



# Assessing Food Security

*A Micro-Study  
of 24 Villages  
in Malaysia*

Study conducted by:



Education and  
Research  
Association  
For Consumers,  
Malaysia

In collaboration with



Study supported by:



Regional Office for  
Asia and the Pacific

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*Edited by G. Umakanthan*



**ERA CONSUMER MALAYSIA**

*(Education and Research Association for Consumers, Malaysia)*

## FOREWORD

This publication is the result of an exhaustive study carried out by ERA Consumer Malaysia and DHRRA (Development of Human Resources in Rural Asia) Network Malaysia into the crucial issue of food security, which has become a matter of concern to people and governments alike. In Rome in 1996, governments of the world made a firm commitment at the World Food Summit to reduce the number of hungry and malnourished people.

This was the time ERA Consumer Malaysia and its sister organisation, DHRRA (Development of Human Resources in Rural Asia) Network Malaysia began to be actively involved in issues of food security and to study the causes for food insecurity locally.

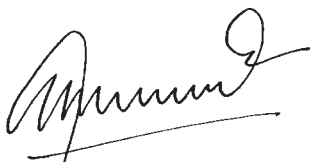
Arising from our field work, particularly that of DHRRA Network, we discovered various problems that threaten the continued production of food in Malaysia, and also learnt reasons why development plans in the area of agriculture have been formulated the way they are, giving little importance to food security, "because it is cheaper to import food from producers who have economies of scale".

This publication documents our study, carried out in collaboration with the Asian NGO Coalition for Agrarian Reform (ANGOC), which undertook an Asia-wide 200 Village Project to establish mechanisms to monitor and determine the extent to which the 1996 World Food Summit's "Plan of Action" commitments are being achieved.

We wish to record our appreciation to the following people, in particular, for their input and assistance in helping us carry out the 24 Village Micro Study Project, the Malaysian part of the 200 Village Project.

1. The villagers who took part in the study
2. The evaluators from Kelantan, Pahang, Perak, Selangor, Negeri Sembilan and Sarawak
3. Consumers International-Regional Office for Asia and the Pacific (C I-ROAP) for its financial contribution towards the project, and
4. Mr. Bishan Singh Bahadur, the Executive Director of the Management Institute for Social Change (MINSOC), who assisted in training the evaluators and coordinating the project.

ERA Consumer and DHRRA Network hope that this publication will not only serve as a basic resource for more work to be done in the area of food security for Malaysia, but will also provide the basis and inspiration for more studies to be carried out.



**MARIMUTHU NADASON**

*President, ERA Consumer Malaysia  
Chairman, DHRRA Network Malaysia*

## PREFACE

Poverty is one of the causes of food insecurity in a country, and rural communities are often vulnerable. In 1999, it was estimated that 10.7% of the rural population in Malaysia lived in poverty.

Food security is generally accepted to mean “access to adequate food that is balanced in nutrition, palatable and culturally acceptable to sustain a healthy and productive life”. At the household level, food security means that each member of the family, no matter the age, sex or physical condition, has an adequate supply of nutritious food on a sustainable basis.

According to figures derived from the Asia-level “200 Village Project”, the average net profit made by a farmer for his hard work in one month is RM138, which puts him out of the market for buying his own plot of farmland or renting a larger one. This locks the farmer in a cycle of poverty: if he is to live better, he must have a larger plot of land on which he can grow more food and cash crops for sale.

Unstable prices of food commodities during harvest cause farmers to suffer low incomes. The reaction is to dump the food crops or carry out large-scale destruction as a desperate measure to protect or shore up the prices at the farm.

From the micro-study conducted in six states of Malaysia, ERA Consumer Malaysia and DHRRA Network Asia are of the opinion that middle- and low-income farmers, if mobilised, trained, supported and guided, will be able to not only increase agricultural productivity but also food production without high quantities of chemical inputs. In addition, they can be transformed into a support group to link and assist other small-scale farmers.

In this publication, we also argue against the capital-centred neo-economic approach of the private sector that focuses on a large-scale monoculture production that is heavily dependent on chemical inputs. Monoculture and the heavy use of chemical inputs are the classic characteristics of non-sustainable agriculture, which in the long run pollutes, depletes and destroys natural resources. Since returns from investment in agriculture are low, the government will have to lure the private sector into agriculture with huge subsidies and concessions. This is certainly not a good or sensible solution.

The farmers themselves have come up with several proposals on how they can help the nation achieve food security. The government, they say, must change its mindset and also act to provide them with more land. Better planning on the ground level is needed, and farmers and fishermen want government officers from the various sectors to work with

them in planning or building infrastructures or when extending services to them. Some have outright called for the total revamp of the Department of Agriculture.

They see a future in cooperative farming, such as merging small, uneconomical farms and using machinery and modern practices to improve output and therefore, their standard of living. On an urgent basis, they want the government to come out with a solution to the shortage of land and the shortage of farm workers.

ERA Consumer and DHRRA Network Malaysia have been asked by the participating villagers to play a role and both these organisations will, within a year, launch a project to build the capacities of farmers in selected villagers in the effort to promote self-reliant communities.

Our emphasis will be on the conservation and sustainable use of natural resources and harmonise with the global policies of biodiversity, sustainable agriculture, sustainable consumption and sustainable livelihood. This is where we hope to be working closely with the various government departments and agencies.

We believe that support and encouragement given to the farmers to plant more food crops, increase the variety of crops that are cultivated and assistance in helping them establish cooperatives or to link up with existing cooperatives to market their produce will put Malaysia on the path to food security.

