

UNIVERSITI TEKNOLOGI MARA

**DEVELOPING INTEGRATED
CONCEPTS TOWARD ACHIEVING
A VIBRANT YIELD FOR PADDY
FARMERS IN KERIAN, PERAK**

ELIAS BIN KAMARUZZAMAN

PhD

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

Name of Student : Elias Bin Kamaruzzaman

Student I.D. No. : 2017727477

Programme : Doctor of Philosophy (Business Management) –
BM950

Faculty : Business Management

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Signature of Student :

Date : May 2020

ABSTRACT

The main objective of this research was to develop an integrated-concept comprising of government paddy policies, human factors, good agriculture practices and agri-innovations towards achieving a better yield of not less than 6 MT/ha. This was very important, firstly to contribute to the food security of Malaysia which currently stands at only 64% Self-sufficiency Level (SSL) to 80 %. This study was done to address the research questions of how yield could be increased by restructuring government support to the farmers. Research question on why was there a need to group the small parcels of paddy land into bigger and more viable parcels which will be managed by professional managers equipped with sufficient state-of-the-art machinery and how do we handle the farmers' sentiments to willingly accept the new concept of large Estate Management Model in paddy farming was also done. The methodological approach used for this qualitative research includes the collection of data from purposive samples by observation, interviews, field studies and secondary data. As the study involves human factors, the ethnographic approach was used. State-of-the-art software was used to collate and analyse data. This research found that outdated government paddy policies in the areas of land usage, lack of good management and enforcement on paddy subsidies, the negative mindset of the farmers and shortage of labour were the main causes of the low yield of only 4.9 MT/ha. When these problems are resolved, the researcher is confident that the yield can rise to 6 MT/ ha. With an average yield of 6 MT/ha, the SSL will rise from the present 64% to 80%. The scope of the study includes a very detail and in-depth studies of the four approaches mentioned above. However, the limitation of the study only allows one Kerian granary out of the ten granaries to be studied. The novelty of the study lies with the integrated approach in combining relevant qualitative information to derive the ultimate findings of yield increase. Many types of research were done in isolation but not integrated as done in this research. The practical implications that can be expected in the execution of this research will be the human factor concept. To change the farmers mind-sets to abandon smallholding farming to that of the Estate Management Model, dependency on government subsidies to augment their income, to train government and paddy agencies' middle-level staff to gradually change the farmers' mindset is not easy but doable over some time. To train technocrats to operate sophisticated machinery and high technologies such as photo image forensic, drone pilots and technicians will take time but must be done to achieve the objectives. These are the areas for future studies.

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