Plantation Intelligence Applied Oil Palm Operations: Unlocking Value by Analysing Commercial Data

OBERTHÜR T, DONOUGH C R, COOK S, SUGIANTO H, LIM Y L, COCK J, KAM S P, AND FISHER M J
International Plant Nutrition Institute, Southeast Asia Program, 29C-03-08 Maritime Piazza, Karpal Singh Drive, 11600 Penang, Malaysia

Plantation intelligence [PI] applies the concept of business intelligence, which is analysis of company data, to oil palm production. Plantations already have collected monthly data of block yield but do not use them to enhance financial performance. These data were analysed for a whole plantation to rank individual blocks according to their ability to respond to applied fertiliser. Blocks were classified according to their average fertiliser productivity (AFP), which was associated with the block's soil management group (SMG). AFP varied between years depending on rainfall and SMG. The ranking was used to guide fertiliser management by diverting fertiliser from unresponsive blocks to those that are more responsive. Although the inferences lack statistical validity they appear robust from a practical viewpoint. They are easy to evaluate in the field, since they require no upscaling from or interpretation of experimental data. They provide managers with a tool to evaluate the variable effect of fertiliser over the whole plantation in different years and to improve financial performance.

Keywords: Plantation intelligence, fertiliser response, soil management group, financial performance.