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## **LIST OF ABBREVIATIONS**

ANGOC	Asian NGO Coalition for Agrarian Reform and Rural Development
BERNAS	Beras Nasional Malaysia or National Rice Corporation
1MP	First Malaysia (Development) Plan - 1966-70
2MP	Second Malaysia Plan – 1971-75
3MP	Third Malaysia Plan – 1976-80
4MP	Fourth Malaysia Plan – 1981-85
5MP	Fifth Malaysia Plan – 1986-90
6MP	Sixth Malaysia Plan – 1991-95
7MP	Seventh Malaysia Plan – 1996-2000
FAMA	Federal Agriculture Marketing Authority
FELDA	Federal Land Development Authority
FELCRA	Federal Land Rehabilitation and Consolidation Authority
GDP	Gross Domestic Product
LKIM	Lembaga Kemajuan Ikan Malaysia or Fisheries Development Board, Malaysia
MAJUIKAN	Fisheries Development Authority of Malaysia
MAJUTERNAK	National Livestock Development Authority
MARDI	Malaysian Agricultural Research and Development Institute
NAP1	First National Agricultural Policy – 1984-91
NAP2	Second National Agricultural Policy – 1992-2010
NAP3	Third National Agricultural Policy – 1998-2010

## **PART I**

### **The Agricultural Scene in Malaysia**

Touted in tourism promotion brochures as “Malaysia Truly Asia”, this equatorial nation of some 23 million people is strategically located at one of the world’s major crossroads. Some two-thirds of this multiracial, multicultural Southeast Asian country are covered with rainforests.

The people of Malaysia are spread around 12 states in the peninsula and two states in East Malaysia, Sabah and Sarawak, which are on the island of Borneo. The Malays, together with the native races, collectively called orang asli in Peninsular Malaysia and the Bajau, Bidayuh, Bisayah, Iban, Kadazandusun, Kayan, Kenyah, Murut and the other communities of Sabah and Sarawak, make up about 58% of the population, the Chinese about 32%, the Indians (including Pakistanis) about 9% and the “others”, such as the Europeans, Eurasians, Arabs and Filipinos, make up 1%. The official religion of Malaysia is Islam, but Buddhism, Hinduism, Christianity and the Baha’i faith are also widely practised.

Largely an agricultural nation, the aggressive modernisation policies of the country’s fourth Prime Minister, Datuk Seri Dr Mahathir Mohamad, have in the last two decades been rapidly changing the face of the nation to that of an industrial one. Once famous for its natural rubber and tin, Malaysia’s major exports today are electrical and electronics products, textiles and apparel, chemicals and chemical products, wood and wood products, iron, steel and fabricated metal products, palm oil and oil and gas.

In the late 1960s and early 1970s, the agricultural sector played a crucial role in the national economy, contributing to 33% of the Gross Domestic Product (GDP), providing half of the total employment and accounting for 50% of the country’s foreign exchange earnings.

In 1970, the agricultural sector saw a growth of 8%, largely due to the emphasis on more and better skilled agricultural workers in the country’s first national development plan, the First Malaysia Plan (1MP – 1966-1970). Paddy production, with two planting seasons a year, saw a growth of 11.9% a year and the National Paddy and Rice Authority (now a corporation, known by its acronym BERNAS), was established during this period to coordinate the various aspects of production, processing and marketing of paddy and rice.

Production in the other sectors increased as well. Fisheries saw a production increase of 8% a year and livestock production by 5.4% a year, with the growth focused on the chicken and hog industries. Malaysia has, since independence in 1957, been dependent on imports for dairy products.

During the 1MP, the Federal Agriculture Marketing Authority (FAMA) played an important role in regulatory schemes in the principal paddy growing areas of the peninsula and initiated paddy trading in Tanjung Karang in Selangor and in Kedah, Kelantan and Terengganu. The Agriculture Bank or Bank Pertanian was also established, to strengthen and coordinate public sector credit programmes for agriculture. The Federal Land Rehabilitation and Consolidation Authority (FELCRA) was established in 1966 to alienate and develop land, especially idle land, for agricultural purposes.

In 1975, the contribution of the agriculture sector to foreign exchange was 49.3% and to



the GDP, 29.8%. The sector employed 1.9 million workers or 49.3% of the total workforce and continued to remain important to the national economy for the “eradication of poverty and the restructuring of society”, the two key objectives of the New Economic Policy (NEP) which was implemented in 1971, following the racial riots of 1969.



The Second Malaysia Plan period (2MP – 1971-75) saw the agriculture sector grow by 5.9% and though 150,000 new jobs were created, the sector registered a drop in total employment because of the more rapid growth in the manufacturing sector, which attracted workers from the rural areas. Food production increased during the 2MP because the government, startled by the world food crisis of 1972-73, pushed for food self-sufficiency.

The world food crisis led to the 90% self-sufficiency in paddy target to be raised to 100% and attention was also paid to the provision and improvement of irrigation facilities, introduction of new varieties of rice for higher yields, a guaranteed minimum price for the retail and wholesale of paddy, urea and other subsidies, incentives and facilities for farmers. Rice production at two million tonnes in 1975 met 87% of the domestic needs.

Fish landings increased by 9.8% a year during the 2MP with the establishment of the Fisheries Development Authority of Malaysia (MAJUIKAN) and the increase in the fishing fleet from 20,300 vessels in 1971 to 22,400 in 1975. The National Livestock Development Authority or MAJUTERNAK was established in 1972 to develop and commercialise the beef and dairy industries. Malaysia was self-sufficient in the production of poultry and pork and produced 85% of its beef requirements. However, 95% of the milk and milk product requirements continued to be imported.

The production of vegetables also increased, from 370,400 tonnes in 1970 to 523,100 tonnes in 1975, largely as a result of farm crop subsidies and protection given by the government to vegetable and fruit growers.

The Third Malaysia Plan (3MP – 1976-80) saw food production increase, but the agriculture sector's contribution to the GDP dropped to 22.2% in 1980. The growth rate of the sector was 4.3% a year. The government invested RM375.9 million under the 1MP, RM88.18 million under the 2MP and RM2,744.65 million under the 3MP to open up land, rehabilitate idle land and develop drainage and irrigation for agriculture and food crops, including paddy production. Livestock production accounted for 6% of the total agricultural output in 1980 and fisheries, 11.2%. The cultivation of fruits and vegetables increased between 1970 and 1980 as subsidies and marketing incentives were provided. At the end of 1980, the total

acreage for vegetables was 9,000 hectares.

