Head of the Soils and Crop Management Division, a position which laid the foundation to much of his future contributions. In 1977, he obtained his PhD from Ghent University, Belgium, an achievement he attributes to the insistence and friendly pressure of the then RRIM Director, Tan Sri Ani Arope.

“At that time, almost ninety percent of the plantations were rubber,” explained Pushparajah. “I was involved in providing advice to the sector in terms of soil management from the aspects of water conservation including use of legume cover between rubber tree rows, use of fertilisers, and erosion prevention, among others,” said Pushparajah who added that this included spearheading new and novel technology such as discriminatory or site specific fertilisation. “It was because of these activities that I got caught up with the Incorporated Society of Planters (ISP),” enthused Pushparajah.

## The ISP Connection

“I used to go to the estates to run trials, and one of these estates was Seafeld Estate then managed by Colin Sergeant AISP FISP, who was also the Chairman of the ISP Technical Education Scheme (TES),” shared Pushparajah. “I asked him to avail the use of more plots for trials, but instead he gave

me an ISP membership form which he had initialed,” he added. “This Catch-22 situation panned out for the better, because once I became an ISP member, it was a lot easier to get access to the heads of the estates for trials etc.,” enthused Pushparajah. With his letter of admission to ISP, came a notice that he had been co-opted into the TES committee.

As paradoxical as his entry was into the ISP, the year 1968 marked the beginning of a five-decade journey with the society. He served as Chairman of the Planter Editorial Committee (PEC) for over 16 years, (with a short break in between); where he, with support from the Publications Officer, Ms Thavamalar introduced a house-style for the technical publication *The Planter*, and fortified the scientific writing standards of the periodical.

Pushparajah has written over forty editorials and a number of articles expounding technical information on various crop-planting methods especially those related to soil and water management. Others held viewpoints on the plantation industry, especially those dealing with sustainability. Alongside the PEC, Pushparajah's chairmanship of the TES Committee from 2017 to 2019 has also been instrumental in steering the ISP's new syllabus into the 21st century. He has also contributed to the review and editing of papers for the Proceedings of ISP Conferences and Seminars.

## Enriching Education

“The syllabus for the Associate Licentiate (AISP) was first introduced in 1928 and a first revision to it commissioned in 1937. By 1967, the Malay language was made a compulsory subject for the AISP,” briefed Pushparajah. He also added that throughout the earlier years, the format of the TES examinations kept to the

fundamentals of Agricultural Science (Botany and Soils), Estate Surveying, Estate Bookkeeping, Estate Practice (Rubber or Palm Oil or Cocoa), and Languages (Malay, Tamil and Chinese by special arrangement). By the 1970s, the AISP had come to be accepted as a professional qualification for estate managers employed by major Malaysian plantation companies as well as those in Papua New Guinea and even Cameroon.

It had however remained untouched for too long and in 1979, a major change to the TES syllabus took place to ensure relevance to modern needs. “The TES under the Chairmanship of Dr Redzuan instituted a major revision where we changed the format to a modular form. Modules One and Two would give a candidate the new Licentiate Diploma (LISP), while those continuing on to Modules Three and Four, plus a project, would obtain the AISP,” said Pushparajah adding that the shift accorded the LISP an equivalence to a diploma, and the AISP to a degree.

An initial resistance gave way to acceptance, and in 1996, the syllabus was again revised. The latest revision produced by Pushparajah, with support from the staff, involved major revisions to the system and syllabus contents. The approach of the 100 percent examination weightage was revised to constitute a 60 percent examination and 40 percent assignment format. “Also, we increased the number of topics for each module to meet current needs and enhanced the practical component to implement credit hours that levelled the playing field for the LISP and AISP with university programmes. The new and updated syllabus was approved in 2016 and implemented in 2017. The ISP also collaborates with Universiti Putra Malaysia (UPM) in the Master of Science in Plantation awarded by UPM.”

## Global kinship

In spite of a hectic schedule that demanded his attention at work, at home and at the ISP, Pushparajah continued to make great strides in his career and in 1981 was appointed as the Director of the Department of Biology in RRIM. During this tenure, he was responsible for coordinating research on botany, soil and crop management, pest mitigation and exploitation or managing tapping, which he undertook until his optional retirement in late 1988. Also in 1981, Pushparajah was awarded the ISP fellowship (FISP) in recognition of his contributions to the nation, industry and ISP.

After RRIM, Pushparajah left for Thailand where he spent several years with the International Board for Soil Research and Management (IBSRAM), and supervised work in Africa, Asia and the Pacific Islands. In early 1995, he returned home and assumed consultancy for various areas within the plantation industry. He was also engaged by the World Bank to review rubber programmes in Indonesia and the Tripura state of India (involving hill tribes).

This hiatus did little to distance Pushparajah from the ISP and upon his return to Malaysia, and at M.R. Chandran's "I won't take a "No" for an answer," was drafted back to the ISP to offer his invaluable insights to the PEC and contribute extensively to the TES. Pushparajah shared that in the 1990s ISP introduced the Certificate in Plantation Management (CPM) and the Certificate in Plantation Practices (CPP). "These certificate programmes afford non-executive level staff as well as school leavers, an opportunity to further their qualification. These courses enabled successful individuals to obtain junior managerial posts, become members of the ISP and thus further their qualifications to a LISP, AISP and eventually even a master's degree.

It was essential for us to avail qualifications that benefit the many levels of human resource within the sector, to ensure that we nurture planters who are professional and well-qualified," emphasised Pushparajah.



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## A professional generation

"We really need the younger generation to play a bigger role to progress the sector," said Pushparajah. "A qualification is not sufficient, and one has to spend hands-on time in the field if one hopes to be a proficient planter," added Pushparajah. In this respect, the ISP offers sound qualifications that have been continually perfected over a century.

Pushparajah shared that the qualifications offered by ISP has gained academic and professional recognition from institutions and agencies outside of the country and felt that this might be a good time for the same to happen here. "There are professional bodies for various areas such as accountancy and engineering; even for niche areas such as chemistry and even nursing;

why not for the plantation industry which has done so much for our country over the last century?" quizzed Pushparajah. "We must look seriously and with urgency into this matter, which I believe only an Act of Parliament can set into motion."

## Forging the future

In addition to his involvement with the ISP, Pushparajah was also a Founding Member of The Malaysian Society of Soil Science of which he was the Chairman from 1974 to 1977, and a member of the Malaysian Scientific Association of which he was the honorary Secretary for 1976 to 1977. However, he gave up these obligations to "make way for his commitment to ISP". Incidentally, Pushparajah is a Fellow of both organisations. "Three days ago (prior to this interview) I received a letter from ISP confirming my membership, again, in the PEC," shared the octogenarian who turned 82 this year. It is clear from the glint in his eye that he is no less enthusiastic now than when he first dug his heels in six decades ago, about putting the spark back into the planter and the joy back into planting.