

GOVERNMENT OF MALAYSIA

**FEASIBILITY STUDY
ON
RATIONALIZATION AND
CROP DIVERSIFICATION
IN
NON-GRANARY IRRIGATED AREAS
IN MALAYSIA**

Volume 5-11

State Report - Kelantan

October 1990

JAPAN INTERNATIONAL COOPERATION AGENCY

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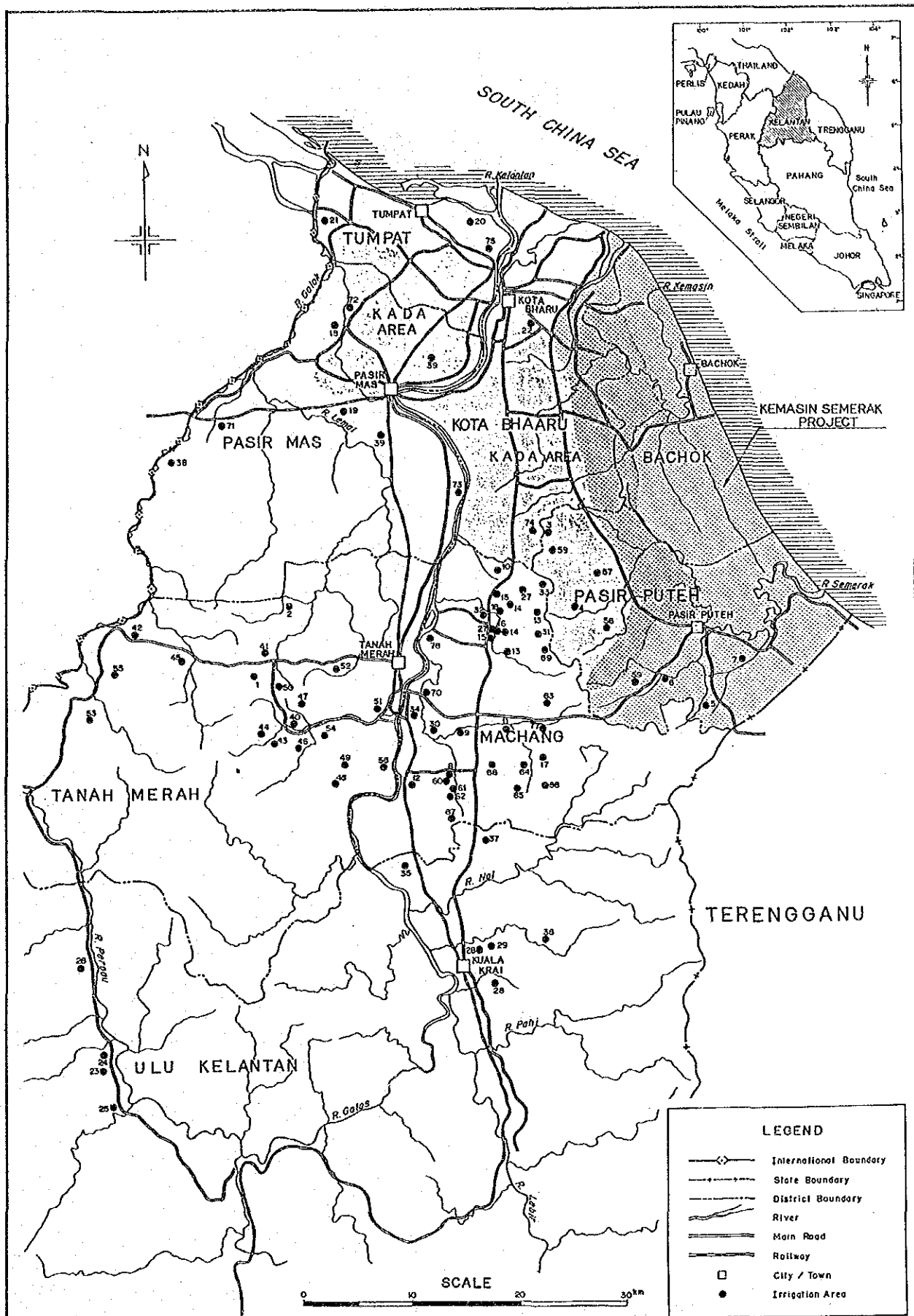
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*Feasibility Study on Rationalization and Crop Diversification
in Non-granary Irrigated Areas in Malaysia*

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Location of Non-granary Irrigation Schemes
Kelantan

FEASIBILITY STUDY ON RATIONALIZATION AND
 CROP DIVERSIFICATION IN NON-GRANARY
 IRRIGATED AREAS IN MALAYSIA

Japan International Cooperation Agency

*Feasibility Study on Rationalization and Crop Diversification
in Non-granary Irrigated Areas in Malaysia*

Volume 5-11

State Report - Kelantan

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RESULTS OF EVALUATION FOR CROP DIVERSIFICATION POTENTIAL

1. INTRODUCTION

This is the State Report - Kelantan, Volume 5-11, of the Final Report for Feasibility Study on Rationalization and Crop Diversification in Non-granary Irrigated Areas in Malaysia. This report includes the criteria, procedure and results of evaluation of crop diversification potential of non-granary irrigation schemes in the State of Kelantan.

Detailed information on the criteria and procedure for evaluation is presented in Volume 2 of the Final Report, and the results of evaluation of crop diversification potential for each scheme are given in the Appendix attached to this Volume.

2. GENERAL CONDITIONS

2.1 Socio-economic Situation

Kelantan borders Thailand in the northeastern part of the Peninsular, and shares the boundaries with Perak to the west, Pahang to the south, and Terengganu to the east, facing the South China Sea to the northeast. The physical area is 14,943 km² and divided into 10 administrative districts. The estimated population was 1,040,000 persons in 1985 and 1,120,700 persons in 1988. The population density in 1988 was 75 person/km². Rural population ratio was 70% in 1985 and 69% in 1988. The proportion of population by ethnic group was 93% for Bumiputera, 5% for Chinese, 1% each for Indian and others.

In Kelantan, GDP in 1988 amounted to M\$1,758 million at 1978 constant prices of which 29% came from the agriculture sector followed by both the private and government service sectors of 25% each. Per capita GDP was M\$1,475 in 1986 and slightly increased to M\$1,553 in 1988, while these were the lowest level in the country and far below by M\$2,076 in 1986 and M\$2,035 in 1988. According to the Household Income Surveys, 81,000 households were below the poverty line income and the poverty incidence was 39.2% of the total of 206,600 households in 1984. This situation was improved to a slight extent in 1987 and the poor households were 70,400 with the poverty incidence of 31.6% of the total households of 222,800. The mean monthly income increased from M\$625 in 1984 to M\$667 in 1987 but far below the average of Peninsular Malaysia of M\$1,095 in 1984 and M\$1,074 in 1987, respectively.

Regarding the social infrastructure service condition in 1985, the coverage was 62.8% by electricity, 65.0% by urban piped water supply and 30.0% by rural piped water supply. The length of road network was 2,125 km and the road density was 140 m/km². Per capita road length was 2,020 m every 1,000 population. The registered number of motor vehicles was 165 per 1,000 population. There were 1.6 doctors

and 1.5 acute care hospital beds per 1,000 population. Each health center took care of 16,400 rural people. The infant mortality was 3.0 per 1,000 population, being the highest level of throughout the country.

Under the revised 5MP, the Federal Government and NFPEs allocated M\$1,905 million as development expenditure accounting for 6.1% of the total to all the States. The main agencies for the economic development of the State are the Kelantan State Economic Development Corporation (PKINK), the Kemubu Agricultural Development Authority (KADA) which is a statutory body under the Ministry of Agriculture, the Kelantan Selatan Development Authority (KESEDAR) under the Ministry of Land and Regional Development. The role of PKINK in developing the State is very broad but currently it is involved mainly in industrial development, housing and shop housing projects, urban renewal programme, tourism and investment through establishment of subsidiary companies. The objective of KADA is to raise the standard of living of the farmers in the KADA area amounting to about 57,500 ha under the jurisdiction including five irrigation schemes, namely, Kemubu of 19,000 ha, Lemal of 9,300 ha, Pasir Mas of 2,100 ha, Salor of 850 ha and Alor Pasir of 230 ha. At present, KESEDAR is undertaking seven schemes such as land development scheme, land rehabilitation, Kampung development, urban development, infrastructure development, investment and tourist development. Through these development programmes, nine areas have been newly opened up for settlement and cultivation covering 15,088 ha in total including land of 6,302 ha under oil palm and 8,782 ha under rubber. A total of 25 land schemes has been rehabilitated covering rubber area of 23,803 ha and orchard area of 5,266 ha.

2.2 Present Agriculture

In Kelantan, the total area used for agricultural purposes is about 350,400 ha and its proportion to the State's territory is 23%. Some 79,700 ha are under paddy and 278,100 ha are grown with tree crops.

The coverage of tree crops is 43,460 ha for oil palm, 17,260 ha for rubber, 16,070 ha for coconut and 210 ha for cocoa. Miscellaneous crops are grown in a total area of 26,640 ha with 107 kinds as a whole. Tobacco is the most popular and its planted area amounts to 8,280 ha. Durian, rambutan and banana are also common in miscellaneous crop cultivation and cover 8,135 ha in total. In 1987, the States produced paddy of 99,500 tons, oil palm of 311,000 tons as FFB and rubber of 46,400 tons.

The FAMA's projection on the total demand for food crops, vegetables, fruits and freshwater fishes is summarized below.

Produce	Net Consumption (ton)	Outflow to Other States (ton)	Post-harvest Loss (ton)	Total Demand (ton)
Food crops	8,820	1,519	2,585	12,924
Vegetables	48,504	22	12,132	60,658
(Leafy)	(14,014)	(5)	(3,505)	(17,524)
(Fruit)	(23,769)	(11)	(5,945)	(29,725)
(Root)	(7,831)	(6)	(1,959)	(9,796)
(Other)	(2,890)	(0)	(723)	(3,613)
Fruits	62,240	53	15,573	77,866
Freshwater fishes	695	0	174	869

The total supply to local markets in Kelantan is estimated to be 22,907 tons for food crops, 2,617 tons for vegetables, 10,492 tons for fruits and 59 tons for freshwater fishes. The projected market potential is indicated below.

Produce	Market Potential (ton)	Major Crops (ton)
Food crops	-9,983	Sweet potato (6,355)
Vegetables	58,041	
(Leafy)	(16,578)	Cabbage (7,454), Mustard (4,423)
(Fruit)	(27,954)	Cucumber (8,195), Yard long bean (4,112)
(Root)	(9,796)	Shallot (9,346)
(Other)	(3,713)	Garlic (2,244)
Fruits	67,374	Banana (18,242), Durian (9,386)
Freshwater fishes	754	Haruan (363)

2.3 Present Situation of Non-granary Irrigation Schemes

In Kelantan, the total area used for agricultural purposes is about 350,400 ha covering 23% of the State's territory. Some 84,426 ha are under paddy and 228,100 ha are grown with tree crops. The coverage of productive tree crops is 43,460 ha for oil palm, 17,260 ha for rubber, 16,070 ha for coconut and 210 ha for coconut. Miscellaneous crops are grown in a total area of 26,640 ha with 107 kinds as a whole. Tobacco is the most popular and its planted area amounts to 8,280 ha. Durian, rambutan and banana are also common in miscellaneous crop cultivation and cover 8,135 ha in total. The total irrigable paddy fields are 49,474 ha comprising granary irrigated areas of 38,807 ha and non-granary irrigated areas of 10,667 ha.

- Number of schemes : 77
- Total irrigable area : - main season = 10,667 ha
- off season = 3,185 ha
- Type of scheme : gravity; 55 pump; 20
gravity/pump (tubewell); 2
- Irrigation water resources availability by scheme
(except tubewell scheme)
 - : - sufficient for double cropping; 24
 - insufficient for off season
presaturation; 14
 - limited to only single cropping; 37
- Average cropping intensity (paddy + upland crops)
for previous three years
 - : - main season = 68%
 - off season = 20%
- Average cropping intensity (paddy only)
for previous three years
 - : - main season = 64%
 - off season = 16%
- Utilization of scheme - main season paddy cropping
intensity of 100%; 7

- main season paddy cropping intensity of more than 50%; 57
- main season paddy cropping intensity of less than 50%; 8
- fully idle; 5

In Kelantan, non-granary irrigation schemes are distributed along the Golok river flowing down on the Thai border, along the Kelantan river and in the downstream right bank areas of the Kelantan river. Every downstream area has been suffering from frequent occurrence of flood, while middle and upstream areas are facing with water shortage problems derived from small catchment areas. Under such situation, single cropping of the off season paddy is practiced for securing stable yield in some flood-affected non-granary scheme areas where irrigation water is available during that time. Double cropping and farm mechanization are undertaken in limited scheme areas. Due to the small farm size, there is very few potential of extending farm mechanization in most schemes.

Traditionally farmers adhere to paddy cultivation and currently they can hire seasonal labor from Thailand at cheaper cost. As a result, they can expect to earn farm income for meeting their needs to a large extent. No strong intention is observed in Kelantan in terms of crop diversification except tobacco cultivation in the downstream right bank areas of the Kelantan river.

3. EVALUATION OF CROP DIVERSIFICATION POTENTIAL FOR NON-GRANARY IRRIGATION SCHEMES

This section presents a general concept, criteria and procedure of evaluation in order to facilitate understanding of the results of the evaluation of potential for crop diversification by scheme attached in Appendix of this volume. A detailed explanation of the evaluation is given in Volume 2.

3.1 Basic Considerations for Evaluation

The intended shift from paddy cultivation to diversified crops in non-granary irrigated areas would invariably require investigations on a range of issues such as the selection of the appropriate crops based on agronomic and economic factors, institutional support systems, and additional investments for providing new or upgrading of facilities. Since the areas concerned are both extensive and widespread, it is only proper that a coordinated study be carried out in order to evaluate the prevailing scheme conditions and to prepare crop diversification strategies including the selection of the suitable crops.

To prepare crop diversification options for revitalization of the non-granary irrigation schemes with a wide range of constraints, the potential for crop diversification in each scheme area has to be evaluated and then indicated as the crop diversification patterns. Such procedure is to be defined as evaluation of resource potential for crop diversification. Its outcome will provide indications of the crop diversification patterns being a basis for formulating development plans and programs.

For non-paddy crops, irrigation has recently become an important input for crop production in Malaysia like irrigation for paddy. In order to accommodate crop diversification in the existing rice-based irrigation systems, special considerations are required for

the differences between paddy and non-paddy crops as well as paddy farmers behavior in addition to basic parameters such as soil-plant-water relations, water resources, climate, geographic, economic and social.

3.1.1 Differences between paddy and non-paddy crop

Paddy is very tolerant to fully saturated or flooded conditions, which is the main reason for it being planted in flood prone areas with heavy soils and poor drainage conditions. Non-paddy crops on the other hand need non-saturated and well aerated soils for healthy growth. Therefore poorly drained areas as found in most of the schemes can seriously affect growth and yields of non-paddy crops.

Sensitivity to water stress varies between their growth stages and also crop types. Cultural practices and production systems can be vastly different between types and varieties and the produce also tend to be more perishable than paddy.

These basic differences need some general criteria for the system design to be established. Irrigation for paddy is designed for continuous supply and drainage adequate for excess surface flow. Whereas for non-paddy, supply is intermittent since demand depends on available soil water storage and evapotranspiration rate. Besides irrigation, water is also required for fertilizer and pesticide application for non-paddy crops. Its drainage design will need to consider both surface and subsurface flows.

3.1.2 Paddy farmers' behavior

Paddy areas have a very long history of mono-cropping, and traditions and culture have evolved around paddy. Most paddy farmers are usually experienced and knowledgeable only in paddy production. Thus, diversification will require changes to deep-rooted life styles, values and technology of paddy farmers. On the other hand,

diversification will also require appropriate adjustments on its part to match with their behavior.

In this connection, a Socio-economic Sample Survey was performed in all non-granary irrigation scheme areas to identify paddy farmers' intentions and local community opinion leaders' view towards crop diversification. The results of the Socio-economic Sample Survey are presented in Appendix B for farmers' intentions and Appendix C for the leaders' opinions.