The overriding objective of the Fourth Malaysia Plan (4MP – 1981-85) was to increase income through productivity improvements and the creation of employment opportunities. The NEP remained the base for the development of the agricultural sector in the development plans, since this sector had the highest poverty rate,

Paddy production increased by 1.1% a year from 1,040,200 tonnes in 1980 to 1,258,000 tonnes in 1985. Rice self-sufficiency in 1980 was 92%, but only 73.6% in 1985. This decline was said to be due to weather conditions, continuing instabilities in yields and cropping intensities, even in the major granary areas, and the increasing amount of paddy land being abandoned. The drop was so high that RM257.1 million worth of rice had to be imported in 1985.

Fish imports in 1985 came to RM237.2 million. Beef production increased to 19,100 tonnes in 1985 while mutton production, which decreased to 600 tonnes in 1981, rose to 800 tonnes in 1985 as a result of the rearing of sheep in rubber and coconut plantations. There was a surplus in the production of poultry, eggs and pork, resulting in the export of the surplus. The import bill for milk, mutton and beef was RM465 million in 1985.

Milk production increased three-fold between 1980 and 1985, largely due to the rearing of better breeds, the increase in the number of dairy farmers and improved dairy management. MAJUTERNAK, which had been tasked with the development of the beef and dairy sector, was dissolved in 1983 and its duties were taken over by the Department of Veterinary Services.

The total food import bill was RM3,063 million in 1985 as against RM2,340.3 million in 1980.

The 4MP saw the agriculture sector grow by 3.4% a year, but its contribution to the GDP



was just 20.3% in 1985. In terms of employment, agriculture accounted for 1.95 million jobs or 35.7% of the total workforce in 1985. During the plan period from 1981 to 1995, some 42,300 jobs (equivalent to 6% of the workforce then) were generated.

Efforts to revitalise and modernise the rural agricultural sector and to urbanise the rural areas were taken during the Fifth Malaysia Plan (5MP – 1986-90), with the major thrusts on modernising and commercialising the smallholder sub-sector, rationalising the extent of government involvement and increasing the participation of the private sector, which had thus far been playing a small role in agriculture, despite government encouragement. Of the total of 888,100 hectares of land developed by the government during the course of the 1MP, the private sector was involved in only 139,000 hectares, though joint programmes with government agencies. During the 3MP, the private sector developed 134,615 hectares of land, also through joint ventures with the government sector.

The agriculture sector grew by 4.6% a year during the 5MP and contributed to 18.7% of the GDP in 1990. This was despite the First National Agriculture Policy (NAP1 – 1984-91), formulated during the 4MP period and implemented in 1984, being pursued with vigour. Paddy production was 1,271,000 tonnes in 1990 and the small 1.03% growth was blamed on labour shortage, low returns, poor management and the occasional droughts in the non-granary areas of the northern peninsula.

Vegetable production increased 4% a year to 609,600 tonnes in 1990, and this increase was due to intensity in cultivation rather than the increase in acreage. Malaysia remained a net importer of vegetables, with the import bill for this being RM366.8 million in 1990. Livestock imports amounted to RM855.2 million in 1990. While chicken, eggs and pork were exported, the country was only 10% self-sufficient in milk. Beef production grew by just 1.9% a year during the 5MP.

The Sixth Malaysia Plan (6MP – 1991-95) called for the greater involvement of the private sector in agriculture. Land development was no longer done by FELDA but by the state governments and private companies. The private sector opened up 85% of the total land developed during the 6MP.

Priority under the 6MP was given to further reorienting the smallholdings towards greater commercial operation to realise economies of scale and to be able to be globally competitive in the long run. The major policy concern was to ensure that agriculture remained competitive in the international market, and therefore economically viable, through the exploration of new crops for their potential. Research and development were emphasised to enhance the competitiveness of crops that were not.

At the end of the 6MP, during which the Second National Agriculture Policy (NAP2 – 1992-2010) was implemented, the production of paddy was at 1,373,000 tonnes (in 1995), or a growth of 1.4% a year and a self-sufficiency level of 76.3%. The supply-demand gap increased from 359,000 tonnes in 1990 to 426,000 tonnes in 1995. Land used for paddy decreased from 680,600 hectares in 1990 to 670,000 hectares in 1995.

Vegetable production came to 609,600 tonnes in 1995, giving a self-sufficiency level of 71.7% and vegetable import for that year was valued at RM683.4 million. The import of livestock and dairy products continued to increase. The production of livestock was 1,400,100 tonnes and the import bill for livestock products came to RM1,437.2 million in 1995. Despite an increase in aquaculture activities, fish products worth RM762.4 million were imported in

1995. The total food import bill for 1995: RM7,633.6 million.

The agriculture sector grew at 2% a year during the 6MP, as Malaysia headed towards industrialisation and Vision 2020, Prime Minister Dr Mahathir's blueprint for Malaysia to be a fully developed nation by the year 2020. In 1995, the agriculture sector's contribution to total export earnings was 13.1% and contribution to total employment, only 18%: a direct result of the government moving the country from an agricultural economy to an industrial economy. Agriculture was considered a non-productive, labour- and capital-intensive sector and therefore, concentration was only on the production of commodities like palm oil and cocoa, which, besides being of export value, were also important to the local manufacturing sector.

The Seventh Malaysia Plan (7MP – 1996-2000) saw a further reduction in the role of agriculture in the national economy and a slow growth in the food sector. The 7MP encouraged increased participation in large-scale agricultural production, particularly of food commodities and high-value produce. The policy also called for the reorientation of production methods to improve competitiveness in the context of a more liberal market environment and the review of the remaining tariffs imposed on agriculture imports. At the same time, the plan called for the gradual withdrawal of subsidies to encourage greater market efficiency. All these policies confirm that the agriculture sector was moving towards a more open and competitive agricultural economy and towards free trade – as the pressures of the World Trade Organisation agreements began to take effect.

Paddy production increased by 0.9% a year between 1996 and 1998. However, the import bill for rice has also been increasing, from RM527.52 million in 1996 to RM701.31 million in 1997 and RM910.52 million in 1998. The production of vegetables registered a positive increase, but imports continued to rise, from 10% in 1996 to 16.6% in 1998. The vegetable import bill for 1998 was RM987.3 million and the main imports were onions, shallots and garlic, followed by potatoes, carrots, round cabbage, cauliflower and headed broccoli.

