

SULIT

RANCANGAN MALAYSIA KEEMPAT 1981-1985

DEMENTERIAN PERTANIAN



**INSTITIUT PENYELIDIKAN
DAN KEMAJUAN PERTANIAN
MALAYSIA**

M A R D I

FOURTH MALAYSIA PLAN 1981 - 1985

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FOURTH MALAYSIA PLAN 1981-1985

SUMMARY

1.1 INTRODUCTION

The Malaysian Agricultural Research and Development Institute (MARDI) was established in 1969 with the main objective of undertaking scientific, technological, economic and sociological research in agriculture covering all crops (except rubber) livestock, and freshwater fisheries. In September, 1979, with the establishment of Palm Oil Research Institute (PORIM), the responsibility for oil palm research was taken out of MARDI.

Since becoming operational in February 1971, MARDI has concentrated full efforts in the following areas of activity namely:-

- (i) Determination and development of research facilities and infrastructure such as land acquisition and development, construction of laboratories, glasshouses, workshops, office space, staff quarters and procurement of farm machineries and research equipment in a number of locations/stations in line with its research strategies and activities.
- (ii) Recruitment and training of research scientists of various disciplines together with their subordinate operative and development of an efficient research organization which could cater for the research requirements of the country.
- (iii) Strengthening ongoing and instituting new research programmes and activities that could effectively meet the agricultural developmental needs of the country utilizing all resources available at its disposal.

1.2 DEVELOPMENT OF INFRASTRUCTURE

The development of research facilities and infrastructure has been the most trying experience for the Institute. Although it has been allocated sufficient financial support (\$27.7 million for SMP, and \$63.372 million for TMP), it was faced with a number of

constraints many of which were beyond its capacities to solve. The Institute was established with a total of seven research stations which were taken over from the Department of Agriculture. During the Second and Third Malaysia Plan periods, 20 more experimental stations were identified and were subsequently being developed.

Among the major constraints encountered by the Institute in the development of research facilities include:-

- (i) The delay in land acquisition process.
- (ii) The delay in the completion of many of the civil/construction works planned for the various Institute's research stations due to delinquent contractors who either could not complete their works according to schedule or who left their jobs unfinished due to certain problems faced by them.
- (iii) The delay in acquisition of laboratory and field equipment due in part to the above two reasons.
- (iv) As a result of these constraints, the Institute has not been able to spend the full development budget of \$63,372 million ringgit allocated to it in the TMP. It is estimated that by the end of 1980, the amount to be expended (actual and committed) will be about 48.8 million ringgit or 77.1% of the total allocation.

1.3 RECRUITMENT AND TRAINING OF STAFF

The recruitment and training of staff has been and will continue to be a major activity of the Institute for quite some time. When the Institute started in 1971, it has a complement of only a few research scientists seconded from the Department of Agriculture. By the end of the TMP, it was planned for the Institute to have a total of at least 597 research scientists, 585 Research Assistants and 1155 Junior Technicians. However, by 1980 it is expected that the Institute would only have a total of 417 posts for Scientists, 472 posts for Research Assistants and 771 posts for Junior Technicians. These figures indicate that the Institute has been able to achieve about 70% of its overall staff requirement target for the TMP. While the number of staff recruited might reflect a satisfactory manpower build up for the Institute, the effective working manpower resource is however, much lesser. Throughout the TMP period a significant proportion, as high as a third of the scientists were mostly overseas undertaking postgraduate training programmes. The training programme was however considered essential in order to build up a pool of highly trained and competent scientists who have the capabilities to undertake research. One major constraint faced by the Institute has been the fact that the majority of the staff are still very young and inexperienced. Although they are highly qualified, they still lack the experience and the exposure to the scientific field of research. The Institute has to spend a total of about \$11.964 million ringgit in the training programme for all categories of staff during the Third Malaysia Plan Period covering costs for undergraduate, postgraduate, certificate and short-terms training programmes.

As a stop gap measure the Institute had hoped to recruit a number of foreign specialists to work with the Institute under the World Bank Project Programme. However, it has not managed to get the numbers required, due primarily to the unavailability of these experts and the not so attractive terms and conditions of service that the Institute could offer. A total of 10 expatriates have so far been recruited on a long term employment with the Institute.

1.4 RESEARCH PROGRAMMES AND ACTIVITIES (1971-1980)

In the Second and Third Malaysia Plan periods the Institute gave top most priority to research programmes and activities which aimed at solving the problems of the farmers. The primary objective