3.1.3 Determination of categories

In deciding options for crop diversification, it is apparent that there exists various possibilities for diversifying land utilization such as double cropping of paddy, combination of the main season paddy with short-term crops in the off-season, mix-farming, perennial tree crop cultivation, freshwater aquaculture, and cattle grazing ground. Any one of these taken singly or in combination with any other option can be a category. Taking into consideration the purpose of the evaluation under the Study, the following eight categories are to be made:

- Category 1 : Schemes to be converted to high value crop cultivation under irrigated condition,
- Category 2 : Schemes to be converted to tree crop cultivation;
- Category 3 : Schemes to introduce two-cropping system planting paddy during the main season and short-term annual crops during the off-season;
- Category 4 : Schemes to be converted to animal feeding crop cultivation or cattle raising fields;
- Category 5 : Schemes to be converted to freshwater fish culture ponds;
- Category 6 : Schemes to be positively maintained as mini-granary areas;
- Category 7 : Schemes to be maintained as paddy cultivation areas within a definite period of time for social welfare purposes and thereafter to be further categorized; and
- Category 8 : Schemes to be converted to housing/industrial and other uses.

3.2 Criteria for Evaluation

3.2.1 General

Inevitably, crop diversification involves the question of which crop or crops to be recommended based on a variety of factors. In the process to evaluate potential for crop diversification, each non-granary irrigation scheme is subjected to a screening process on a variety of factors. For this purpose, seven main factors are taken into account.

- Water resources availability,
- Farmers' intention towards continuation of paddy cultivation and introduction of crop diversification,
- Land suitability for carrying out direct seeding and mechanized plowing and harvesting for growing paddy,
- Soil and climatic suitability and limitations for the cultivation of specific crops,
- Crop profitability,
- Crop marketability, and
- Investment performance with regard to crop diversification.

3.2.2 Water resources availability

The evaluation of water resources in quantitative and qualitative terms is based on the information collected during the Scheme Inventory Survey. Reconfirmation of water resources availability is carried out through supplementary investigations on rainfall data, catchment characteristics, river discharges, reference on the existing hydrological procedures, and previous study reports on the availability of water resources on a specific catchment. The criteria for evaluating water availability of each non-granary irrigation scheme is expressed in the following four terms:

- A. Irrigation water is sufficient for double cropping of paddy;
- B. Sufficient for supplying irrigation water to the main season paddy cultivation but insufficient for meeting presaturation water requirement for the off season paddy cultivation;
- C. Limited to single cropping of the main season paddy and upland crop cultivation; and
- D. Insufficient for paddy cultivation but no limitation to grow upland crops for the main season.

The detailed information on water resources evaluation for the various non-irrigation schemes is compiled in Appendix A of Volume 2.

3.2.3 Farmers' intention towards continuation of paddy cultivation and introduction of crop diversification

This factor is important as the success of the crop diversification program is depended on farmers' willingness to participate and also their attitude and preference to move towards a more diversified cropping pattern. To evaluate this factor, the Socio-economic Sample Survey results are referred to in respect to paddy farmers' intention towards continuation of paddy cultivation and introduction of crop diversification.

The evaluation criteria established are based on the proportion of respondent farmers who strongly intend to continue the present paddy cultivation pattern among the total sample farmers and that of paddy planted area for the last three years (1985-1987) against the irrigable area of each scheme. The evaluation method is to identify the State in which more than half of the respondent farmers show intentions towards continuation of paddy cultivation and to screen out the scheme with paddy cropping intensity of more than 50%.

- Schemes possible for promoting double cropping of paddy in case that the proportion of intended farmers against the total samples in each State is over 50%. Also, possible for promoting double cropping of paddy if the scheme-by-scheme planted area for the last three years is more than 50% every year in case of the State with the above proportion of less than 50%.

- Schemes impossible for promoting intensive paddy cultivation when the above proportion on the State basis is less than 50% and the cropping intensity is below 50%.

3.2.4 Land suitability for mechanized farming practices

This factor is optionally evaluated to clarify suitability of undertaking modern farming practices of paddy cultivation in case of schemes where intensive double cropping of paddy can be promoted. To evaluate this factor, special attention is paid to soil physical characteristics, size of scheme, availability of mechanical service centers and distance between schemes and available service sources. The evaluation criteria is established taking into account soil physical characteristics among others as below.

- Schemes suitable for mechanized farming practices are expressed in terms of the existence of alluvial soils.
- Schemes not suitable for mechanized farming practices are indicated by inappropriate soil physical conditions derived from peat soils and organic mac soils which are featured by low bearing capacity for using tractors and harvesters commonly used in Malaysia.

The detailed information is presented in Appendix D of Volume 2.

3.2.5 Soil and agro-climatic suitability and limitations for the cultivation of specific diversified crop

These factors are the basis to identify crops suitable for each scheme from the agronomic viewpoints. In identifying suitable crops, soil criteria for optimum crop growth is prepared for the following 28 crop groups referring to documents such as "Soil-Crop Suitability Classification for Peninsular Malaysia" prepared by the Department of Agriculture (DOA), "The Land Capability Classification" collected from DOA, Sabah and "Sarawak Land Capability Classification and Evaluation for Agricultural Crops" issued by DOA, Sarawak.

Short-term food crops:

maize, sorghum, wet paddy and upland rice as food crops,
and ginger, groundnut and vegetables as vegetable crops,

Fruits:

mango/durian, guava, banana, cashewnut, papaya, citrus,
pineapple and watermelon,

Perennial industrial crops:

coconut, oil palm, cocoa, rubber, sago palm, coffee, tea,
clove, tobacco, sugarcane and pepper,

Feeding crops:

fodder grasses and pasture.

As the basic information to evaluate soil suitability and limitations, soil services that distribute in each scheme are identified referring to the available reconnaissance soil maps and those limitations to growth of each of 28 crops are evaluated on the basis of the soil criteria. The evaluated limitations are expressed in the form of soil suitability classed with a symbol indicating the specific limitation such as acid sulphate layer, depth to compacted layer, drainage, nutrient imbalance, organic horizon, salinity, and texture and structure. The followings are the grade of limitations to crop growth.

- Class 1 soils with no limitation or only minor limitations to crop growth are suitable for the widest range of crops.
- Class 2 soils with moderate limitations to crops growth are suitable for a narrower range of crops than Class 1 soils. Minor management practices according to limitations are required.
- Class 3 soils with one serious limitation to crop growth are restricted to an even narrower range of crops. Necessary management practices involve moderate expenses.
- Class 4 soils with more than one serious limitation to crop growth are suitable for a very narrow range of crops with provision of major amelioration measures.
- Class 5 soils with at least one very serious limitation to crop growth are least suitable for crop growth.

Through the identification and grading of limitations to crop growth for soil series which is identified in each non-granary irrigation scheme, soil suitability of 28 crops is classified into four groups such as suitable, marginally suitable, very marginally suitable and not suitable for promoting crop diversification.

The correlation between suitability grades and soil classes as follows:

Suitable:

Class 1 soils,

Marginally suitable:

Class 2 soils and partly Class soils of which limitations can be physically improved,

Very marginally suitable:

Class 3 soils with limitations of which limitations can be hardly graded up by direct physical measurements, and

Not suitable:

Classes 4 and 5 soils.

After evaluating soil suitability in the above procedure, identified crops with suitable to very marginally suitable grades are to be succeedingly confirmed from the agro-climatic viewpoint. For this purpose, two basic references are utilized, being "Agro-ecological regions in Peninsular Malaysia" and "Climatic and Agricultural Planning in Peninsular Malaysia" both prepared by the Malaysian Agricultural Research and Development Institute (MARDI). Among the identified crops, those which are not suited to regional climatic conditions in the specific scheme are eliminated from a list of suitable crops identified on the basis of soil conditions.

The detailed information is presented in Appendix D of Volume 2.

3.2.6 Crop profitability

To confirm the net income difference between paddy cultivation and other diversified crops, crop budget is computed based on average crop yield under normal farming practices, production cost and selling price. For this, "Guideline on Economic Viability of Selected Crops" prepared by the Ministry of Agriculture (MOA) is used as the basic reference. This includes crop budget data on 25 food crops and vegetables, 14 fruits and one industrial crop. With regard to other industrial crops, data on crop budgets are supplemented from MOA, DOA and agencies concerned. All the information is presented in Appendix E of Volume 2. The evaluation criteria is set up as below.

- Crop suitable for promoting diversified cropping are more profitable as compared with net income derived from the single cropping of paddy.
- Crops not suitable for incorporating in diversified cropping are less profitable in comparison with the net income obtained from the single cropping of paddy.

3.2.7 Crop marketability

This factor is also very important when crop diversification is promoted in specific areas, because most paddy farmers are aware that success of diversified cropping especially for short-term upland crops demand largely on availability of markets where they can expect to sell their produce at profitable price levels.

In terms of export-oriented perennial crops, the respective responsible agencies provide smallholder farmers with easy access to the existing marketing channel actively maintained. As for short-term upland crops, the Federal Agricultural Marketing Authority (FAMA) is responsible for promotion of marketing activities to encourage growers. Every year, FAMA gives a guideline for market potential in each State for about 30 varieties of vegetables and cash crops, 20 varieties of fruits and 15 kinds of freshwater fishes and livestock products. The data on market potential is compiled in Annex F of

Volume 2. By referring to this guideline, the crop marketability is evaluated in terms of quantified market potential on the administrative district-by-district bases. The evaluation criteria is set up as below.

- Crops suitable for promoting crop diversification have less marketable volume as compared with the demand of a specific administrative district where one particular scheme is located major market situated nearby or easily accessed from the scheme.
- Crops not suitable for promoting crop diversification have marketable quantity exceeding over more than twice of the demand in the specific administration district.

3.2.8 Investment performance with regard to crop diversification

This factor is evaluated for the purpose of judging the priority among categories and crops of which suitability to promote crop diversification are both identified. The evaluation procedure is based on economic viability indicated by net present value and benefit-cost ratio.

3.3 Procedure of Evaluation

3.3.1 General procedure

The potential of crop diversification for each non-granary irrigation scheme is evaluated category by category based on the following seven stepwise procedure as illustrated in Fig. 1.

- Step 1 : Evaluation water resources availability,
- Step 2 : Evaluation of farmers' intention towards continuation of paddy cultivation and introduction of crop diversification,
- Step 3 : Evaluation of land suitability for carrying out direct seeding and mechanized plowing and harvesting in growing paddy,

Step 4 : Evaluation of soil and climatic suitability and limitations for the cultivation of specific crops,

Step 5 : Evaluation of crop profitability,

Step 6 : Evaluation of crop marketability, and

Step 7 : Evaluation of investment performance with regard to crop diversification.

The flow chart of evaluation procedure is illustrated in Fig. 2. In general, evaluation of factors in each Category starts from Step 1 and ends Step 7 for the respective schemes. As Step 3 is the optional gate to evaluate land suitability for conducting mechanized paddy cultivation practices, all Categories other than Category 6 jumps evaluation in Step 3. Before entering Step 1, the following two items are preliminarily checked to understand the present condition on how a scheme is utilized by beneficially farmers:

- Type of irrigation water intake facilities, and
- Planted area for the last three years.

3.3.2 Evaluation procedure for Category 1

In Step 1, one scheme has potential for promoting intensive short-term upland crop cultivation under irrigated condition if available water resources are enough for double cropping of paddy and short during the presaturation period of the off season. Upland crops can be grown maximum twice a year under irrigated condition in case that available water resources can meet irrigation water demand only for the main season paddy. Irrigated cropping of upland crops are limited to the main season if available water resources are insufficient for paddy cultivation. Therefore, each scheme can pass Step 1 with the exceptions of control drainage and inundation schemes.

In Step 2, schemes are evaluated as possible for promoting crop diversification and then go to Step 4. To provide information on technical and economical choice of upland crops if requested, other schemes also move down to Step 4 additionally.

In Step 4 after skipping Step 3, suitable upland crops are firstly identified through soil-crop-suitability assessment. Further, suitable varieties of upland crops are selected among the above crops identified paying special attention agro-climatic condition in lowland areas. If there is an identified and selected crop, schemes enter into the next step.

In Step 5, net income data of the selected crops are compared with that earned from single cropping of paddy. In case of higher net income expected, schemes shift to the next step.

In Step 6, marketability of upland crops confirmed its profitability are evaluated through comparison with the local demand in the District where schemes are located and in the local marketing centers. Usually, mono-cropping of the specific upland crop is very risky from the viewpoints of crop management and marketing. In this connection, crop production is estimated based on such assumed figures as the national average yield and the maximum planted area equivalent to 50% of the scheme's irrigable area for each of profitable crops.

In Step 7, economic viability is evaluated in terms of benefit-cost ratio and net present value. For this, benefit and cost are estimated on the basis of the assumption as below. The result is used for determining the priority among marketable upland crops and in comparison with other categories.

- Cost and benefit are estimated on the unit area basis,
- Cost required for upgrading drainage and access conditions is assumed to be M\$8,000/ha and time required for constructing these on-farm service facilities is one year, and
- Benefit born before diversification depends on single cropping of paddy and after diversification comes from marketable upland crops in the same planted area of paddy. Crop budget figures refer to those used in evaluating crop profitability. Buildup period to reach the target yields of upland crops is also assumed to be five years.

3.3.3 Evaluation procedure for Category 2

In Step 1, consideration is given only to improve drainage and farm access conditions for evaluating potential for converting paddy fields to perennial crop fields. Thus, all the schemes except control drainage and inundation types go to the next step.

In Step 2, the same procedure taken for Category 1 is applied and therefore schemes jump Step 3 and enter to Step 4.

In Step 4, suitability of fruit and industrial tree crops is assessed from the viewpoint of soil-crop suitability relationship. Then, identified tree crops as suitable are evaluated on the basis of agro-climatic condition of each scheme. When a tree crop is identified and selected, schemes shift to the next step.

In Step 5, annualized net income is calculated according to the economic life of a tree crop and then compared with net income gained from single cropping of paddy. If the annualized income is higher, schemes enter into the next step.

In Step 6, profitable tree crops are evaluated to confirm those marketability as compared with local demand on the administrative district basis firstly and in major markets secondly. Crop production amount is equal to the annualized yield used for estimate of crop profitability.

In Step 7, the same procedure as taken for Category 1 is applied. Cost required for upgrading drainage and farm access conditions is assumed to be M\$4,000/ha for scheme of which soils have marginally drainage limitation to crop growth and M\$8,000/ha for the case of very marginally drainage limitation.

3.3.4 Evaluation procedure for Category 3

In Step 1, schemes with sufficient water resources for the main season paddy cultivation are identified as possible schemes where two cropping system can be promoted. While, schemes with water shortage problems during the main season are deleted from further evaluation in Step 2 and onward.

In Step 2, schemes that are evaluated as possible for promoting crop diversification and intensive double cropping of paddy go to Step 4. In case of schemes with no possibility of improving the present paddy cultivation pattern, further evaluation in Step 4 and onward is made to get information on suitable crops with those profitability and marketability as reference data.

In Step 4 after skipping Step 3, short-term upland crops suitable for the off season cultivation are identified resulting from assessment of soil-crop-suitability. Then, crop selection is made after confirming crop adaptability to agro-ecological situation in each scheme. If there is identified and selected crop, schemes move to the next step.

In Step 5, net income of the main season paddy is estimated taking into account increase in average unit yield from 2.25 ton/ha to 3.5 ton/ha through improvement of farming practices. The off season upland crops have the same yield level of Category 1.

In Step 6, evaluation of marketability is made for the off season upland crops by applying the similar method to Category 1.

In Step 7, additional investment requirement is assumed to be M\$4,000/ha. Benefit estimate and economic viability confirmation are made following the same procedure employed for Category 7.

3.3.5 Evaluation procedure for Category 4

In Step 1, no attention is paid to availability of water resources so that all the schemes can pass this step.

In Steps 2 and 3, no evaluation of these two factors is made as possibility of introducing this Category is examined from the technical and economical viewpoints.

In Step 4, soils with excessively drained feature are evaluated as possible for converting paddy fields to animal grazing land. In case of growing animal feeding crops, those suitability is assessed from the soil-crop-suitability assessment. When both results indicate as suitable for conversion of paddy fields for the livestock purpose, schemes go to the next step.

In Step 5, profitability is evaluated focussing upon the contribution of both grazing and feeding practices to livestock outputs. For this purpose, the average annual income is estimated based on beef production value obtained from unit yield of animal feeding crops. If the profit is higher than that derived from single cropping of paddy, schemes enter into the next step.

In Step 6 and , marketability is evaluated with the same procedure of Category 1.

In Step 7, additional investment cost is assumed to be M\$500/ha for the use of paddy fields to rear animals and M\$4,000/ha for growing animal feeding crops. Benefit is estimated referring to the result of profit evaluation.

3.3.6 Evaluation procedure for Category 5

In Step 1, special attention is paid to availability of sufficient water resources to meet daily freshwater requirement. If the available water resources are enough to grow paddy twice a year, schemes enter into the next step. For the case of control drainage schemes located along the coast in Sarawak, intake of brackish water is evaluated according to topographic condition.