Even though Malaysia has a large vegetable import bill, there is still the export of vegetables to Singapore and sometimes a re-export of the imports to the island republic. It is said that Malaysia exports cheap vegetables and imports expensive ones<sup>1</sup>. Imported vegetables are definitely not for the masses as they are expensive – which means that the import bill is high because Malaysia imports vegetables for the rich and the better off. This is neglect of the poor as the vegetables they consume are exported and the ones for the rich are imported.

The import bill for livestock and animal feed is also increasing. The major contributor to the import bill, which takes up about 50% of the livestock, meat and meat products and dairy



and dairy products imports, is dairy produce – all kinds of milk and cream, butter and other fats derived from milk, cheese and yoghurt. Malaysia is only 4% self-sufficient in milk. Fisheries, one of the areas developed for export-orientation, also show high import and export figures. Production had a constant increase of 5.8% a year between 1996 and 1998 while consumption increased by 7.1% a year. Production increase was not in tandem with consumption increase, and Malaysia remained a net exporter of seafood.

Today, more and more items of food, fresh as well as processed, are being imported. The food import bill for the year 2001 exceeded RM13 billion. In the first quarter of 2001, the agriculture sector contributed 8.52% to the GDP. In comparison, in the first quarter of 2002, the sector contributed 8.02% to the GDP.

In the first quarter of 2001, the food sector contributed 3.23% to the GDP, compared to the first quarter 2002 when it contributed 3.31%. As for the non-food sector of agriculture, it contributed 5.29% to the GDP in the first quarter of 2001, while in the first quarter of 2002, the contribution of the non-food sector to the GDP dropped to 4.71%. The total workforce in the agriculture sector, including farmers, fishermen, livestock breeders, plantation workers and smallholders, was 3.87 million in the year 2001.



## The National Agricultural Policy

During the course of the 4MP (1981-85), the government pushed for agriculture sector incomes to be maximised through the efficient use of the country's resources. Food production was decreasing, one of the reasons for which were adverse weather conditions, and food imports increasing, and therefore the government came out with the First National Agricultural Policy (NAP1), which was implemented in 1984.

This started the movement of the agriculture sector towards commercialisation. Planting materials and certain inputs that had been provided free to farmers by the government were replaced with a scheme under which this aid was provided for a nominal fee. Subsidies for all kinds of crops, livestock and fisheries, with the exception of paddy, pepper and sago, were gradually reduced towards the end of the 4MP. This resulted in the increase in the cost of production for farmers and fishermen and decreased production in 1984 and 1985, even though the strategies of the NAP1 stressed cost-reducing measures.

Privatisation also came into the picture, to encourage private sector participation in the agriculture sector. The aquaculture projects in Puchong and Sungai Dagga, the hatchery centre at Machang in Kelantan, the pig sections at abattoirs in the major towns of the peninsula, the ice factories at the fishing complexes run by MAJUIKAN (now renamed Lembaga Kemajuan Ikan Malaysia or LKIM) and the tea factory run by the Malaysian Agricultural Research and Development Institute (MARDI) in Cameron Highlands were privatised. The exercise had an adverse impact on the small farmers and fishermen, who had now to pay more for goods and services.

This was the beginning of private sector involvement in food production. Large-scale production, the increasing of farm sizes and the reduction of smallholdings for all food crops was encouraged, especially in vegetables, fruits and livestock, with the objective of economic productions of scale and to increase production for domestic demand and for export.

FAMA, which was established to help farmers to earn better incomes from fairer prices for their produce by setting up buying centres, gradually moved out of direct domestic marketing activities to concentrate on providing marketing intelligence and seeking out and developing new markets overseas. This showed the importance given to overseas markets and export-orientated products under NAP1.

A very worrying trend was discovered after five years of the implementation of the NAP1. Malaysia's import of food had increased tremendously and the rate of self-sufficiency had dropped, especially in rice. Land used for the production of food commodities like rice and vegetables increased by 0.2% to 0.4% a year between 1985 and 1990, while land used for cash crops like oil palm and cocoa increased around 6% and 6.7% a year. Food crop production was sidelined because production costs were high and the returns, low.

The mechanisation of the agriculture sector was also emphasised under NAP1, even in the research and development areas. This contributed to the increased costs of production, as mechanisation is expensive and it could well have contributed to a number of small farmers

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2 For example, the cost of producing a 2kg chicken for the market (a 40-day-old broiler), in a 1998 study by Nafas Sdn Bhd was RM5.62. Of the production components, 70% or RM3.97 worth of inputs – soft animal feed, rough animal feed, medicines and vitamins – are imported.



going out of business. Employment in the sector dropped by about 3.8% in 1990.

NAP1 was supposed to increase the incomes of the farmers through increased productivity and efficiency. However, this was not achieved because figures showed that the incidence of poverty in the agriculture sector remained high. What increased was the role of the private sector in agriculture. During the 2MP, 57.2% of the land developed by the private sector was for wholly private sector projects while 42.5% represented joint-venture projects with government agencies. During the course of NAP1, only 2% of the total land developed by the private sector was by joint venture with government agencies, proving that the role of the private sector, which was basically planting crops of commercial or industrial value, had increased tremendously.

The Second National Agriculture Policy (NAP2 – 1992-2010) stressed that the agriculture sector should be market-led, commercialised, efficient and productive and so emphasis was given to large-scale production, rural industrialisation and commercial interests. Self-sufficiency in food production was not encouraged because it was argued that Malaysia does not have a comparative advantage in food production. Even though import substitution for food crops was stressed under NAP2, imports continued to increase and food production remained relatively low, compared with the production of cash crops.

The implementation of NAP2 therefore resulted in decreased food production. Unlike the NAP1 which saw attention paid to training in farming, agriculture techniques, fishing and so on, the NAP2 concentrated on the integration of small farms into bigger cooperatives to become more competitive and the encouragement of investment in agricultural commodities that would support the industries.

