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Changing oil palm industry image towards sustainable future

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Plantation agriculture is the fundamental building block in nation building acting as an economic engine for social engineering and rural development. Plantation agriculture starts with coffee and later was replaced by rubber. In the late 1970s and early 1980s, the oil palm is the major plantation crop and during this period Malaysia has transformed from agriculture to industrial nation. It has played an important role in transforming, expanding and shifting Malaysian economy from agriculture into industrial base. Unfortunately, in turn the industry is gradually taken the large part of agriculture labour force which created labour shortage in the oil palm industry. Plantation work known to difficult, dangerous and dirty making it less attracted to new generation of labour force. Initiatives has been proposed to combat these manpower shortage such as introduction of8 mechanization and automation however they met with poor acceptance due to high cost and still there is no pulling factor to gain interest from labour force to work in the plantation. In oil palm, harvesting is one of the important work that face labour shortage due to difficulties in harvesting tall palms. Incorporating the secondary trait such as semi-dwarf into high oil yield can greatly increase productivity, efficiency and less difficulty. Sime Darby has vast collection of oil palm germplasm and contained potential populations for semi-dwarf material development. Extensive selection and testing have been carried out to evaluate semi-dwarf populations. Combination of primary and secondary trait such as high oil yield and semi dwarf in recent population were succeed and grouped differently as showed in the Figure 1. High oil yield of semi dwarf oil palm will increased oil and harvesting productivity and indirectly reduced land expansion for sustainable future. Incorporating new technologies such as ripeness sensing technology and easy-to-operate harvesting tools with the semi-dwarf trait can be the first step towards transforming plantation agriculture.

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