In Steps 2 and 3, all the schemes with sufficient water resources skip these two steps with the same reason of Category 4.

In Step 4, soils with heavy texture are prerequisite to convert paddy fields to fish ponds. From the agro-climatic viewpoints, schemes with no effect of flooding are recognized as possible for promoting freshwater fish pond culture. Schemes that can pass these two checking points move to the next step. In case of brackish water fish culture, flooding or excess inundation problem is only assessed.

In Step 5, profitability is evaluated on the basis of annualized net income earned from carp, freshwater shrimp and brackish water prawn cultures by in excavated fish pond with modern practices. If higher profit is expected as compared with single cropping of paddy, schemes shift to the next step.

In Step 6, the evaluation procedure of marketability is the same as Category 1.

In Step 7, required cost for excavating fish pond is assumed to be M\$10,000/ha. Benefit is estimated by referring to the profitability evaluation results.

3.3.7 Evaluation procedure for Category 6

In Step 1, supply of irrigation water for the off season is the most important key factor for this category. Schemes pass this step if available water resources can meet the normal irrigation water demand for the off season paddy.

In Step 2, schemes evaluated as possible for promoting double cropping of paddy enter into the next step.

In Step 3, land suitability for performing mechanized farming practices is evaluated. Schemes identified as suitable pass this step and go to the next step.

In Step 4, soil and agro-climatic suitabilities are reconfirmed and schemes with no limitation shift to the next step.

In Step 5, assumption is made in terms of increase in unit yield of paddy from 2.25 ton/ha to 3.5 ton/ha per one season. Schemes pass this step.

In Step 7 after skipping Step 6, cost is assumed to be M\$4,000/ha to improve on farm-service facilities matching with undertaking of mechanized farming practices. Benefit estimate is made referring the results of profitability evaluation.

3.3.8 Evaluation procedure for Category 7

Evaluation of potential for the Category 7 is to be made in case that a scheme is presently used for the paddy cultivation purpose and no potential use for the Categories 1 to 6 is identified.

In Step 1, schemes with available water resources for the main season paddy cultivation goes to the next step.

In Step 2, schemes shift the next step if identified as impossible for promoting crop diversification from the social viewpoint.

In Step 4 after skipping Step 3, soil limitations to growth of paddy are reconfirmed. If schemes have poorly drained soils caused by frequent flooding and stagnant water problems, these are deleted from further evaluation. In this connection, inundation and controlled drainage schemes can be taken into consideration only for the case that more than half of the irrigable area is grown with paddy for the last three years. All the schemes that pass this step are identified as Category 7 without further evaluation of factors in Step 5 and onward.

3.3.9 Evaluation procedure for Category 8

If no crop diversification potential is found through evaluation for the Categories 1 to 7, the following factors are to be evaluated. These are water availability and soil limitation to crop growth. Schemes with no available water resources and unsuitable soils for crop growth are defined as Category 8.

4. RESULTS OF EVALUATION

The evaluation results of crop diversification potential are adjusted to agro-climatic factors, regional market demand for diversified crops and investment performance. The State of Kelantan is divided into three agro-ecological zones, Regions 24 to 26. As described in Appendix D of Volume 2, each Region has different advantages in growing perennial lowland crops. Taking into consideration this regional climatic suitability, recommendable crops are selected as shown in Table 1 and some of crops judged as suitable in each step of the potential evaluation are deleted.

Regarding the Category 6, adjustment is made on the basis of such conditions as scheme size of more than 100 ha and main season paddy planted area covering more than the half of irrigable area in each scheme.

If marketable quantities of specific crops produced in one non-granary irrigated area is over the demand within an administrative district, possibility of marketing to large consumption centers, Penang and Kuala Lumpur, is examined by comparing surplus of marketable quantities with the regional market demand.

As a result of above process, the crop diversification potential is adjusted to the present situation category by category for each scheme. Table 2 shows the summary of crop diversification potential evaluation. The process of evaluation is attached to this Volume 5 as Appendix in a form of scheme-by-scheme description sheet.

Among 77 non-granary irrigation schemes as shown in Table 2, 16 schemes have the highest potential for the Category 1 and another 18 schemes for the Category 2. There are 11 schemes to which the first priority is put for the Category 6 with potential for crop diversification under the Categories 1 to 3. In addition, 12 schemes are classified as the Category 3 and 20 schemes as the Category 7 both having the first priority.

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Tables & Figures

Table 1 Priority Order of Selected Crops for Each Scheme

State : Kelantan (1/3)

Code No.	Scheme	Annual Crops	Perennial Crops
KN001	Jegor		DM
KN002	R.T. Bendang Muring	SP, VG, GG*	DM, CN, SC, CR
KN003	Danan	SP, VG*	
KN004	Batu Balai	SP, VG*	
KN005	Padang Lindung	SP, VG*	
KN006	Telosan Rasau	SP, VG*	
KN007	R.T. Sg. Yong	DP, VG*	
KN008	Pertok Lama	SP	DM
KN009	Hilir Sat I	SP	DM*
KN010	Galang	SP	DM, FC
KN011	Ulu Sat	SP	DM*
KN012	Putat Mak Sari	SP	DM
KN013	Bagan I	SP	DM
KN014	Sg. Dewan	SP	DM*
KN015	Bagan II	SP	DM*
KN016	Sg. Rusa	SP	DM*
KN017	Pak Yam	SP	DM
KN018	Meranti	DP, VG	
KN019	Repek	DP, VG*	
KN020	Sg. Pinang	SP, VG	
KN021	Kubang Sawa	SP, VG, GG*	DM, CN, SC, CR
KN022	Pasir Hor	SP, VG*, GG*	CN, SC, DM*, CR*
KN023	Bkt. Jering	SP	DM*
KN024	Jerimbong	SP	DM*
KN025	Kuala Balah	SP	DM*

Remarks: Priority order is shown from left to right for each crop group.

*; Needs for regional marketing promotion

DP; Double cropping of paddy

SP; Single cropping of paddy

VG; Vegetables

GG; Ginger

DM; Durian/mango

CN; Cashewnut

CR; Citrus

PL; Pineapple

RB; Rubber

TB; Tobacco

SC; Sugarcane

Table 1 Priority Order of Selected Crops for Each Scheme

State : Kelantan (2/3)

Code No.	Scheme	Annual Crops	Perennial Crops
KN026	Lubok Bongor	SP	DM*
KN027	Rengas	SP	DM
KN028	R.T. Sg. Kenor	SP	DM
KN029	R.T. Keluat	SP	DM
KN030	Hilir Sat II	DP, VG*, GG*	
KN031	Sg. Labok	SP, VG*, GG*	
KN032	Bagan III	DP, VG*, GG*	CN, SC, DM*, CR*
KN033	Pulai Chondong	SP, VG*	CN, SC, DM*
KN034	Lubok Awah	SP, VG, GG*	DM, PL, CN, SC, CR*
KN035	R.T. Bedal	SP, VG	DM, CN, SC, CR, PL*
KN036	R.T. Enggong	VG, SP, GG*	DM, CN, SC, CR, PL*
KN037	R.T. Lapan Agor	VG, SP, GG*	DM, CN, SC, CR, PL*
KN038	Rantau Panjang I	SP, VG*	
KN039	Serdang	DP, VG*	DM, CN, SC, CR*
KN040	Gual Ipoh	SP, VG*, GG*	DM, CN, SC, PL*, CR*
KN041	R.T. Air Cina Kelubi	SP	DM
KN042	Nibong	SP	DM, RB
KN043	R.T. Blok Ulu Kusial	SP, VG, GG*	DM, CN, SC, PL*, CR*
KN044	R.T. Gelugor	VG, SP, GG*	DM, CN, SC, CR, PL*
KN045	Lawang Air Batu & Kelisar	SP	RB, DM*
KN046	R.T. Lubok Berangan	DP, VG*, GG*	DM, CN, SC, PL*, CR*
KN047	Ternang Ulu	VG, SP, GG*	DM, CN, SC, CR, PL*
KN048	Panjang	SP, VG, GG*	DM, PL, CN, SC, CR
KN049	Gebok	SP, VG, GG*	DM, PL, CN, SC, CR
KN050	Jelakong	VG, SP, GG*	DM, CN, SC, CR, PL*

Remarks: Priority order is shown from left to right for each crop group.

*; Needs for regional marketing promotion

DP; Double cropping of paddy

SP; Single cropping of paddy

VG; Vegetables

GG; Ginger

DM; Durian/mango

CN; Cashewnut

CR; Citrus

PL; Pineapple

RB; Rubber

TB; Tobacco

SC; Sugarcane

Table 1 Priority Order of Selected Crops for Each Scheme

State : Kelantan (3/3)

Code No.	Scheme	Annual Crops	Perennial Crops
KN051	Banjar Parah	DP, VG*, GG*	DM, CN, SC, PL*, CR*
KN052	Rawa Bechah Laut	SP, VG, GG*	DM, CN, SC, PL*, CR*
KN053	Air Lanas	DP, VG*, GG*	DM, CN, SC, PL*, CR*
KN054	Bdg. Paku	VG, GG*	DM, CN, SC, CR, PL*
KN055	Bujung Gertak Serong	VG, GG*	DM, CN, SC, CR, PL*
KN056	Rambai	SP, VG, GG*	DM, PL, CN, SC, CR
KN057	Permatang Sungkai	SP, VG*	
KN058	Bdg. Kamal	SP, VG*	
KN059	Bdg. Bukit Merbau	SP, VG*	
KN060	Pertok I	VG, SP, GG*	DM, PL, CN, SC, CR
KN061	Pertok II	SP, VG, GG*	DM, CN, SC, CR, PL*
KN062	Pertok III	SP, VG, GG*	DM, PL, CN, SC, CR
KN063	Mas Ulu	VG, SP, GG*	DM, CN, SC, CR, PL*
KN064	Tualang Kelikir	SP, VG*, GG*	CN, SC, DM*, PL*, CR*
KN065	Suda	SP, VG*, GG*	CN, SC, DM*, PL*, CR*
KN066	Gaung	SP, VG*, GG*	CN, SC, DM*, PL*, CR*
KN067	Che Wa	VG, SP, GG*	DM, CN, SC, PL*, CR*
KN068	Bechah Pauh	SP, VG*, GG*	CN, SC, DM*, PL*, CR*
KN069	Batu Pahat	VG, SP	
KN070	Bdg. Ujit	VG, SP, GG*	DM, CN, SC, CR, PL*
KN071	Bakat I	VG, SP	
KN072	Bdg. Senor	VG, SP	
KN073	Bdg. Pauh	SP, VG	DM, CN, SC, CR, PL*
KN074	Bdg. Bukit Cina	SP, VG*, GG*	CN, SC, TB, DM*, PL*, CR*
KN075	Kok Keli	VG, GG*	DM, CN, SC, PL*, CR*
KN076	Joh	SP, VG*	
KN077	Pangong Dalu	VG, SP, GG*	DM, CN, SC, PL*, CR*

Remarks: Priority order is shown from left to right for each crop group.

*; Needs for regional marketing promotion

DP; Double cropping of paddy

SP; Single cropping of paddy

VG; Vegetables

GG; Ginger

DM; Durian/mango

CN; Cashewnut

CR; Citrus

PL; Pineapple

RB; Rubber

TB; Tobacco

SC; Sugarcane

Table 2 Crop Diversification Potential for Each Scheme

State : Kelantan (1/2)

Code	Scheme	Category							
		1	2	3	4	5	6	7	8
KN001 Jegor		.	*1	.	.	.	.	.	.
KN002 R.T. Bendang Muring		*2	*3	*1	.	.	.	*3	.
KN003 Danan		*4	.	*4	.	.	.	*1	.
KN004 Batu Balai		*4	.	*4	.	.	.	*1	.
KN005 Padang Lindung		*4	.	*4	.	.	.	*1	.
KN006 Telosan Rasau		*4	.	*4	.	.	.	*1	.
KN007 R.T. Sg. Yong		*4	.	*4	.	.	.	*1	.
KN008 Pertok Lama		.	*1	.	.	.	.	*2	.
KN009 Hilir Sat I		.	*4	.	.	.	.	*1	.
KN010 Galang		.	*1	.	.	*3	.	*2	.
KN011 Ulu Sat		.	*4	.	.	.	.	*1	.
KN012 Putat Mak Sari		.	*1	.	.	.	.	*2	.
KN013 Bagan I		.	*1	.	.	.	.	*2	.
KN014 Sg. Dewan		.	*4	.	.	.	.	*1	.
KN015 Bagan II		.	*4	.	.	.	.	*1	.
KN016 Sg. Rusa		.	*4	.	.	.	.	*1	.
KN017 Pak Yam		.	*1	.	.	.	.	*2	.
KN018 Meranti		*1	.	*2	.	.	.	*3	.
KN019 Repek		*2	.	*2	.	.	*1	.	.
KN020 Sg. Pinang		*1	.	*2	.	.	.	*3	.
KN021 Kubang Sawa		*2	*3	*1	.	.	.	*3	.
KN022 Pasir Hor		*4	*2	*4	.	.	.	*1	.
KN023 Bkt. Jering		.	*4	.	.	.	.	*1	.
KN024 Jerimbong		.	*4	.	.	.	.	*1	.
KN025 Kuala Balah		.	*4	.	.	.	.	*1	.
KN026 Lubok Bongor		.	*4	.	.	.	.	*1	.
KN027 Rengas		.	*1	.	.	.	.	*2	.
KN028 R.T. Sg. Kenor		.	*1	.	.	*3	.	*2	.
KN029 R.T. Keluat		.	*1	.	.	.	.	*2	.
KN030 Hilir Sat II		*4	.	*4	.	.	*1	.	.
KN031 Sg. Labok		*4	.	*4	.	.	*1	.	.
KN032 Bagan III		*4	*2	*4	.	.	*1	.	.
KN033 Pulau Chondong		*4	*1	*4	.	.	.	*2	.
KN034 Lubok Awah		*2	*3	*1	.	.	.	*3	.
KN035 R.T. Bedal		*2	*3	*1	.	.	.	*3	.
KN036 R.T. Enggong		*1	*3	*2	.	.	.	*3	.
KN037 R.T. Lapan Agor		*1	*3	*2	.	.	.	*3	.
KN038 Rantau Panjang I		*4	.	*4	.	.	.	*1	.
KN039 Serdang		*4	*2	*4	.	.	*1	.	.
KN040 Gual Ipoh		*4	*1	*4	.	.	.	*2	.
KN041 R.T. Air Cina Kelubi		.	*1	.	.	.	.	*2	.
KN042 Nibong		.	*1	.	.	*2	.	.	.
KN043 R.T. Blok Ulu Kusial		*2	*3	*1	.	.	.	*3	.
KN044 R.T. Gelugor		*1	*3	*2	.	.	.	*3	.
KN045 Lawang Air Batu & Kelisar		.	*2	.	.	.	.	*1	.