The 1997 Asian financial crisis hit Malaysia hard and saw the Malaysian ringgit pegged to

the US dollar at US\$1:RM3.80. This was a bitter experience for the country and because of the high imports of food and food products, feed for livestock like poultry, fertilisers and pesticides, domestic food prices spiralled<sup>2</sup>. Important commodities like sugar, coconut, chicken and rice saw steep price increases, while there were shortages of vegetables, onions, potatoes and other food products as price increases also forced a reduction in imports. Until then, the nation had not faced a food crisis (even the global food crisis of 1972 did not have such a disastrous impact!). The lesson for the planners was that for a country that all along had been agriculture-based, the shortages of food and food products could have been avoided if policies towards food security had been introduced and implemented.

Following this crisis, the NAP2 was reviewed during the course of the 7MP and the Third National Agriculture Policy (NAP3 – 1998-2010) was introduced in 1998. However, this policy too did not give priority to food self-sufficiency, ignoring the issues of raising food production or research in ensuring food security.



*Home industry : Farm community women make keropok lekor, a local delicacy.*

Agroforestry and the product-based approach, which are for enhancing the production of crops that have high market value, are emphasised. Research and development programmes are to focus on conducting industrial-driven technologies, producing technologies suitable for the national economy, commercialising research findings and efforts to ensure the efficient marketing of cash crops. Private sector involvement in agriculture is to be increased significantly and a public-private sector coordination council to implement NAP3 has been

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- 3 *The CPI tracks changes in the prices of goods for the average Malaysian, according to weightage. The weightage for food products is 34.9% (base year 1994, with the CPI at 100). Rice, bread and cereals make up 5.5%, fruits and vegetables (5.4%), fish (4.9%), meat (3.8%), egg and milk (2.3%), oil and fat (0.7%) and other foods (1.1%).*
- 4 *DHRRRA (Development of Human Resources in Rural Asia) Network Malaysia is the successor of MasDHRRRA or Malaysia DHRRRA which was formed in 1974 as a member of the Philippine-based AsiaDHRRRA. The activities of MasDHRRRA, which had been successful in bringing together rural communities driven by a spirit of dialogue and cooperation, ceased in 1998 when its Secretary-General, Anthony Muthu, died.*

*ERA Consumer Malaysia then joined AsiaDHRRRA in reviving MasDHRRRA, which subsequently came to be known as DHRRRA Network Malaysia and was registered as a community-based organization in 2001. It started working on issues related to health, hygiene, welfare and consumer education in the rural areas. DHRRRA Network Malaysia's thrusts remain working with the rural peoples to build a strong, self-reliant community through poverty alleviation, based on dialogue and cooperation among rural peoples.*



set up. Private sector involvement in large-scale paddy farming and investment in research and development of crops of commercial value are also encouraged.

Malaysia's dependency on food imports in recent years has increased the common man's monthly food bill drastically. The Consumer Price Index (CPI)<sup>3</sup> tracks the increases in the prices of consumer goods and can be used to prove that the cost of food has increased tremendously in the last few years. Food is the highest expenditure in the CPI, carrying a weightage of 34.9 of the full 100 points (as at the last revision in 1994). If a person spent RM271.94 a month on food in 1994, he would have spent RM357 a month on that same food in 1998.

The food habits of Malaysians have also changed in recent years and this is also one of the reasons for the high food import bill. There is a high import of foods that can be considered "Western diet", especially cereals (such as oats and cornflakes) which accounted for 27% of the food imports in 1998. The changing lifestyles and in food demand from rice to cornflakes and from sawi and bayam to cauliflower and broccoli are not a healthy trend as Malaysia, already highly dependent on the inputs used to produce food, will gradually become more vulnerable to food security.



## **PART II**

# **ASSESSING THE FOOD SECURITY SITUATION IN MALAYSIA AND IDEAS FOR ACTION: A 24-VILLAGE STUDY**

A 200-village study across 10 Asian countries to generate solid, community-based information on the security of food for the people was carried out, starting in the year 1999, as a response to the solemn commitment of 186 global leaders gathered in Rome at the World Food Summit of 1996 that the number of hungry people in the world should be halved by the year 2015. The seriousness of this initiative was underscored by the fact that two-thirds of the world's hungry, or 800 million people, live in Asia.

Food, like air, water, clothing and shelter, is indispensable to survival and hence no human being should go without it. As a basic human need, the right to food is also one of the most fundamental rights in the Universal Declaration of Human Rights.

The 200 Village Project study began, with household surveys that would show the inter-relationship of the fundamental factors affecting food security at the household and community levels, in 103 villages in Bangladesh, Pakistan, Sri Lanka, the Philippines and Thailand. This study was initiated by the Asian NGO Coalition for Agrarian Reform and Rural Development (ANGOC), which undertook to establish mechanisms to monitor and determine the extent to which the 1996 World Food Summit commitments are being achieved.

Geared towards formulating community projects and policy recommendations to national governments on the availability of food to the masses at reasonable prices to the people, one of the key objectives of the project was to enable grassroots communities to participate more effectively in identifying food related problems, plan actions to solve these problems and to monitor progress in food security at the community level through Participatory Rural Appraisal techniques. Malaysia joined the 200-Village Project in September 2000.

Conducting the survey in Malaysia was the Education and Research Association for Consumers, Malaysia (ERA Consumer, Malaysia), a voluntary, non-profit and non-political organisation that completed a micro study of 24 villages covering six of the 14 states in the country, including one in East Malaysia (on Borneo island), as an integral part of the "200-Village Project". In this work, ERA Consumer was assisted by DHRRA Network Malaysia<sup>4</sup>

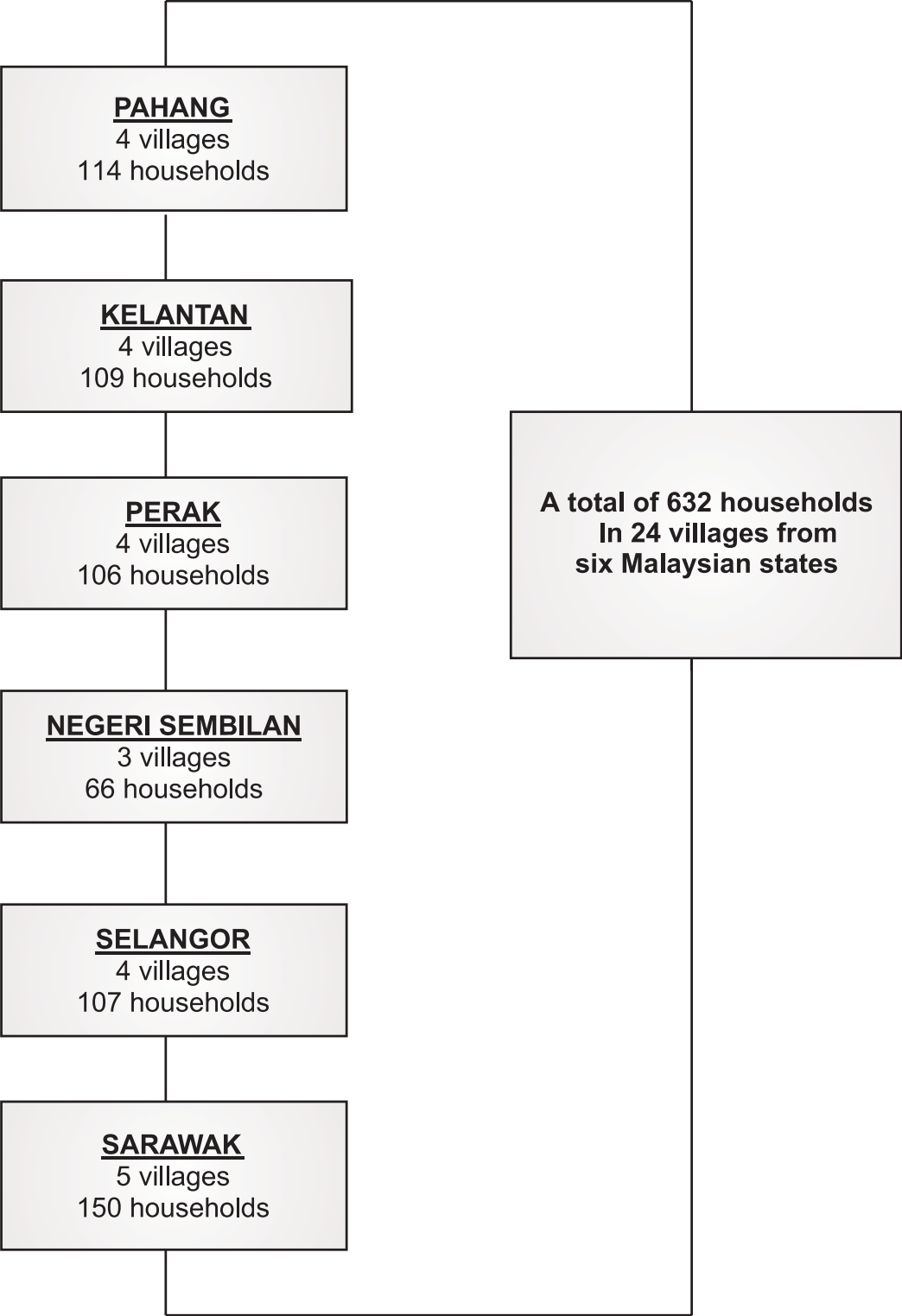
Malaysia is divided into East Malaysia and Peninsular Malaysia. The areas facing the most serious problem of food security are the two East Malaysian states of Sabah and Sarawak, as well as several areas in Peninsular Malaysia. The six states that were selected for the project sites were Perak, Kelantan, Pahang, Negeri Sembilan, Selangor and Sarawak. Initially, Sabah was chosen as a pre-survey field testing area, but since committed partners to help carry out the survey could not be secured in that state, ERA Consumer switched the site to Sarawak.

In all, a total of 632 households in 24 villages were surveyed. Four villages in each of the states of Perak, Kelantan, Pahang and Selangor representing 406 households. In Negeri Sembilan, 66 households in three villages took part in the survey while in Sarawak, five villages were involved in which 150 households participated.

The villages that were involved in the study were:

<b>Perak</b>	<ul style="list-style-type: none"><li>● Parit Buntar, Taiping</li><li>● Pondok Tanjung, Taiping</li><li>● Gopeng, Ipoh</li><li>● Semanggol, Taiping</li></ul>
<b>Pahang</b>	<ul style="list-style-type: none"><li>● Kampung Ulu Jengka</li><li>● Batu 49, Kuala Terlak</li><li>● Kota Gelanggi, Termerloh</li><li>● Berinchang, Cameron Highland</li></ul>
<b>Kelantan</b>	<ul style="list-style-type: none"><li>● Kampung Peringat, Kota Bharu</li><li>● Kampung Repek, Bachok</li><li>● Chuchuk Puteri, Kuala Krai</li><li>● Kampung Kok Seraya, Tumpat</li></ul>
<b>Negeri Sembilan</b>	<ul style="list-style-type: none"><li>● Taman Jaya Bahru</li><li>● Batu 10 Pantai, Seremban</li><li>● Kuala Pilah, Bahau</li></ul>
<b>Selangor</b>	<ul style="list-style-type: none"><li>● Kampung Sungai Serai, Kuang</li><li>● Parit 4, Sungai Burung, Sekinchan</li><li>● Kampung Sri Tiram Jaya, Tanjung Karang</li><li>● Kampung Baru Kundang, Kuang</li></ul>
<b>Sarawak</b>	<ul style="list-style-type: none"><li>● Baru 8, Jalan Sibu, Bintulu</li><li>● Kampung Simpok, Tapak Sarawak</li><li>● Kampung Gayu, Pedawan, Kuching</li><li>● Kampung Skuduk, Tapak, Kuching</li><li>● Kampung Lundu, Serian</li></ul>

DIAGRAM 1



## The purpose of the study

Food security exists when all people at all times have physical and economic access to sufficient, safe and nutritious food for their dietary and food preferences for a healthy lifestyle. Food therefore has to be treated as a national security by all countries, and the production of food has to be nurtured and protected at all costs.