Table 2 Crop Diversification Potential for Each Scheme

State : Kelantan (2/2)

Code	Scheme	Category							
		1	2	3	4	5	6	7	8
KN046	R.T. Lubok Berangan	*4	*2	*4	.	.	*1	.	.
KN047	Ternang Ulu	*1	*3	*2	.	.	.	*3	.
KN048	Panjang	*2	*3	*1	.	*3	.	*3	.
KN049	Gebok	*2	*3	*1	.	*3	.	*3	.
KN050	Jelakong	*1	*3	*2	.	.	.	*3	.
KN051	Banjar Parah	*4	*2	*4	.	.	*1	.	.
KN052	Rawa Bechah Laut	*2	*3	*1	.	.	.	*3	.
KN053	Air Lanas	*4	*2	*4	.	.	*1	.	.
KN054	Bdg. Paku	*1	*2	.	.	.	.	.	.
KN055	Bujung Gertak Serong	*1	*2	.	.	.	.	.	.
KN056	Rambai	*2	*3	*1	.	*3	.	*3	.
KN057	Permatang Sungkai	*4	.	*4	.	.	.	*1	.
KN058	Bdg. Kamal	*4	.	*4	.	.	.	*1	.
KN059	Bdg. Bukit Merbau	*4	.	*4	.	.	.	*1	.
KN060	Pertok I	*1	*3	*2	.	.	.	*3	.
KN061	Pertok II	*2	*3	*1	.	.	.	*3	.
KN062	Pertok III	*2	*3	*1	.	*3	.	*3	.
KN063	Mas Ulu	*1	*3	*2	.	.	.	*3	.
KN064	Tualang Kelikir	*4	*1	*4	.	.	.	*2	.
KN065	Suda	*4	*1	*4	.	.	.	*2	.
KN066	Gaung	*4	*1	*4	.	.	.	*2	.
KN067	Che Wa	*1	*3	*2	.	.	.	*3	.
KN068	Bechah Pauh	*4	*1	*4	.	.	.	*2	.
KN069	Batu Pahat	*1	.	*2	.	.	.	*3	.
KN070	Bdg. Ujit	*1	*3	*2	.	.	.	*3	.
KN071	Bakat I	*4	.	*4	.	.	*1	.	.
KN072	Bdg. Senor	*4	.	*4	.	.	*1	.	.
KN073	Bdg. Pauh	*2	*3	*1	.	.	.	*3	.
KN074	Bdg. Bukit Cina	*4	*1	*4	.	.	.	*2	.
KN075	Kok Keli	*1	*2	.	.	.	.	.	.
KN076	Joh	*4	.	*4	.	.	*1	.	.
KN077	Panggong Dalu	*1	*3	*2	.	.	.	*3	.
*1	Super category	16	18	12	.	.	11	20	.
*2	2nd priority category	13	10	14	.	1	.	16	.
*3	3rd priority category	.	22	.	.	6	.	25	.
*4	4th priority category with needs of regional marketing promotion	27	9	27

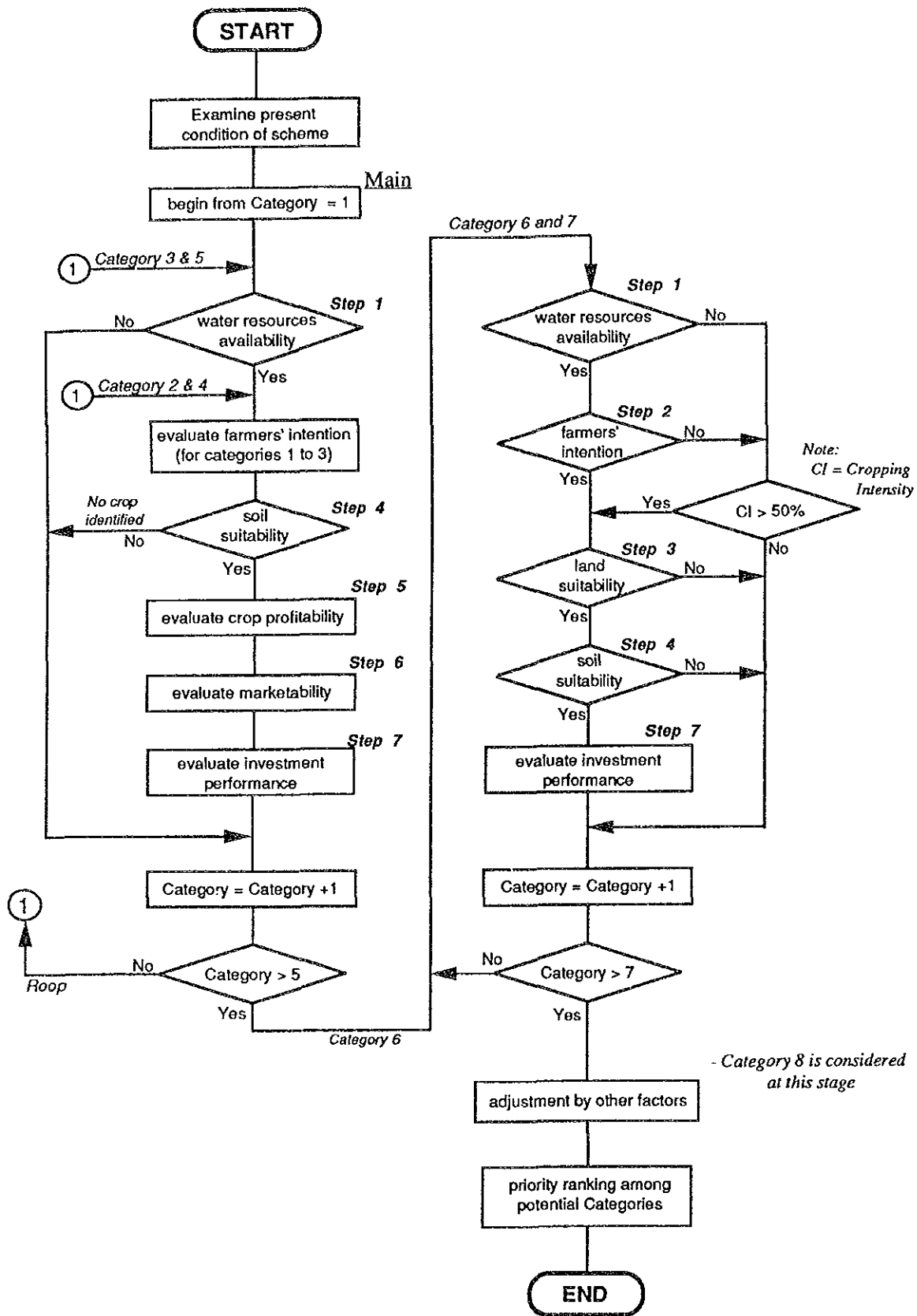


Fig. 2
General Flow of Evaluation
for Crop Diversification Potential

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Appendix

Results of Evaluation for Crop Diversification Potential

Remarks

Category

Category 1	<i>Schemes to be converted to high value crop cultivation under irrigated condition</i>
Category 2	<i>Schemes to be converted to tree crop cultivation</i>
Category 3	<i>Schemes to introduce two-cropping system planting paddy during the main season and short-term annual crops during the off-season</i>
Category 4	<i>Schemes to be converted to animal feeding crop cultivation or cattle raising fields</i>
Category 5	<i>Schemes to be converted to freshwater fish culture ponds</i>
Category 6	<i>Schemes to be positively maintained as mini-granary areas</i>
Category 7	<i>Schemes to be maintained as paddy cultivation areas within a definite period of time for social welfare purposes and thereafter to be further categorized</i>
Category 8	<i>Schemes to be converted to housing/industrial and other uses</i>

Evaluation Item in Each Step

Step 1	<i>Available irrigation water quantity</i>
Step 2	<i>Farmers' intention towards paddy cultivation</i>
Step 3	<i>Land suitability for mechanized farming practices</i>
Step 4	<i>Soil suitability and limitations to diversify crops</i>
Step 5	<i>Crop profitability</i>
Step 6	<i>Crop marketability</i>
Step 7	<i>Investment performance</i>

- Note:
- If any item is examined, steps for the respective categories are indicated with a star mark "*".*
 - In step 7, BIC ratio at the interest rate of 10% is described.*

Evaluation Results of Each Scheme

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Crop Diversification Potential for KN001

Code Number : KN001 Name of Scheme : Jegor
 State : Kelantan District : Tanah Merah
 Type of Scheme : Pump
 Water source : Limited to single cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 16 Off : 15
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : Idle

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		240
				Groundnut	C	A	A		42
				Vegetable	C	A	A		283
2	*	*	*	Durian/Mango	C	A	A	11.0	109
				Guava	C	A	-	3.1	384
				Banana	C	A	A	0.7	168
				Cashewnut	C	A	A		28
				Papaya	C	A	A		400
				Citrus	C	A	A		168
				Pineapple	C	A	A	0.5	384
				Coconut	A	-	A		70
				Oilpalm	C	A	A	0.9	307
				Cocoa	C	A	A	0.6	50
				Rubber	C	A	A		22
				Coffee	C	A	A		14
				Tea	C	A	A		21
				Clove	C	A	A		5
Tabacco	C	A	A		144				
Sugarcane	C	A	A		320				
Pepper	C	A	A		47				
3	*	*	*	Maize	C	-	-		52
				Sorghum	C	-	A		60
				Ginger	C	A	-		240
				Groundnut	C	A	A		42
				Vegetable	C	A	A		283
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5									
6									
7									
8	*	*	*		*	*	*		

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).

* : Potential categories

A : Suitable

B : Marginal suitable due to lack of drainage facilities

C : Marginal suitable due to limited factors other than drainage conditions

- : Not suitable

Crop Diversification Potential for KN002

Code Number : KN002 Name of Scheme : R.T. Bendang Muring
 State : Kelantan District : Tanah Merah
 Type of Scheme : Pump
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 10 Off : 9
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	A	2.5	150
				Groundnut	A	A	A	0.9	26
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>177</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	68
				Guava	C	A	-	3.1	240
				Banana	C	A	A	0.7	106
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>18</u>
				Papaya	B	A	A	0.6	250
				Citrus	B	A	A	2.9	106
				<u>Pineapple</u>	A	A	A	<u>9.5</u>	<u>240</u>
				Coconut	A	-	A		43
				Oilpalm	C	A	A	0.9	192
				Cocoa	C	A	A	0.6	32
				Rubber	B	A	A	0.6	13
				Sago	C	-	A		90
				Coffee	A	A	A	0.7	9
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>13</u>
				Clove	B	A	A	1.1	3
Tabacco	B	A	A	0.7	90				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>200</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>30</u>				
3	*	*	*	Maize	A	-	-		32
				Sorghum	A	-	A		38
				Ginger	B	A	A	2.5	150
				Groundnut	A	A	A	0.9	26
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>177</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	A	<u>2.0</u>	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN003

Code Number : KN003 Name of Scheme : Danan
 State : Kelantan District : Pasir Puteh
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 25 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	-	6,9	443
2	*	*	*	Coconut	B	-	A		110
				Sago	A	-	A		225
3	*	*	*	Vegetable	B	A	-	6,9	443
4	*	*	*	Fodder grasses	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN004

Code Number : KN004 Name of Scheme : Batu Balai
 State : Kelantan District : Pasir Puteh
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 83 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	-	6.9	1,469
2	*	*	*	Coconut	B	-	A		364
				Sago	A	-	A		747
3	*	*	*	Vegetable	B	A	-	6.9	1,469
4	*	*	*	Fodder grasses	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN005

Code Number : KN005 Name of Scheme : Padang Lindung
 State : Kelantan District : Pasir Puteh
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 22 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	-	6.9	389
2	*	*	*	Coconut	B	-	A		96
				Sago	A	-	A		198
3	*	*	*	Vegetable	B	A	-	6.9	389
4	*	*	*	Fodder grasses	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8	*								

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN006

Code Number : KN006 Name of Scheme : Telosan Rasau
 State : Kelantan District : Pasir Puteh
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 1100 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	-	6.9	19,470
2	*	*	*	Coconut	B	-	A		4,818
				Sago	A	-	A		9,900
3	*	*	*	Vegetable	B	A	-	6.9	19,470
4	*	*	*	Fodder grasses	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN007

Code Number : KN007 Name of Scheme : R.T. Sg. Yong
 State : Kelantan District : Pasir Puteh
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 3d(at)

Irrigable area (ha) Main : 1587 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	-	6.9	28,090
2	*	*	*						
3	*	*	*	Vegetable	B	A	-	6.9	28,090
4	*	*	*	Fodder grasses	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN008

Code Number : KN008 Name of Scheme : Pertok Lama
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 29 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		435
				Groundnut	C	A	A		76
				Vegetable	C	A	A		514
2	*	*	*	Durian/Mango	C	A	A	11.0	197
				Guava	C	A	-	3.1	696
				Banana	C	A	A	0.7	305
				Cashewnut	C	A	A		51
				Papaya	C	A	-		725
				Citrus	C	A	A		305
				Pineapple	C	A	-	0.5	696
				Coconut	A	-	A		127
				Oilpalm	C	A	A	0.9	557
				Cocoa	C	A	A	0.6	90
				Rubber	C	A	A		39
				Coffee	C	A	A		26
				Tea	C	A	A		37
				Clove	C	A	A		9
Tabacco	C	A	A		261				
Sugarcane	C	A	A		580				
Pepper	C	A	A		86				
3	*	*	*	Maize	C	-	-		94
				Sorghum	C	-	A		109
				Ginger	C	A	-		435
				Groundnut	C	A	A		76
				Vegetable	C	A	A		514
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN009

Code Number : KN009 Name of Scheme : Hilir Sat I
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 396 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		5,940
				Groundnut	C	A	A		1,034
				Vegetable	C	A	-		7,009
2	*	*	*	Durian/Mango	C	A	-	11.0	2,693
				Guava	C	A	-	3.1	9,504
				Banana	C	A	-	0.7	4,158
				Cashewnut	C	A	A		697
				Papaya	C	A	-		9,900
				Citrus	C	A	-		4,158
				Pineapple	C	A	-	0.5	9,504
				Coconut	A	-	A		1,734
				Oilpalm	C	A	A	0.9	7,603
				Cocoa	C	A	A	0.6	1,228
				Rubber	C	A	A		543
				Coffee	C	A	A		348
				Tea	C	A	A		515
				Clove	C	A	A		123
Tabacco	C	A	A		3,564				
Sugarcane	C	A	A		7,920				
Pepper	C	A	A		1,168				
3	*	*	*	Maize	C	-	-		1,287
				Sorghum	C	-	A		1,485
				Ginger	C	A	-		5,940
				Groundnut	C	A	A		1,034
				Vegetable	C	A	-		7,009
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN010

Code Number : KN010 Name of Scheme : Galang
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 44 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		660
				Groundnut	C	A	A		115
				Vegetable	C	A	A		779
2	*	*	*	Durian/Mango	C	A	A	11.0	299
				Guava	C	A	-	3.1	1,056
				Banana	C	A	A	0.7	462
				Cashewnut	C	A	A		77
				Papaya	C	A	-		1,100
				Citrus	C	A	-		462
				Pineapple	C	A	-	0.5	1,056
				Coconut	A	-	A		193
				Oilpalm	C	A	A	0.9	845
				Cocoa	C	A	A	0.6	136
				Rubber	C	A	A		60
				Coffee	C	A	A		39
				Tea	C	A	A		57
				Clove	C	A	A		14
Tabacco	C	A	A		396				
Sugarcane	C	A	A		880				
Pepper	C	A	A		130				
3	*	*	*	Maize	C	-	-		143
				Sorghum	C	-	A		165
				Ginger	C	A	-		660
				Groundnut	C	A	A		115
				Vegetable	C	A	A		779
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5	*	*	*			A	A	<u>2.0</u>	
6	*	*	*						
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN011

Code Number : KN011 Name of Scheme : Ulu Sat
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 580 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		8,700
				Groundnut	C	A	A		1,514
				Vegetable	C	A	-		10,266
2	*	*	*	Durian/Mango	C	A	-	11.0	3,944
				Guava	C	A	-	3.1	13,920
				Banana	C	A	-	0.7	6,090
				Cashewnut	C	A	A		1,021
				Papaya	C	A	-		14,500
				Citrus	C	A	-		6,090
				Pineapple	C	A	-	0.5	13,920
				Coconut	A	-	A		2,541
				Oilpalm	C	A	A	0.9	11,134
				Cocoa	C	A	A	0.6	1,798
				Rubber	C	A	A		795
				Coffee	C	A	A		511
				Tea	C	A	A		754
				Clove	C	A	A		180
Tabacco	C	A	A		5,220				
Sugarcane	C	A	A		11,600				
Pepper	C	A	A		1,712				
3	*	*	*	Maize	C	-	-		1,886
				Sorghum	C	-	A		2,176
				Ginger	C	A	-		8,700
				Groundnut	C	A	A		1,514
				Vegetable	C	A	-		10,266
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN012

Code Number : KN012 Name of Scheme : Putat Mak Sari
 State : Kelantan District : Machang
 Type of Scheme : Gravity & Pump
 Water source : Sufficient for double cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 32 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		480
				Groundnut	C	A	A		84
				Vegetable	C	A	A		566
2	*	*	*	Durian/Mango	C	A	A	11.0	218
				Guava	C	A	-	3.1	768
				Banana	C	A	A	0.7	336
				Cashewnut	C	A	A		56
				Papaya	C	A	-		800
				Citrus	C	A	A		336
				Pineapple	C	A	-	0.5	768
				Coconut	A	-	A		140
				Oilpalm	C	A	A	0.9	614
				Cocoa	C	A	A	0.6	99
				Rubber	C	A	A		44
				Coffee	C	A	A		28
				Tea	C	A	A		42
				Clove	C	A	A		10
Tabacco	C	A	A		288				
Sugarcane	C	A	A		640				
Pepper	C	A	A		94				
3	*	*	*	Maize	C	-	-		104
				Sorghum	C	-	A		120
				Ginger	C	A	-		480
				Groundnut	C	A	A		84
				Vegetable	C	A	A		566
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5	*	*	*			A	A	<u>2.0</u>	
6	*	*	*						
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN013