A healthy population is developed and maintained by ensuring that all citizens get their due share of food. Governments can fall as a result of food shortages and even developed countries are confronted with the challenges of overcoming food insecurity. All nations must become self-sufficient in the food needs of their peoples and the ultimate decision on what the people should grow and eat should be in their hands: it should not go by the dictates of the World Trade Organisation.



*At the wet market in Kota Bahru, Kelantan*

Besides some 800 million people in Asia suffering from malnutrition, some 25% of the childhood deaths in the continent were found to be due to inadequate diets as a result of protein and energy deficiency and the lack of key minerals and vitamins. Some three million children under the age of five die in Asia every year from diarrhoea and dysentery because of poor quality and unsafe food and water supplies.

The 200 Village Project was therefore designed to act as the poverty alleviation and food security initiative to localise globalisation, to promote participation of the community, local NGOs, concerned organisations, public agencies and the government in the battle against poverty and thereby, alleviate hunger.

### ***The primary objectives of the study were to:***

- i. Develop a framework showing the inter-relationships between the fundamental factors affecting food security at the household and community levels;

- ii. Develop and implement methodologies and training to build the capacity of local NGOs and communities in planning for food security and rural development;
- iii. Enable grassroots communities to participate more effectively in identifying food related problems and potentials for food security in their own communities;
- iv. Utilise the data obtained to link local actions with ANGOC policy work with local and national governments and international agencies;
- v. Encourage discussions and create opportunities to establish a favourable environment for policy planning for the promotion of food security;
- vi. Advance the effective transfer of knowledge and the sharing of experiences among the ANGOC networks and to strengthen the capabilities of NGOs in the South;
- vii. Develop and act upon food security issues locally and formulate significant policies to influence local, national and regional planning to alleviate hunger and attain food security;  
*and*
- viii. Attempt to localise globalisation by inter-relating community initiatives in different Asian villages at the regional level.

***Specifically in Malaysia, ERA Consumer also focused on:***

- i. Assessing the food security situation at the household and community levels at the 24 villages in the six states;
- ii. Adopting and adapting the approach as the basis for community level analysis, planning and action for sustainable food security and rural development;
- iii. Using the findings for policy advocacy at the national level for sustainable food security and rural development; *and*
- iv. Promoting and helping the communities in the villages selected to work towards food security.

***The study format:***

The villages were selected according to the following criteria:

- i. An area that produces cash crops for export and for domestic consumption;
- ii. An area that produces sustainable crops mainly for domestic consumption;
- iii. An area that represents different types of food crops grown, land use and geographical area; and







- iv. An area where existing NGOs or local people's organisations are willing to participate in the programmes.

***Criteria for household selection:***

To select the households to participate in the survey, the following criteria were adopted:

- i. Those willing to be interviewed and co-operate with the project;
- ii. That they are mainly dependent on the production of food crops for their livelihood;
- iii. Those having potential to increase food production;
- iv. Priority was given to areas that are food insecure, poor, indigenous race households and households headed by women; and
- v. Those who were willing to join ERA's food security project.

## Project implementation

The project implementation consisted of three main phases:

- i. Baseline Survey and Community Planning
  - Collection of household and community information and data affecting the food security situation at each level through interviews and questionnaires.
  - Household action planning on resolution of food insecurity.
  - National food security situational report.
- ii. Community Project Implementation
  - Implementation of pilot sites to solve the problem of food insecurity at the household-level, based on the results of the first phase.
- iii. Policy Advocacy
  - Based on the experiences and achievements from the first and second phase, policy advocacy will be made to help further scale-up the results gained.

### ***Project management:***

The overall management of the project was the responsibility of the ANGOC Board and the ANGOC Regional Secretariat. The Project Advisory Committee (PAC) and the Technical Working Group (TWG) played an advisory function. The PAC ensured that the project conformed to with agreed framework. It also assisted ANGOC in convening regional meetings, which serve as a venue for policy dialogue as well as presentation of the project findings. The TWG, composed of institutions and organisations, provided technical assistance in finalising the project design, preparing the survey and planning tools, designing the database system, the application of Participatory Rural Appraisal (PRA) techniques and preparing the criteria for selection of villages and NGO partners.

In each country, 20 villages were selected to represent the ecological and productive characteristics of that country. Each country has one organisation as the Country Focal Point (CFP). Guidelines were provided to the CFP on the survey methodology.

In Malaysia, the study was conducted by two field officers, one from ERA Consumer, Parvathi Letchumanan, and the other, Vijayakumar Annamuthu, of DHRRRA Network Malaysia. They were given training in the research methodologies of the ANGOC studies, the participatory approaches to be adopted, food security issues and related matters and then sent to the villages to train the village/community leaders who assisted in carrying out the survey. These two staff members oversaw the conduct of the entire project in the six states of the federation.



# The Process of the Study

## *Training the enumerators*

The pre-field testing to select the enumerators for the project and to consider the suitability and adaptability of the questionnaires was conducted in Cameron Highlands in Pahang, Kota Bahru in Kelantan and in Kota Kinabalu, Sabah. It was also an opportunity to gauge the support that ERA Consumer could expect in those areas. Sabah was eventually dropped as a site for study as we were not able to identify a suitable partner for ground support.

After the field testing and editing of the questionnaires, a national-level training was conducted in Kuala Lumpur with 30 leaders, volunteers, NGO leaders and women's group representatives from the six states on how to carry out the survey. Copies of the edited questionnaire, translated into Bahasa Malaysia and Tamil as well, were given to the 30 main participants.

Then came the training of the local help in the villages selected, before the survey could start. After seeking the permission of the relevant village heads, local people's organisation leaders or the leaders of the local area farmers' organisation, a general meeting with the villagers was called.

At this session, lasting two to three hours, the enumerators provided guidance to the interviewers on the overall process of the survey, how to conduct it and coached them on developing their questioning ability.