Code Number : KN013 Name of Scheme : Bagan I
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 53 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		795
				Groundnut	C	A	A		138
				Vegetable	C	A	A		938
2	*	*	*	Durian/Mango	C	A	A	11.0	360
				Guava	C	A	-	3.1	1,272
				Banana	C	A	A	0.7	557
				Cashewnut	C	A	A		93
				Papaya	C	A	-		1,325
				Citrus	C	A	-		557
				Pineapple	C	A	-	0.5	1,272
				Coconut	A	-	A		232
				Oilpalm	C	A	A	0.9	1,018
				Cocoa	C	A	A	0.6	164
				Rubber	C	A	A		73
				Coffee	C	A	A		47
				Tea	C	A	A		69
				Clove	C	A	A		16
Tabacco	C	A	A		477				
Sugarcane	C	A	A		1,060				
Pepper	C	A	A		156				
3	*	*	*	Maize	C	-	-		172
				Sorghum	C	-	A		199
				Ginger	C	A	-		795
				Groundnut	C	A	A		138
				Vegetable	C	A	A		938
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN014

Code Number : KN014 Name of Scheme : Sg. Dewan
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 116 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		1,740
				Groundnut	C	A	A		303
				Vegetable	C	A	-		2,053
2	*	*	*	Durian/Mango	C	A	-	11.0	789
				Guava	C	A	-	3.1	2,784
				Banana	C	A	-	0.7	1,218
				Cashewnut	C	A	A		204
				Papaya	C	A	-		2,900
				Citrus	C	A	-		1,218
				Pineapple	C	A	-	0.5	2,784
				Coconut	A	-	A		508
				Oilpalm	C	A	A	0.9	2,227
				Cocoa	C	A	A	0.6	360
				Rubber	C	A	A		159
				Coffee	C	A	A		102
				Tea	C	A	A		151
				Clove	C	A	A		36
Tabacco	C	A	A		1,044				
Sugarcane	C	A	A		2,320				
Pepper	C	A	A		342				
3	*	*	*	Maize	C	-	-		377
				Sorghum	C	-	A		435
				Ginger	C	A	-		1,740
				Groundnut	C	A	A		303
				Vegetable	C	A	-		2,053
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN015

Code Number : KN015 Name of Scheme : Bagan II
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 180 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-	2,700
				Groundnut	C	A	A	470
				Vegetable	C	A	-	3,187
2	*	*	*	Durian/Mango	C	A	-	11.0
				Guava	C	A	-	3.1
				Banana	C	A	-	0.7
				Cashewnut	C	A	A	
				Papaya	C	A	-	
				Citrus	C	A	-	
				Pineapple	C	A	-	0.5
				Coconut	A	-	A	
				Oilpalm	C	A	A	0.9
				Cocoa	C	A	A	0.6
				Rubber	C	A	A	
				Coffee	C	A	A	
				Tea	C	A	A	
				Clove	C	A	A	
Tabacco	C	A	A					
Sugarcane	C	A	A					
Pepper	C	A	A					
3	*	*	*	Maize	C	-	-	585
				Sorghum	C	-	A	
				Ginger	C	A	-	2,700
				Groundnut	C	A	A	470
				Vegetable	C	A	-	3,187
4	*	*	*	Fodder grasses	C	-	A	
				Pasture	C	-	A	
5	*	*	*			A	-	2.0
6	*	*	*					
7	*	*	*	*	*	*		
8								

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN016

Code Number : KN016 Name of Scheme : Sg. Rusa
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 106 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		1,590
				Groundnut	C	A	A		277
				Vegetable	C	A	-		1,876
2	*	*	*	Durian/Mango	C	A	-	11.0	721
				Guava	C	A	-	3.1	2,544
				Banana	C	A	-	0.7	1,113
				Cashewnut	C	A	A		187
				Papaya	C	A	-		2,650
				Citrus	C	A	-		1,113
				Pineapple	C	A	-	0.5	2,544
				Coconut	A	-	A		464
				Oilpalm	C	A	A	0.9	2,035
				Cocoa	C	A	A	0.6	329
				Rubber	C	A	A		145
				Coffee	C	A	A		93
				Tea	C	A	A		138
				Clove	C	A	A		33
Tabacco	C	A	A		954				
Sugarcane	C	A	A		2,120				
Pepper	C	A	A		313				
3	*	*	*	Maize	C	-	-		345
				Sorghum	C	-	A		398
				Ginger	C	A	-		1,590
				Groundnut	C	A	A		277
				Vegetable	C	A	-		1,876
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN017

Code Number : KN017 Name of Scheme : Pak Yam
 State : Kelantan District : Machang
 Type of Scheme : Pump
 Water source : Sufficient for double cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 29 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		435
				Groundnut	C	A	A		76
				Vegetable	C	A	A		514
2	*	*	*	Durian/Mango	C	A	A	11.0	197
				Guava	C	A	-	3.1	696
				Banana	C	A	A	0.7	305
				Cashewnut	C	A	A		51
				Papaya	C	A	-		725
				Citrus	C	A	A		305
				Pineapple	C	A	-	0.5	696
				Coconut	A	-	A		127
				Oilpalm	C	A	A	0.9	557
				Cocoa	C	A	A	0.6	89
				Rubber	C	A	A		40
				Coffee	C	A	A		25
				Tea	C	A	A		38
				Clove	C	A	A		9
Tabacco	C	A	A		261				
Sugarcane	C	A	A		580				
Pepper	C	A	A		86				
3	*	*	*	Maize	C	-	-		94
				Sorghum	C	-	A		109
				Ginger	C	A	-		435
				Groundnut	C	A	A		76
				Vegetable	C	A	A		514
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5	*	*	*			A	A	2.0	
6	*	*	*						
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN018

Code Number : KN018 Name of Scheme : Meranti
 State : Kelantan District : Pasir Mas
 Type of Scheme : Pump
 Soil series : 3d(t)

Irrigable area (ha) Main : 55 Off : 20
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	A	6.9	974
2	*	*	*	Coconut	B	-	A		241
				Sago	A	-	A		495
3	*	*	*	Vegetable	B	A	A	6.9	974
4	*	*	*	Fodder grasses	A	-	A		
5	*	*	*			A	A	<u>2.0</u>	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN019

Code Number : KN019 Name of Scheme : Repek
 State : Kelantan District : Pasir Mas
 Type of Scheme : Pump
 Water source : Sufficient for double cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 454 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : Less than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	-	6.9	8,036
2	*	*	*	Coconut	B	-	A		1,989
				Sago	A	-	A		4,086
3	*	*	*	Vegetable	B	A	-	6.9	8,036
4	*	*	*	Fodder grasses	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN020

Code Number : KN020 Name of Scheme : Sg. Pinang
 State : Kelantan District : Tumpat
 Type of Scheme : Pump
 Water source : Sufficient for double cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 80 Off : 80
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : Less than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	A	6.9	1,416
2	*	*	*	Coconut	B	-	A		350
				Sago	A	-	A		720
3	*	*	*	Vegetable	B	A	A	6.9	1,416
4	*	*	*	Fodder grasses	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN021

Code Number : KN021 Name of Scheme : Kubang Sawa
 State : Kelantan District : Tumpat
 Type of Scheme : Pump
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 77 Off : 77
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	1,155
				Groundnut	A	A	A	0.9	201
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>1,363</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	524
				Guava	C	A	-	3.1	1,848
				Banana	C	A	A	0.7	809
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>136</u>
				Papaya	B	A	-	0.6	1,925
				Citrus	B	A	A	2.9	809
				Pineapple	A	A	-	9.5	1,848
				Coconut	A	-	A		337
				Oilpalm	C	A	A	0.9	1,478
				Cocoa	C	A	A	0.6	239
				Rubber	B	A	A	0.6	105
				Sago	C	-	A		693
				Coffee	A	A	A	0.7	68
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>100</u>
				Clove	B	A	A	1.1	24
Tabacco	B	A	A	0.7	693				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>1,540</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>227</u>				
3	*	*	*	Maize	A	-	-		250
				Sorghum	A	-	A		289
				Ginger	B	A	-	2.5	1,155
				Groundnut	A	A	A	0.9	201
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>1,363</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN022

Code Number : KN022 Name of Scheme : Pasir Hor
 State : Kelantan District : Kota Bharu
 Type of Scheme : Pump
 Water source : Sufficient for double cropping
 Soil series : 2d

Irrigable area (ha) Main : 69 Off : 69
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Groundnut	A	A	A	0.9	180
				Vegetable	A	A	-	13.8	1,221
2	*	*	*	Durian/Mango	A	A	-	43.6	469
				Guava	A	A	-	12.2	1,656
				Banana	A	A	-	2.7	725
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>121</u>
				Citrus	B	A	-	2.9	725
				Pineapple	A	A	-	9.5	1,656
				Coconut	A	-	A		302
				<u>Oilpalm</u>	A	A	A	<u>3.6</u>	<u>1,325</u>
				Cocoa	A	A	A	2.2	214
				Rubber	B	A	A	0.6	95
				Coffee	B	A	A	0.4	61
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>90</u>
				Clove	B	A	A	1.1	21
Tabacco	B	A	A	0.7	621				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>1,380</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>204</u>				
3	*	*	*	Maize	A	-	-		224
				Sorghum	A	-	A		259
				Groundnut	A	A	A	0.9	180
				Vegetable	A	A	-	13.8	1,221
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN023

Code Number : KN023 Name of Scheme : Bkt. Jering
 State : Kelantan District : Jeli
 Type of Scheme : Pump
 Water source : Sufficient for double cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 20 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : Less than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		300
				Groundnut	C	A	A		52
				Vegetable	C	A	-		354
2	*	*	*	Durian/Mango	C	A	-	11.0	136
				Guava	C	A	-	3.1	480
				Banana	C	A	-	0.7	210
				Cashewnut	C	A	A		35
				Papaya	C	A	-		500
				Citrus	C	A	-		210
				Pineapple	C	A	-	0.5	480
				Coconut	A	-	A		88
				Oilpalm	C	A	A	0.9	384
				Cocoa	C	A	A	0.6	62
				Rubber	C	A	A		27
				Coffee	C	A	A		18
				Tea	C	A	A		26
				Clove	C	A	A		6
Tabacco	C	A	A		180				
Sugarcane	C	A	A		400				
Pepper	C	A	A		59				
3	*	*	*	Maize	C	-	-		65
				Sorghum	C	-	A		75
				Ginger	C	A	-		300
				Groundnut	C	A	A		52
				Vegetable	C	A	-		354
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5	*	*	*			A	A	2.0	
6	*	*	*						
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN024

Code Number : KN024 Name of Scheme : Jerimbong
 State : Kelantan District : Jeli
 Type of Scheme : Pump
 Water source : Sufficient for double cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 50 Off : 50
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		750
				Groundnut	C	A	A		131
				Vegetable	C	A	-		885
2	*	*	*	Durian/Mango	C	A	-	11.0	340
				Guava	C	A	-	3.1	1,200
				Banana	C	A	-	0.7	525
				Cashewnut	C	A	A		88
				Papaya	C	A	-		1,250
				Citrus	C	A	-		525
				Pineapple	C	A	-	0.5	1,200
				Coconut	A	-	A		219
				Oilpalm	C	A	A	0.9	960
				Cocoa	C	A	A	0.6	155
				Rubber	C	A	A		69
				Coffee	C	A	A		44
				Tea	C	A	A		65
				Clove	C	A	A		16
Tabacco	C	A	A		450				
Sugarcane	C	A	A		1,000				
Pepper	C	A	A		148				
3	*	*	*	Maize	C	-	-		163
				Sorghum	C	-	A		188
				Ginger	C	A	-		750
				Groundnut	C	A	A		131
				Vegetable	C	A	-		885
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5	*	*	*			A	A	2.0	
6	*	*	*						
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN025

Code Number : KN025 Name of Scheme : Kuala Balah
 State : Kelantan District : Jeli
 Type of Scheme : Other
 Water source : Sufficient for double cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 60 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : Less than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		900
				Groundnut	C	A	A		157
				Vegetable	C	A	-		1,062
2	*	*	*	Durian/Mango	C	A	-	11.0	408
				Guava	C	A	-	3.1	1,440
				Banana	C	A	-	0.7	630
				Cashewnut	C	A	A		106
				Papaya	C	A	-		1,500
				Citrus	C	A	-		630
				Pineapple	C	A	-	0.5	1,440
				Coconut	A	-	A		263
				Oilpalm	C	A	A	0.9	1,152
				Cocoa	C	A	A	0.6	186
				Rubber	C	A	A		82
				Coffee	C	A	A		53
				Tea	C	A	A		78
				Clove	C	A	A		19
Tabacco	C	A	A		540				
Sugarcane	C	A	A		1,200				
Pepper	C	A	A		177				
3	*	*	*	Maize	C	-	-		195
				Sorghum	C	-	A		225
				Ginger	C	A	-		900
				Groundnut	C	A	A		157
				Vegetable	C	A	-		1,062
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*						
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN026

Code Number : KN026 Name of Scheme : Lubok Bongor
 State : Kelantan District : Jeli
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 81 Off : 78
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		1,215
				Groundnut	C	A	A		211
				Vegetable	C	A	-		1,434
2	*	*	*	Durian/Mango	C	A	-	11.0	551
				Guava	C	A	-	3.1	1,944
				Banana	C	A	-	0.7	851
				Cashewnut	C	A	A		143
				Papaya	C	A	-		2,025
				Citrus	C	A	-		851
				Pineapple	C	A	-	0.5	1,944
				Coconut	A	-	A		355
				Oilpalm	C	A	A	0.9	1,555
				Cocoa	C	A	A	0.6	251
				Rubber	C	A	A		111
				Coffee	C	A	A		71
				Tea	C	A	A		105
				Clove	C	A	A		25
				Tabacco	C	A	A		729
Sugarcane	C	A	A		1,620				
Pepper	C	A	A		239				
3	*	*	*	Maize	C	-	-		263
				Sorghum	C	-	A		304
				Ginger	C	A	-		1,215
				Groundnut	C	A	A		211
				Vegetable	C	A	-		1,434
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*						
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN027

Code Number : KN027 Name of Scheme : Rengas
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 58 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		870
				Groundnut	C	A	A		151
				Vegetable	C	A	A		1,027
2	*	*	*	Durian/Mango	C	A	A	11.0	394
				Guava	C	A	-	3.1	1,392
				Banana	C	A	A	0.7	610
				Cashewnut	C	A	A		102
				Papaya	C	A	-		1,450
				Citrus	C	A	-		610
				Pineapple	C	A	-	0.5	1,392
				Coconut	A	-	A		254
				Oilpalm	C	A	A	0.9	1,114
				Cocoa	C	A	A	0.6	180
				Rubber	C	A	A		80
				Coffee	C	A	A		52
				Tea	C	A	A		76
				Clove	C	A	A		18
Tabacco	C	A	A		522				
Sugarcane	C	A	A		1,160				
Pepper	C	A	A		171				
3	*	*	*	Maize	C	-	-		188
				Sorghum	C	-	A		218
				Ginger	C	A	-		870
				Groundnut	C	A	A		151
				Vegetable	C	A	A		1,027
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN028

Code Number : KN028 Name of Scheme : R.T. Sg. Kenor
 State : Kelantan District : Kuala Krai
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 63 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		945
				Groundnut	C	A	A		164
				Vegetable	C	A	A		1,116
2	*	*	*	Durian/Mango	C	A	A	11.0	428
				Guava	C	A	-	3.1	1,512
				Banana	C	A	A	0.7	663
				Cashewnut	C	A	A		111
				Papaya	C	A	-		1,575
				Citrus	C	A	A		663
				Pineapple	C	A	-	0.5	1,512
				Coconut	A	-	A		277
				Oilpalm	C	A	A	0.9	1,210
				Cocoa	C	A	A	0.6	197
				Rubber	C	A	A		86
				Coffee	C	A	A		55
				Tea	C	A	A		83
				Clove	C	A	A		20
Tabacco	C	A	A		567				
Sugarcane	C	A	A		1,260				
Pepper	C	A	A		187				
3	*	*	*	Maize	C	-	-		204
				Sorghum	C	-	A		237
				Ginger	C	A	-		945
				Groundnut	C	A	A		164
				Vegetable	C	A	A		1,116
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5	*	*	*			A	A	2.0	
6	*	*	*						
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN029

Code Number : KN029 Name of Scheme : R.T. Keluat
 State : Kelantan District : Kuala Krai
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 40 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		600
				Groundnut	C	A	A		104
				Vegetable	C	A	A		708
2	*	*	*	Durian/Mango	C	A	A	11.0	272
				Guava	C	A	-	3.1	960
				Banana	C	A	A	0.7	420
				Cashewnut	C	A	A		70
				Papaya	C	A	-		1,000
				Citrus	C	A	A		420
				Pineapple	C	A	-	0.5	960
				Coconut	A	-	A		175
				Oilpalm	C	A	A	0.9	768
				Cocoa	C	A	A	0.6	124
				Rubber	C	A	A		55
				Coffee	C	A	A		35
				Tea	C	A	A		52
Clove	C	A	A		12				
Tabacco	C	A	A		360				
Sugarcane	C	A	A		800				
Pepper	C	A	A		118				
3	*	*	*	Maize	C	-	-		130
				Sorghum	C	-	A		150
				Ginger	C	A	-		600
				Groundnut	C	A	A		104
				Vegetable	C	A	A		708
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN030

Code Number : KN030 Name of Scheme : Hilir Sat II
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 460 Off : 230
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	-	6.9	8,142
2	*	*	*	Coconut	B	-	A		2,015
				Sago	A	-	A		4,140
3	*	*	*	Vegetable	B	A	-	6.9	8,142
4	*	*	*	Fodder grasses	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		<u>A</u>	<u>A</u>	<u>A</u>		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN031

Code Number : KN031 Name of Scheme : Sg. Labok
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 189 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	-	6.9	3,345
2	*	*	*	Coconut	B	-	A		828
				Sago	A	-	A		1,701
3	*	*	*	Vegetable	B	A	-	6.9	3,345
4	*	*	*	Fodder grasses	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN032

Code Number : KN032 Name of Scheme : Bagan III
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2d

Irrigable area (ha) Main : 362 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Groundnut	A	A	A	0.9	945
				Vegetable	A	A	-	13.8	6,407
2	*	*	*	Durian/Mango	A	A	-	43.6	2,462
				Guava	A	A	-	12.2	8,688
				Banana	A	A	-	2.7	3,801
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>637</u>
				Citrus	B	A	-	2.9	3,801
				Pineapple	A	A	-	9.5	8,688
				Coconut	A	-	A	-	1,586
				<u>Oilpalm</u>	A	A	A	<u>3.6</u>	<u>6,950</u>
				<u>Cocoa</u>	A	A	A	<u>2.2</u>	<u>1,122</u>
				Rubber	B	A	A	0.6	496
				Coffee	B	A	A	0.4	319
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>471</u>
				Clove	B	A	A	1.1	112
Tabacco	B	A	A	0.7	3,258				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>7,240</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>1,068</u>				
3	*	*	*	Maize	A	-	-	-	1,177
				Sorghum	A	-	A	-	1,358
				Groundnut	A	A	A	0.9	945
				Vegetable	A	A	-	13.8	6,407
4	*	*	*	Fodder grasses	A	-	A	-	-
				Pasture	A	-	A	-	-
5	*	*	*			A	-	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN033

Code Number : KN033 Name of Scheme : Pulai Chondong
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 205 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	3,075
				Groundnut	A	A	A	0.9	535
				Vegetable	A	A	-	13.8	3,629
2	*	*	*	Durian/Mango	C	A	-	11.0	1,394
				Guava	C	A	-	3.1	4,920
				Banana	C	A	-	0.7	2,153
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>360</u>
				Papaya	B	A	-	0.6	5,125
				Citrus	B	A	-	2.9	2,153
				Pineapple	A	A	-	9.5	4,920
				Coconut	A	-	A		898
				Oilpalm	C	A	A	0.9	3,936
				Cocoa	C	A	A	0.6	636
				Rubber	B	A	A	0.6	281
				Sago	C	-	A		1,895
				Coffee	A	A	A	0.7	180
				Tea	A	A	A	<u>10.4</u>	<u>266</u>
				Clove	B	A	A	1.1	63
Tabacco	B	A	A	0.7	1,845				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>4,100</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>605</u>				
3	*	*	*	Maize	A	-	-		667
				Sorghum	A	-	A		769
				Ginger	B	A	-	2.5	3,075
				Groundnut	A	A	A	0.9	535
				Vegetable	A	A	-	13.8	3,629
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN034

Code Number : KN034 Name of Scheme : Lubok Awah
 State : Kelantan District : Machang
 Type of Scheme : Pump
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 11 Off : 11
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	165
				Groundnut	A	A	A	0.9	29
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>195</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	75
				Guava	C	A	-	3.1	264
				Banana	C	A	A	0.7	116
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>19</u>
				Papaya	B	A	A	0.6	275
				Citrus	B	A	A	2.9	116
				<u>Pineapple</u>	A	A	A	<u>9.5</u>	<u>264</u>
				Coconut	A	-	A		48
				Oilpalm	C	A	A	0.9	211
				Cocoa	C	A	A	0.6	34
				Rubber	B	A	A	0.6	15
				Sago	C	-	A		99
				Coffee	A	A	A	0.7	10
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>14</u>
				Clove	B	A	A	1.1	3
Tabacco	B	A	A	0.7	99				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>220</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>32</u>				
3	*	*	*	Maize	A	-	-		36
				Sorghum	A	-	A		41
				Ginger	B	A	-	2.5	165
				Groundnut	A	A	A	0.9	29
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>195</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	A	<u>2.0</u>	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN035

Code Number : KN035 Name of Scheme : R.T. Bedal
 State : Kelantan District : Kuala Krai
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 30 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : Less than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	450
				Groundnut	A	A	A	0.9	78
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>531</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	204
				Guava	C	A	-	3.1	720
				Banana	C	A	A	0.7	315
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>53</u>
				Papaya	B	A	-	0.6	750
				Citrus	B	A	A	2.9	315
				Pineapple	A	A	-	9.5	720
				Coconut	A	-	A		131
				Oilpalm	C	A	A	0.9	576
				Cocoa	C	A	A	0.6	93
				Rubber	B	A	A	0.6	41
				Sago	C	-	A		270
				Coffee	A	A	A	0.7	26
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>39</u>
Clove	B	A	A	1.1	9				
Tabacco	B	A	A	0.7	270				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>600</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>89</u>				
3	*	*	*	Maize	A	-	-		98
				Sorghum	A	-	A		113
				Ginger	B	A	-	2.5	450
				Groundnut	A	A	A	0.9	78
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>531</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	A	<u>2.0</u>	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN036

Code Number : KN036 Name of Scheme : R.T. Enggong
 State : Kelantan District : Kuala Krai
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 49 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	735
				Groundnut	A	A	A	0.9	127
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>867</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	333
				Guava	C	A	-	3.1	1,176
				Banana	C	A	A	0.7	515
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>86</u>
				Papaya	B	A	-	0.6	1,225
				Citrus	B	A	A	2.9	515
				Pineapple	A	A	-	9.5	1,176
				Coconut	A	-	A		214
				Oilpalm	C	A	A	0.9	941
				Cocoa	C	A	A	0.6	152
				Rubber	B	A	A	0.6	67
				Sago	C	-	A		441
				Coffee	A	A	A	0.7	43
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>64</u>
				Clove	B	A	A	1.1	15
Tabacco	B	A	A	0.7	441				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>980</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>145</u>				
3	*	*	*	Maize	A	-	-		159
				Sorghum	A	-	A		184
				Ginger	B	A	-	2.5	735
				Groundnut	A	A	A	0.9	127
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>867</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN037

Code Number : KN037 Name of Scheme : R.T. Lapan Agor
 State : Kelantan District : Kuala Krai
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 30 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	450
				Groundnut	A	A	A	0.9	78
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>531</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	204
				Guava	C	A	-	3.1	720
				Banana	C	A	A	0.7	315
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>53</u>
				Papaya	B	A	-	0.6	750
				Citrus	B	A	A	2.9	315
				Pineapple	A	A	-	9.5	720
				Coconut	A	-	A		131
				Oilpalm	C	A	A	0.9	576
				Cocoa	C	A	A	0.6	93
				Rubber	B	A	A	0.6	41
				Sago	C	-	A		270
				Coffee	A	A	A	0.7	26
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>39</u>
				Clove	B	A	A	1.1	9
Tabacco	B	A	A	0.7	270				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>600</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>89</u>				
3	*	*	*	Maize	A	-	-		98
				Sorghum	A	-	A		113
				Ginger	B	A	-	2.5	450
				Groundnut	A	A	A	0.9	78
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>531</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN038

Code Number : KN038 Name of Scheme : Rantau Panjang I
 State : Kelantan District : Pasir Mas
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 708 Off : 708
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	-	6.9	12,532
2	*	*	*	Coconut	B	-	A		3,101
				Sago	A	-	A		6,372
3	*	*	*	Vegetable	B	A	-	6.9	12,532
4	*	*	*	Fodder grasses	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN039

Code Number : KN039 Name of Scheme : Serdang
 State : Kelantan District : Pasir Mas
 Type of Scheme : Pump
 Water source : Sufficient for double cropping
 Soil series : 2d

Irrigable area (ha) Main : 140 Off : 140
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Groundnut	A	A	A	0.9	365
				Vegetable	A	A	-	13.8	2,478
2	*	*	*	<u>Durian/Mango</u>	A	A	A	<u>43.6</u>	<u>952</u>
				Guava	A	A	-	12.2	3,360
				<u>Banana</u>	A	A	A	<u>2.7</u>	<u>1,470</u>
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>246</u>
				Citrus	B	A	-	2.9	1,470
				Pineapple	A	A	-	9.5	3,360
				Coconut	A	-	A		613
				<u>Oilpalm</u>	A	A	A	<u>3.6</u>	<u>2,688</u>
				<u>Cocoa</u>	A	A	A	<u>2.2</u>	<u>434</u>
				Rubber	B	A	A	0.6	192
				Coffee	B	A	A	0.4	123
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>182</u>
				Clove	B	A	A	1.1	43
				Tabacco	B	A	A	0.7	1,260
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>2,800</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>413</u>				
3	*	*	*	Maize	A	-	-		455
				Sorghum	A	-	A		525
				Groundnut	A	A	A	0.9	365
				Vegetable	A	A	-	13.8	2,478
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN040

Code Number : KN040 Name of Scheme : Gual Ipoh
 State : Kelantan District : Tanah Merah
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 90 Off : 65
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : Less than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	1,350
				Groundnut	A	A	A	0.9	235
				Vegetable	A	A	-	13.8	1,593
2	*	*	*	Durian/Mango	C	A	A	11.0	612
				Guava	C	A	-	3.1	2,160
				Banana	C	A	A	0.7	945
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>158</u>
				Papaya	B	A	-	0.6	2,250
				Citrus	B	A	-	2.9	945
				Pineapple	A	A	-	9.5	2,160
				Coconut	A	-	A		394
				Oilpalm	C	A	A	0.9	1,728
				Cocoa	C	A	A	0.6	279
				Rubber	B	A	A	0.6	123
				Sago	C	-	A		810
				Coffee	A	A	A	0.7	79
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>117</u>
				Clove	B	A	A	1.1	28
Tabacco	B	A	A	0.7	810				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>1,800</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>266</u>				
3	*	*	*	Maize	A	-	-		293
				Sorghum	A	-	A		338
				Ginger	B	A	-	2.5	1,350
				Groundnut	A	A	A	0.9	235
				Vegetable	A	A	-	13.8	1,593
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN041

Code Number : KN041 Name of Scheme : R.T. Air Cina Kelubi
 State : Kelantan District : Tanah Merah
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2DnT

Irrigable area (ha) Main : 40 Off : 35
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		600
				Groundnut	C	A	A		104
				Vegetable	C	A	A		708
2	*	*	*	Durian/Mango	C	A	A	11.0	272
				Guava	C	A	-	3.1	960
				Banana	C	A	A	0.7	420
				Cashewnut	C	A	A		70
				Papaya	C	A	-		1,000
				Citrus	C	A	A		420
				Pineapple	C	A	-	0.5	960
				Coconut	A	-	A		175
				Oilpalm	C	A	A	0.9	768
				Cocoa	C	A	A	0.6	124
				Rubber	C	A	A		55
				Coffee	C	A	A		35
				Tea	C	A	A		52
				Clove	C	A	A		12
Tabacco	C	A	A		360				
Sugarcane	C	A	A		800				
Pepper	C	A	A		118				
3	*	*	*	Maize	C	-	-		130
				Sorghum	C	-	A		150
				Ginger	C	A	-		600
				Groundnut	C	A	A		104
				Vegetable	C	A	A		708
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN042

Code Number : KN042 Name of Scheme : Nibong
 State : Kelantan District : Tanah Merah
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2DT

Irrigable area (ha) Main : 49 Off : 49
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : Idle

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		735
				Groundnut	C	A	A		128
				Vegetable	C	A	A		867
2	*	*	*	Durian/Mango	C	A	A	11.0	333
				Guava	C	A	-	3.1	1,176
				Banana	C	A	A	0.7	515
				Cashewnut	C	A	A		86
				Papaya	C	A	-		1,225
				Citrus	C	A	A		515
				Pineapple	C	A	-	0.5	1,176
				Coconut	A	-	A		215
				Oilpalm	C	A	A	0.9	941
				Cocoa	C	A	A	0.6	152
				<u>Rubber</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>1.1</u>	<u>67</u>
				Coffee	C	A	A		43
				Tea	C	A	A		64
				Clove	C	A	A		15
				Tabacco	C	A	A		441
Sugercane	C	A	A		980				
Pepper	C	A	A		145				
3	*	*	*	Maize	C	-	-		159
				Sorghum	C	-	A		184
				Ginger	C	A	-		735
				Groundnut	C	A	A		128
				Vegetable	C	A	A		867
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5	*	*	*			A	A	<u>2.0</u>	
6	*	*	*						
7									
8	*	*	*		*	*	*		

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN043

Code Number : KN043 Name of Scheme : R.T. Blok Ulu Kusial
 State : Kelantan District : Tanah Merah
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 80 Off : 50
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	1,200
				Groundnut	A	A	A	0.9	209
				<u>Vegetable</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>13.8</u>	<u>1,416</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	544
				Guava	C	A	-	3.1	1,920
				Banana	C	A	A	0.7	840
				<u>Cashewnut</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>8.7</u>	<u>141</u>
				Papaya	B	A	-	0.6	2,000
				Citrus	B	A	-	2.9	840
				Pineapple	A	A	-	9.5	1,920
				Coconut	A	-	A		350
				Oilpalm	C	A	A	0.9	1,536
				Cocoa	C	A	A	0.6	248
				Rubber	B	A	A	0.6	110
				Sago	C	-	A		720
				Coffee	A	A	A	0.7	70
				<u>Tea</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>10.4</u>	<u>104</u>
				Clove	B	A	A	1.1	25
Tabacco	B	A	A	0.7	720				
<u>Sugarcane</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>3.3</u>	<u>1,600</u>				
<u>Pepper</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>16.4</u>	<u>236</u>				
3	*	*	*	Maize	A	-	-		260
				Sorghum	A	-	A		300
				Ginger	B	A	-	2.5	1,200
				Groundnut	A	A	A	0.9	209
				<u>Vegetable</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>13.8</u>	<u>1,416</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN044

Code Number : KN044 Name of Scheme : R.T. Gelugor
 State : Kelantan District : Tanah Merah
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 32 Off : 20
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	480
				Groundnut	A	A	A	0.9	84
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>566</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	218
				Guava	C	A	-	3.1	768
				Banana	C	A	A	0.7	336
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>56</u>
				Papaya	B	A	-	0.6	800
				Citrus	B	A	A	2.9	336
				Pineapple	A	A	-	9.5	768
				Coconut	A	-	A		140
				Oilpalm	C	A	A	0.9	614
				Cocoa	C	A	A	0.6	99
				Rubber	B	A	A	0.6	44
				Sago	C	-	A		288
				Coffee	A	A	A	0.7	28
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>42</u>
				Clove	B	A	A	1.1	10
Tabacco	B	A	A	0.7	288				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>640</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>94</u>				
3	*	*	*	Maize	A	-	-		104
				Sorghum	A	-	A		120
				Ginger	B	A	-	2.5	480
				Groundnut	A	A	A	0.9	84
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>566</u>
4	*	*	*	Podder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN045

Code Number : KN045 Name of Scheme : Lawang, Air Batu & Kelisar
 State : Kelantan District : Tanah Merah
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2Dt

Irrigable area (ha) Main : 486 Off : 300
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	C	A	-		7,290
				Groundnut	C	A	A		1,268
				Vegetable	C	A	-		8,602
2	*	*	*	Durian/Mango	C	A	-	11.0	3,305
				Guava	C	A	-	3.1	11,664
				Banana	C	A	-	0.7	5,103
				Cashewnut	C	A	A		855
				Papaya	C	A	-		12,150
				Citrus	C	A	-		5,103
				Pineapple	C	A	-	0.5	11,664
				Coconut	A	-	A		2,129
				Oilpalm	C	A	A	0.9	9,331
				Cocoa	C	A	A	0.6	1,507
				<u>Rubber</u>	A	A	A	<u>1.1</u>	<u>666</u>
				Coffee	C	A	A		428
				Tea	C	A	A		632
				Clove	C	A	A		151
Tabacco	C	A	A		4,374				
Sugarcane	C	A	A		9,720				
Pepper	C	A	A		1,434				
3	*	*	*	Maize	C	-	-		1,580
				Sorghum	C	-	A		1,823
				Ginger	C	A	-		7,290
				Groundnut	C	A	A		1,268
				Vegetable	C	A	-		8,602
4	*	*	*	Fodder grasses	C	-	A		
				Pasture	C	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*						
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN046

Code Number : KN046 Name of Scheme : R.T. Lubok Berangan
 State : Kelantan District : Tanah Merah
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 105 Off : 100
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	1,575
				Groundnut	A	A	A	0.9	274
				Vegetable	A	A	-	13.8	1,859
2	*	*	*	Durian/Mango	C	A	A	11.0	714
				Guava	C	A	-	3.1	2,520
				Banana	C	A	A	0.7	1,103
				<u>Cashewnut</u>	A	A	A	<u>9.7</u>	<u>185</u>
				Papaya	B	A	-	0.6	2,625
				Citrus	B	A	-	2.9	1,103
				Pineapple	A	A	-	9.5	2,520
				Coconut	A	-	A		460
				Oilpalm	C	A	A	0.9	2,016
				Cocoa	C	A	A	0.6	326
				Rubber	B	A	A	0.6	144
				Sago	C	-	A		945
				Coffee	A	A	A	0.7	92
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>137</u>
Clove	B	A	A	1.1	33				
Tabacco	B	A	A	0.7	945				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>2,100</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>310</u>				
3	*	*	*	Maize	A	-	-		341
				Sorghum	A	-	A		394
				Ginger	B	A	-	2.5	1,575
				Groundnut	A	A	A	0.9	274
				Vegetable	A	A	-	13.8	1,859
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).

- * : Potential categories
- A : Suitable
- B : Marginal suitable due to lack of drainage facilities
- C : Marginal suitable due to limited factors other than drainage conditions
- : Not suitable

Crop Diversification Potential for KN047

Code Number : KN047 Name of Scheme : Ternang Ulu
 State : Kelantan District : Tanah Merah
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 67 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	1,005
				Groundnut	A	A	A	0.9	175
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>1,186</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	456
				Guava	C	A	-	3.1	1,608
				Banana	C	A	A	0.7	704
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>118</u>
				Papaya	B	A	-	0.6	1,675
				Citrus	B	A	A	2.9	704
				Pineapple	A	A	-	9.5	1,608
				Coconut	A	-	A		293
				Oilpalm	C	A	A	0.9	1,286
				Cocoa	C	A	A	0.6	208
				Rubber	B	A	A	0.6	92
				Sago	C	-	A		603
				Coffee	A	A	A	0.7	59
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>87</u>
				Clove	B	A	A	1.1	21
Tabacco	B	A	A	0.7	603				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>1,340</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>198</u>				
3	*	*	*	Maize	A	-	-		218
				Sorghum	A	-	A		251
				Ginger	B	A	-	2.5	1,005
				Groundnut	A	A	A	0.9	175
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>1,186</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN048

Code Number : KN048 Name of Scheme : Panjang
 State : Kelantan District : Tanah Merah
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 21 Off : 21
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	315
				Groundnut	A	A	A	0.9	55
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>372</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	143
				Guava	C	A	-	3.1	504
				Banana	C	A	A	0.7	221
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>37</u>
				Papaya	B	A	A	0.6	525
				Citrus	B	A	A	2.9	221
				<u>Pineapple</u>	A	A	A	<u>9.5</u>	<u>504</u>
				Coconut	A	-	A		92
				Oilpalm	C	A	A	0.9	403
				Cocoa	C	A	A	0.6	65
				Rubber	B	A	A	0.6	29
				Sago	C	-	A		189
				Coffee	A	A	A	0.7	18
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>27</u>
				Clove	B	A	A	1.1	7
Tabacco	B	A	A	0.7	189				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>420</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>62</u>				
3	*	*	*	Maize	A	-	-		68
				Sorghum	A	-	A		79
				Ginger	B	A	-	2.5	315
				Groundnut	A	A	A	0.9	55
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>372</u>
4	*	*	*	Podder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	A	<u>2.0</u>	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).

- * : Potential categories
- A : Suitable
- B : Marginal suitable due to lack of drainage facilities
- C : Marginal suitable due to limited factors other than drainage conditions
- : Not suitable

Crop Diversification Potential for KN049

Code Number : KN049 Name of Scheme : Gobek
 State : Kelantan District : Tanah Merah
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 23 Off : 20
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	345
				Groundnut	A	A	A	0.9	60
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>407</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	156
				Guava	C	A	-	3.1	552
				Banana	C	A	A	0.7	242
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>40</u>
				Papaya	B	A	A	0.6	575
				Citrus	B	A	A	2.9	242
				<u>Pineapple</u>	A	A	A	<u>9.5</u>	<u>552</u>
				Coconut	A	-	A		101
				Oilpalm	C	A	A	0.9	442
				Cocoa	C	A	A	0.6	71
				Rubber	B	A	A	0.6	32
				Sago	C	-	A		207
				Coffee	A	A	A	0.7	20
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>30</u>
				Clove	B	A	A	1.1	7
Tabacco	B	A	A	0.7	207				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>460</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>68</u>				
3	*	*	*	Maize	A	-	-		75
				Sorghum	A	-	A		86
				Ginger	B	A	-	2.5	345
				Groundnut	A	A	A	0.9	60
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>407</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	A	<u>2.0</u>	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1),

* : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN050

Code Number : KN050 Name of Scheme : Jelakong
 State : Kelantan District : Tanah Merah
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 55 Off : 40
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	825
				Groundnut	A	A	A	0.9	144
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>974</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	374
				Guava	C	A	-	3.1	1,320
				Banana	C	A	A	0.7	578
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>97</u>
				Papaya	B	A	-	0.6	1,375
				Citrus	B	A	A	2.9	578
				Pineapple	A	A	-	9.5	1,320
				Coconut	A	-	A		241
				Oilpalm	C	A	A	0.9	1,056
				Cocoa	C	A	A	0.6	171
				Rubber	B	A	A	0.6	75
				Sago	C	-	A		495
				Coffee	A	A	A	0.7	48
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>72</u>
Clove	B	A	A	1.1	17				
Tabacco	B	A	A	0.7	495				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>1,100</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>162</u>				
3	*	*	*	Maize	A	-	-		179
				Sorghum	A	-	A		206
				Ginger	B	A	-	2.5	825
				Groundnut	A	A	A	0.9	144
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>974</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN051

Code Number : KN051 Name of Scheme : Banjar Parah
 State : Kelantan District : Tanah Merah
 Type of Scheme : Pump
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 140 Off : 120
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	2,100
				Groundnut	A	A	A	0.9	365
				Vegetable	A	A	-	13.8	2,478
2	*	*	*	Durian/Mango	C	A	A	11.0	952
				Guava	C	A	-	3.1	3,360
				Banana	C	A	-	0.7	1,470
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>246</u>
				Papaya	B	A	-	0.6	3,500
				Citrus	B	A	-	2.9	1,470
				Pineapple	A	A	-	9.5	3,360
				Coconut	A	-	A		613
				Oilpalm	C	A	A	0.9	2,688
				Cocoa	C	A	A	0.6	434
				Rubber	B	A	A	0.6	192
				Sago	C	-	A		1,260
				Coffee	A	A	A	0.7	123
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>182</u>
				Clove	B	A	A	1.1	43
Tabacco	B	A	A	0.7	1,260				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>2,800</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>413</u>				
3	*	*	*	Maize	A	-	-		455
				Sorghum	A	-	A		525
				Ginger	B	A	-	2.5	2,100
				Groundnut	A	A	A	0.9	365
				Vegetable	A	A	-	13.8	2,478
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN052

Code Number : KN052 Name of Scheme : Rawa Bechah Laut
 State : Kelantan District : Tanah Merah
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 80 Off : 50
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	1,200
				Groundnut	A	A	A	0.9	209
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>1,416</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	544
				Guava	C	A	-	3.1	1,920
				Banana	C	A	A	0.7	840
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>141</u>
				Papaya	B	A	-	0.6	2,000
				Citrus	B	A	-	2.9	840
				Pineapple	A	A	-	9.5	1,920
				Coconut	A	-	A		350
				Oilpalm	C	A	A	0.9	1,536
				Cocoa	C	A	A	0.6	248
				Rubber	B	A	A	0.6	110
				Sago	C	-	A		720
				Coffee	A	A	A	0.7	70
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>104</u>
Clove	B	A	A	1.1	25				
Tabacco	B	A	A	0.7	720				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>1,600</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>236</u>				
3	*	*	*	Maize	A	-	-		260
				Sorghum	A	-	A		300
				Ginger	B	A	-	2.5	1,200
				Groundnut	A	A	A	0.9	209
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>1,416</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN053

Code Number : KN053 Name of Scheme : Air Lanas
 State : Kelantan District : Tanah Merah
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 125 Off : 100
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : Less than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	1,875
				Groundnut	A	A	A	0.9	326
				Vegetable	A	A	-	13.8	2,213
2	*	*	*	Durian/Mango	C	A	A	11.0	850
				Guava	C	A	-	3.1	3,000
				Banana	C	A	A	0.7	1,313
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>220</u>
				Papaya	B	A	-	0.6	3,125
				Citrus	B	A	-	2.9	1,313
				Pineapple	A	A	-	9.5	3,000
				Coconut	A	-	A		548
				Oilpalm	C	A	A	0.9	2,400
				Cocoa	C	A	A	0.6	388
				Rubber	B	A	A	0.6	171
				Sago	C	-	A		1,125
				Coffee	A	A	A	0.7	110
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>163</u>
				Clove	B	A	A	1.1	39
Tabacco	B	A	A	0.7	1,125				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>2,500</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>369</u>				
3	*	*	*	Maize	A	-	-		406
				Sorghum	A	-	A		469
				Ginger	B	A	-	2.5	1,875
				Groundnut	A	A	A	0.9	326
				Vegetable	A	A	-	13.8	2,213
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN054

Code Number : KN054 Name of Scheme : Kg. Paku
 State : Kelantan District : Tanah Merah
 Type of Scheme : Pump
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 43 Off : 25
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : Idle

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	645
				Groundnut	A	A	A	0.9	112
				<u>Vegetable</u>	A	A	A	13.8	761
2	*	*	*	Durian/Mango	C	A	A	11.0	292
				Guava	C	A	-	3.1	1,032
				Banana	C	A	A	0.7	452
				<u>Cashewnut</u>	A	A	A	8.7	76
				Papaya	B	A	-	0.6	1,075
				Citrus	B	A	A	2.9	452
				Pineapple	A	A	-	9.5	1,032
				Coconut	A	-	A		188
				Oilpalm	C	A	A	0.9	826
				Cocoa	C	A	A	0.6	133
				Rubber	B	A	A	0.6	59
				Sago	C	-	A		387
				Coffee	A	A	A	0.7	38
				<u>Tea</u>	A	A	A	10.4	56
Clove	B	A	A	1.1	13				
Tabacco	B	A	A	0.7	387				
<u>Sugarcane</u>	A	A	A	3.3	860				
<u>Pepper</u>	A	A	A	16.4	127				
3	*	*	*	Maize	A	-	-		140
				Sorghum	A	-	A		161
				Ginger	B	A	-	2.5	645
				Groundnut	A	A	A	0.9	112
				<u>Vegetable</u>	A	A	A	13.8	761
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	A	2.0	
6	*	*	*		A	A	A		
7									
8	*	*	*		*	*	*		

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).

- * : Potential categories
- A : Suitable
- B : Marginal suitable due to lack of drainage facilities
- C : Marginal suitable due to limited factors other than drainage conditions
- : Not suitable

Crop Diversification Potential for KN055

Code Number : KN055 Name of Scheme : Bujung Gertak Serong
 State : Kelantan District : Tanah Merah
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 60 Off : 40
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : Idle

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	900
				Groundnut	A	A	A	0.9	157
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>1,062</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	408
				Guava	C	A	-	3.1	1,440
				Banana	C	A	A	0.7	630
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>106</u>
				Papaya	B	A	-	0.6	1,500
				Citrus	B	A	A	2.9	630
				Pineapple	A	A	-	9.5	1,440
				Coconut	A	-	A		263
				Oilpalm	C	A	A	0.9	1,152
				Cocoa	C	A	A	0.6	186
				Rubber	B	A	A	0.6	82
				Sago	C	-	A		540
				Coffee	A	A	A	0.7	53
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>78</u>
				Clove	B	A	A	1.1	19
Tabacco	B	A	A	0.7	540				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>1,200</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>177</u>				
3	*	*	*	Maize	A	-	-		195
				Sorghum	A	-	A		225
				Ginger	B	A	-	2.5	900
				Groundnut	A	A	A	0.9	157
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>1,062</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		A	A	A		
7									
8	*	*	*		*	*	*		

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN056

Code Number : KN056 Name of Scheme : Rambai
 State : Kelantan District : Tanah Merah
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 25 Off : 25
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	375
				Groundnut	A	A	A	0.9	65
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>443</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	170
				Guava	C	A	-	3.1	600
				Banana	C	A	A	0.7	263
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>44</u>
				Papaya	B	A	A	0.6	625
				Citrus	B	A	A	2.9	263
				<u>Pineapple</u>	A	A	A	<u>9.5</u>	<u>600</u>
				Coconut	A	-	A		110
				Oilpalm	C	A	A	0.9	480
				Cocoa	C	A	A	0.6	78
				Rubber	B	A	A	0.6	34
				Sago	C	-	A		225
				Coffee	A	A	A	0.7	22
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>33</u>
				Clove	B	A	A	1.1	8
Tabacco	B	A	A	0.7	225				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>500</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>74</u>				
3	*	*	*	Maize	A	-	-		81
				Sorghum	A	-	A		94
				Ginger	B	A	-	2.5	375
				Groundnut	A	A	A	0.9	65
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>443</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	A	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN057

Code Number : KN057 Name of Scheme : Permatang Sungkai
 State : Kelantan District : Pasir Puteh
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 32 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	-	6.9	567
2	*	*	*	Coconut	B	-	A		141
				Sago	A	-	A		288
3	*	*	*	Vegetable	B	A	-	6.9	567
4	*	*	*	Fodder grasses	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN058

Code Number : KN058 Name of Scheme : Bdg. Kamal
 State : Kelantan District : Pasir Puteh
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 24 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	-	6.9	425
2	*	*	*	Coconut	B	-	A		106
				Sago	A	-	A		216
3	*	*	*	Vegetable	B	A	-	6.9	425
4	*	*	*	Fodder grasses	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN059

Code Number : KN059 Name of Scheme : Bdg. Bukit Merbau
 State : Kelantan District : Pasir Puteh
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 58 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	-	6.9	1,027
2	*	*	*	Coconut	B	-	A		254
				Sago	A	-	A		522
3	*	*	*	Vegetable	B	A	-	6.9	1,027
4	*	*	*	Fodder grasses	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN060

Code Number : KN060 Name of Scheme : Pertok I
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 10 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	150
				Groundnut	A	A	A	0.9	26
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>177</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	68
				Guava	C	A	-	3.1	240
				Banana	C	A	A	0.7	105
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>18</u>
				Papaya	B	A	A	0.6	250
				Citrus	B	A	A	2.9	105
				<u>Pineapple</u>	A	A	A	<u>9.5</u>	<u>240</u>
				Coconut	A	-	A		44
				Oilpalm	C	A	A	0.9	192
				Cocoa	C	A	A	0.6	31
				Rubber	B	A	A	0.6	14
				Sago	C	-	A		90
				Coffee	A	A	A	0.7	9
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>13</u>
				Clove	B	A	A	1.1	3
				Tabacco	B	A	A	0.7	90
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>200</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>30</u>				
3	*	*	*	Maize	A	-	-		33
				Sorghum	A	-	A		38
				Ginger	B	A	-	2.5	150
				Groundnut	A	A	A	0.9	26
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>177</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN061

Code Number : KN061 Name of Scheme : Pertok II
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 16 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area.

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	240
				Groundnut	A	A	A	0.9	42
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>283</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	109
				Guava	C	A	-	3.1	384
				Banana	C	A	A	0.7	168
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>28</u>
				Papaya	B	A	-	0.6	400
				Citrus	B	A	A	2.9	168
				Pineapple	A	A	-	9.5	384
				Coconut	A	-	A		70
				Oilpalm	C	A	A	0.9	307
				Cocoa	C	A	A	0.6	50
				Rubber	B	A	A	0.6	22
				Sago	C	-	A		144
				Coffee	A	A	A	0.7	14
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>21</u>
Clove	B	A	A	1.1	5				
Tabacco	B	A	A	0.7	144				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>320</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>47</u>				
3	*	*	*	Maize	A	-	-		52
				Sorghum	A	-	A		60
				Ginger	B	A	-	2.5	240
				Groundnut	A	A	A	0.9	42
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>283</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	A	<u>2.0</u>	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN062

Code Number : KN062 Name of Scheme : Pertok III
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Sufficient for double cropping
 Soil series : 2dt

Irrigable area (ha) Main : 11 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	165
				Groundnut	A	A	A	0.9	29
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>195</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	75
				Gusva	C	A	-	3.1	264
				Banana	C	A	A	0.7	116
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>19</u>
				Papaya	B	A	A	0.6	275
				Citrus	B	A	A	2.9	116
				<u>Pineapple</u>	A	A	A	<u>9.5</u>	<u>264</u>
				Coconut	A	-	A		48
				Oilpalm	C	A	A	0.9	211
				Cocoa	C	A	A	0.6	34
				Rubber	B	A	A	0.6	15
				Sago	C	-	A		99
				Coffee	A	A	A	0.7	10
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>14</u>
				Clove	B	A	A	1.1	3
Tabacco	B	A	A	0.7	99				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>220</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>32</u>				
3	*	*	*	Maize	A	-	-		36
				Sorghum	A	-	A		41
				Ginger	B	A	-	2.5	165
				Groundnut	A	A	A	0.9	29
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>195</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	A	<u>2.0</u>	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN063

Code Number : KN063 Name of Scheme : Mas Ulu
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 24 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	360
				Groundnut	A	A	A	0.9	63
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>425</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	163
				Guava	C	A	-	3.1	576
				Banana	C	A	A	0.7	253
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>42</u>
				Papaya	B	A	-	0.6	600
				Citrus	B	A	A	2.9	253
				Pineapple	A	A	-	9.5	576
				Coconut	A	-	A		105
				Oilpalm	C	A	A	0.9	461
				Cocoa	C	A	A	0.6	74
				Rubber	B	A	A	0.6	33
				Sago	C	-	A		216
				Coffee	A	A	A	0.7	21
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>31</u>
				Clove	B	A	A	1.1	7
Tabacco	B	A	A	0.7	216				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>480</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>71</u>				
3	*	*	*	Maize	A	-	-		78
				Sorghum	A	-	A		90
				Ginger	B	A	-	2.5	360
				Groundnut	A	A	A	0.9	63
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>425</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN064

Code Number : KN064 Name of Scheme : Tualang Kelikir
 State : Kelantan District : Machang
 Type of Scheme : Gravity & Pump
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 91 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	1,365
				Groundnut	A	A	A	0.9	238
				Vegetable	A	A	-	13.8	1,611
2	*	*	*	Durian/Mango	C	A	-	11.0	619
				Guava	C	A	-	3.1	2,184
				Banana	C	A	A	0.7	956
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>160</u>
				Papaya	B	A	-	0.6	2,275
				Citrus	B	A	-	2.9	956
				Pineapple	A	A	-	9.5	2,184
				Coconut	A	-	A		399
				Oilpalm	C	A	A	0.9	1,747
				Cocoa	C	A	A	0.6	282
				Rubber	B	A	A	0.6	125
				Sago	C	-	A		819
				Coffee	A	A	A	0.7	80
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>118</u>
				Clove	B	A	A	1.1	28
				Tabacco	B	A	A	0.7	819
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>1,820</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>268</u>				
3	*	*	*	Maize	A	-	-		296
				Sorghum	A	-	A		341
				Ginger	B	A	-	2.5	1,365
				Groundnut	A	A	A	0.9	238
				Vegetable	A	A	-	13.8	1,611
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN065

Code Number : KN065 Name of Scheme : Suda
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 162 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	2,430
				Groundnut	A	A	A	0.9	423
				Vegetable	A	A	-	13.8	2,867
2	*	*	*	Durian/Mango	C	A	-	11.0	1,102
				Guava	C	A	-	3.1	3,888
				Banana	C	A	-	0.7	1,701
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>285</u>
				Papaya	B	A	-	0.6	4,050
				Citrus	B	A	-	2.9	1,701
				Pineapple	A	A	-	9.5	3,888
				Coconut	A	-	A		710
				Oilpalm	C	A	A	0.9	3,110
				Cocoa	C	A	A	0.6	502
				Rubber	B	A	A	0.6	222
				Sago	C	-	A		1,458
				Coffee	A	A	A	0.7	143
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>211</u>
Clove	B	A	A	1.1	50				
Tabacco	B	A	A	0.7	1,458				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>3,240</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>478</u>				
3	*	*	*	Maize	A	-	-		527
				Sorghum	A	-	A		608
				Ginger	B	A	-	2.5	2,430
				Groundnut	A	A	A	0.9	423
				Vegetable	A	A	-	13.8	2,867
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN066

Code Number : KN066 Name of Scheme : Gaung
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 85 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	1,275
				Groundnut	A	A	A	0.9	222
				Vegetable	A	A	-	13.8	1,505
2	*	*	*	Durian/Mango	C	A	-	11.0	578
				Guava	C	A	-	3.1	2,040
				Banana	C	A	A	0.7	893
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>150</u>
				Papaya	B	A	-	0.6	2,125
				Citrus	B	A	-	2.9	893
				Pineapple	A	A	-	9.5	2,040
				Coconut	A	-	A		372
				Oilpalm	C	A	A	0.9	1,632
				Cocoa	C	A	A	0.6	264
				Rubber	B	A	A	0.6	116
				Sago	C	-	A		765
				Coffee	A	A	A	0.7	75
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>111</u>
				Clove	B	A	A	1.1	26
Tabacco	B	A	A	0.7	765				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>1,700</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>251</u>				
3	*	*	*	Maize	A	-	-		276
				Sorghum	A	-	A		319
				Ginger	B	A	-	2.5	1,275
				Groundnut	A	A	A	0.9	222
				Vegetable	A	A	-	13.8	1,505
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN067

Code Number : KN067 Name of Scheme : Che Wa
 State : Kelantan District : Kuala Krai
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 61 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	915
				Groundnut	A	A	A	0.9	159
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>1,080</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	415
				Guava	C	A	-	3.1	1,464
				Banana	C	A	A	0.7	641
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>107</u>
				Papaya	B	A	-	0.6	1,525
				Citrus	B	A	-	2.9	641
				Pineapple	A	A	-	9.5	1,464
				Coconut	A	-	A		267
				Oilpalm	C	A	A	0.9	1,171
				Cocoa	C	A	A	0.6	189
				Rubber	B	A	A	0.6	84
				Sago	C	-	A		549
				Coffee	A	A	A	0.7	54
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>79</u>
Clove	B	A	A	1.1	19				
Tabacco	B	A	A	0.7	549				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>1,220</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>180</u>				
3	*	*	*	Maize	A	-	-		198
				Sorghum	A	-	A		229
				Ginger	B	A	-	2.5	915
				Groundnut	A	A	A	0.9	159
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>1,080</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN068

Code Number : KN068 Name of Scheme : Bechah Pauh
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 182 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	2,730
				Groundnut	A	A	A	0.9	475
				Vegetable	A	A	-	13.8	3,221
2	*	*	*	Durian/Mango	C	A	-	11.0	1,238
				Guava	C	A	-	3.1	4,368
				Banana	C	A	-	0.7	1,911
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>320</u>
				Papaya	B	A	-	0.6	4,550
				Citrus	B	A	-	2.9	1,991
				Pineapple	A	A	-	9.5	4,368
				Coconut	A	-	A		797
				Oilpalm	C	A	A	0.9	3,494
				Cocoa	C	A	A	0.6	564
				Rubber	B	A	A	0.6	250
				Sago	C	-	A		1,638
				Coffee	A	A	A	0.7	160
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>237</u>
Clove	B	A	A	1.1	56				
Tabacco	B	A	A	0.7	1,638				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>3,640</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>537</u>				
3	*	*	*	Maize	A	-	-		592
				Sorghum	A	-	A		683
				Ginger	B	A	-	2.5	2,730
				Groundnut	A	A	A	0.9	475
				Vegetable	A	A	-	13.8	3,221
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN069

Code Number : KN069 Name of Scheme : Batu Pahat
 State : Kelantan District : Machang
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 18 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	A	6.9	319
2	*	*	*	Coconut	B	-	A		79
				Sago	A	-	A		162
3	*	*	*	Vegetable	B	A	A	6.9	319
4	*	*	*	Fodder grasses	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN070

Code Number : KN070 Name of Scheme : Bdg. Ujit
 State : Kelantan District : Machang
 Type of Scheme : Pump
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 15 Off : 0
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	225
				Groundnut	A	A	A	0.9	39
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>266</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	102
				Guava	C	A	-	3.1	360
				Banana	C	A	A	0.7	158
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>26</u>
				Papaya	B	A	-	0.6	375
				Citrus	B	A	A	2.9	158
				Pineapple	A	A	-	9.5	360
				Coconut	A	-	A		66
				Oilpalm	C	A	A	0.9	288
				Cocoa	C	A	A	0.6	47
				Rubber	B	A	A	0.6	21
				Sago	C	-	A		135
				Coffee	A	A	A	0.7	13
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>20</u>
				Clove	B	A	A	1.1	5
Tabacco	B	A	A	0.7	135				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>300</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>44</u>				
3	*	*	*	Maize	A	-	-		49
				Sorghum	A	-	A		56
				Ginger	B	A	-	2.5	225
				Groundnut	A	A	A	0.9	39
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>266</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN071

Code Number : KN071 Name of Scheme : Bakat I
 State : Kelantan District : Pasir Mas
 Type of Scheme : Pump
 Water source : Sufficient for double cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 121 Off : 121
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	A	6.9	2,142
2	*	*	*	Coconut	B	-	A		530
				Sago	A	-	A		1,089
3	*	*	*	Vegetable	B	A	A	6.9	2,142
4	*	*	*	Fodder grasses	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		<u>A</u>	<u>A</u>	<u>A</u>		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN072

Code Number : KN072 Name of Scheme : Hdq. Senor
 State : Kelantan District : Pasir Mas
 Type of Scheme : Pump
 Water source : Sufficient for double cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 123 Off : 123
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	A	6.9	2,177
2	*	*	*	Coconut	B	-	A		539
				Sago	A	-	A		1,107
3	*	*	*	Vegetable	B	A	A	6.9	2,177
4	*	*	*	Fodder grasses	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN073

Code Number : KN073 Name of Scheme : Bdg. Pauh
 State : Kelantan District : Pasir Mas
 Type of Scheme : Pump
 Soil series : 2d

Irrigable area (ha) Main : 47 Off : 43
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Groundnut	A	A	A	0.9	122
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>832</u>
2	*	*	*	<u>Durian/Mango</u>	A	A	A	<u>43.6</u>	<u>319</u>
				Guava	A	A	-	12.2	1,128
				<u>Banana</u>	A	A	A	<u>2.7</u>	<u>494</u>
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>83</u>
				Citrus	B	A	A	2.9	494
				Pineapple	A	A	-	9.5	1,128
				Coconut	A	-	A		206
				<u>Oilpalm</u>	A	A	A	<u>3.6</u>	<u>903</u>
				<u>Cocoa</u>	A	A	A	<u>2.2</u>	<u>145</u>
				Rubber	B	A	A	0.6	65
				Coffee	B	A	A	0.4	42
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>61</u>
				Clove	B	A	A	1.1	14
Tabacco	B	A	A	0.7	423				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>940</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>132</u>				
3	*	*	*	Maize	A	-	-		153
				Sorghum	A	-	A		174
				Groundnut	A	A	A	0.9	122
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>832</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5	*	*	*			A	A	2.0	
6	*	*	*		A	A	A		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN074

Code Number : KN074 Name of Scheme : Bdg. Bukit Cina
 State : Kelantan District : Kota Bharu
 Type of Scheme : Gravity
 Water source : Limited to single cropping
 Soil series : 1

Irrigable area (ha) Main : 200 Off : 120
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : Less than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	A	A	-	5.0	3,000
				Groundnut	A	A	A	0.9	522
				Vegetable	A	A	-	13.8	3,540
2	*	*	*	Durian/Mango	A	A	-	43.6	1,360
				Guava	A	A	-	12.2	4,800
				Banana	A	A	-	2.7	2,100
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>352</u>
				Papaya	A	A	-	1.2	5,000
				Citrus	A	A	-	5.7	2,100
				Pineapple	A	A	-	9.5	4,800
				Coconut	A	-	A		876
				<u>Oilpalm</u>	A	A	A	<u>3.6</u>	<u>3,840</u>
				<u>Cocoa</u>	A	A	A	<u>2.2</u>	<u>620</u>
				<u>Rubber</u>	A	A	A	<u>1.1</u>	<u>274</u>
				Coffee	A	A	A	0.7	176
				Tea	A	A	A	<u>10.4</u>	<u>260</u>
				<u>Clove</u>	A	A	A	<u>2.3</u>	<u>62</u>
<u>Tabacco</u>	A	A	A	<u>1.4</u>	<u>1,800</u>				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>4,000</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>590</u>				
3	*	*	*	Maize	A	-	-		650
				Sorghum	A	-	A		750
				Ginger	A	A	-	5.0	3,000
				Groundnut	A	A	A	0.9	522
				Vegetable	A	A	-	13.8	3,540
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN075

Code Number : KN075 Name of Scheme : Kok Keli
 State : Kelantan District : Tumpat
 Type of Scheme : Pump
 Water source : Limited to single cropping
 Soil series : 2dt

Irrigable area (ha) Main : 0 Off : 110
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : Idle

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Ginger	B	A	-	2.5	1,650
				Groundnut	A	A	A	0.9	287
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>1,947</u>
2	*	*	*	Durian/Mango	C	A	A	11.0	748
				Guava	C	A	-	3.1	2,640
				Banana	C	A	A	0.7	1,155
				<u>Cashewnut</u>	A	A	A	<u>8.7</u>	<u>194</u>
				Papaya	B	A	-	0.6	2,750
				Citrus	B	A	-	2.9	1,155
				Pineapple	A	A	-	9.5	2,640
				Coconut	A	-	A		482
				Oilpalm	C	A	A	0.9	2,112
				Cocoa	C	A	A	0.6	341
				Rubber	B	A	A	0.6	151
				Sago	C	-	A		990
				Coffee	A	A	A	0.7	97
				<u>Tea</u>	A	A	A	<u>10.4</u>	<u>143</u>
Clove	B	A	A	1.1	34				
Tabacco	B	A	A	0.7	990				
<u>Sugarcane</u>	A	A	A	<u>3.3</u>	<u>2,200</u>				
<u>Pepper</u>	A	A	A	<u>16.4</u>	<u>325</u>				
3	*	*	*	Maize	A	-	-		358
				Sorghum	A	-	A		413
				Ginger	B	A	-	2.5	1,650
				Groundnut	A	A	A	0.9	287
				<u>Vegetable</u>	A	A	A	<u>13.8</u>	<u>1,947</u>
4	*	*	*	Fodder grasses	A	-	A		
				Pasture	A	-	A		
5									
6									
7									
8	*	*	*		*	*	*		

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable

Crop Diversification Potential for KN076

Code Number : KN076 Name of Scheme : Joh
 State : Kelantan District : Machang
 Type of Scheme : Pump
 Water source : Sufficient for double cropping
 Soil series : 3d(t)

Irrigable area (ha) Main : 122 Off : 121
 Trafficability of farm machinery : Good
 Paddy planting for last 3 years : More than 50% of irrigable area

Category	Step 1	Step 2	Step 3		Step 4	Step 5	Step 6	Step 7 (B/C)	Production (ton)
1	*	*	*	Vegetable	B	A	-	6.9	2,159
2	*	*	*	Coconut	B	-	A		534
				Sago	A	-	A		1,098
3	*	*	*	Vegetable	B	A	-	6.9	2,159
4	*	*	*	Fodder grasses	A	-	A		
5	*	*	*			A	-	2.0	
6	*	*	*		<u>A</u>	<u>A</u>	<u>A</u>		
7	*	*	*		*	*	*		
8									

NOTE Underline : Crops with highest potential (Class A) in terms of crop suitability, profitability, marketability and invest performance (B/C > 1).
 * : Potential categories
 A : Suitable
 B : Marginal suitable due to lack of drainage facilities
 C : Marginal suitable due to limited factors other than drainage conditions
 - : Not suitable