Specifically, the interviewers were also coached on how to:

- Observe and record the local environment and general geographic features;
- Check out and report on the basic social services available;
- Check out and report on the health services available;
- Observe how the farms are managed;
- Record the role of women in the farm;
- Report on the community issues and problems;
- Get information on the health, food and nutrition of households and information on the overall family situation; and
- Record information on farming methods and the technology applied.

The questionnaires were studied daily by the enumerators and in the second stage of the



household survey, the enumerators had to get the farmers and the interviewers together for further explanation on the survey done. Through these feedback or evaluation sessions, the enumerators were able to fill up the uncompleted portions of the questionnaires or elicit the responses required for the study. Overall, these processes were carried out in an easy and cordial manner, with the farmers showing keen interest that the study could well be the beginning of a better life for them.

### ***Field work and data gathering***

All households visited are first given an explanation on the objectives of the survey as this will help them understand the nature of the questions posed. It took on the average one to two hours to complete the questionnaire for one family and quite often, a second visit was required for clarification or for completing the questionnaire. The enumerators also faced language problems when carrying out the survey and one reason for this was the education level of the farmers. Often too, the farmers could not provide details of crop production or income/expenditure rates.

The table below lists the schedule of the interviews, according to the localities:

Place	Period
Perak	22 -30 December 2000
Negeri Sembilan	2 - 6 January 2001
Pahang	8 -14 January 2001
Kelantan	15 -24 January 2001
Sarawak	29 January - 12 February 2001
Selangor	14 -19 February 2001

## **Assessment of the study**

This assessment is divided into three categories:

### **(a) General Characteristics of the Household Respondent**

The average household size in the 24 villages was five to six people, with several households in Kelantan having eight people. The average household is made up of 30% adults (above 18 years of age), 40% youth (below 18 and above 10 years) and 30% infants (below 10 years of age). In terms of education, around 80% of the farm households are literate in one of the four main local languages – Malay, English, Chinese and Tamil. Of the 80% literate households, 60% attended primary and secondary schools while 40% obtained only primary-level education. The illiterate group comprised mostly the older generation.

Primary occupations of the farmers differ according to the locality or the time of the year. The survey showed that 25% of farm households were involved in full-time farming, the women included. Another 50% of those living in these farming communities were part-time farmers and they included housewives, odd-job labourers, retirees and those employed elsewhere, such as in factories or mills. The other 25% were housewives and those employed in factories or elsewhere who planted food or cash crops in home gardens.



As for the average household income, a full-time farmer in the peninsula states can make up to RM10,000 a year. Farmers in Cameron Highlands can earn as much as RM25,000 a year but a different situation can occur in Sarawak, where the mean annual income can be as low as RM5,000.

Sources of income for the people in the villages surveyed came from employment (60%) and selling of vegetables and cash crops (40%). The bulk of the household expenditure, or 50% of the total monthly income in the villages surveyed was on food. Another 48% is spent on housing, clothing, amenities like water and electricity, education, health and recreation and about 2% of their income is kept aside as savings.

The major crops planted by the farmers are rice, vegetables, pepper, commercial flowers and palm oil while many of them also breed livestock, and rear fish in ponds. Credit sources for those in need of financial help are usually banks like Bank Pertanian (Agriculture Bank) and co-operatives, relatives, friends, sundry shop operators and material suppliers.

None of the households in the 24 villages faced high food insecurity, with at least 65% of the households considered to be in the food secure status, 25% moderately food secure and 10% food insecure. The majority of the farmers or 50% of them cultivate their own land, with 25% of the others tilling rented land, 20% working on government reserve land and 5% on share-cropping land. Sustainable farming practices are being encouraged for the agricultural sector in the new millennium, but only some 10% of the farmers are applying it.

Some 50% of the farmers practise non-sustainable farming, using commercial seed varieties and hence are also dependent on fertilisers and herbicides that have been recognised as a blight on the environment. Another 25% of them practise semi-sustainable farming, that is, a mixture of the commercial and traditional systems, while another 15% foraged the surrounding jungles for herbs and wild products.

Most of the villagers have organised themselves into cooperatives, farmers' organisations and community-based organisations. Rice is the staple diet and nutritionally sufficient amounts of vegetables, fish, poultry and meat are also consumed.



### **(b) Food Security Indicators**

Most of the farming communities enjoy an adequate purchasing power for their basic needs. However prices are on the increase and the poor are finding it difficult to make ends meet. The quality of food produced in the villages is good but education and awareness are needed for the consumption of more local and indigenous food against the growing influence of homogenised eating patterns.

The people's participation in decision-making, marketing their produce and consultation in policy-making is weak. The tendency is for government is to use agriculture and rural development as "vote banks" in a general election and this tendency acts against the genuine development of agriculture and the rural community. Agricultural practices carried out are dependent on heavy chemical inputs and support. Organic and sustainable agricultural practices are still in their infancy. However, awareness of cleaner and safer organic food and the demand for sustainable agriculture is slowly increasing among the farmers.

### **(c) Household Perceptions on Food Availability**

Sufficient quantities of food are available in all the villages, but there will be better accessibility to food if there is to be an improvement to their purchasing power. Unstable and high food prices are the main perceptions the villagers have on factors to ensure food security. A common solution volunteered by the households to the rising prices of food is that this problem can be tackled through home gardening and community farming. Cooperative ventures in food production and marketing are considered to be the best paths to food security.



## Consultation Workshop

A three-day consultation workshop was held in Kuala Lumpur to discuss and validate the survey assessment of the micro study of the 24 villages and at the same time to draw up ideas for action for the improvement of food production by the farmers and a better livelihood for them. The selected participants, numbering 57 in all, were the contact or key people among the farmers and the volunteers who assisted in the project study and assessment. The validation process of the survey was done in two parts. In the first, the farmer-leaders were asked to pick one of the villages surveyed in their state and carry out a food security profile of that village. In the second part, the initial findings of the coordinators of the micro study were assessed.



### *The study output*

The 57 representatives from Kelantan, Negeri Sembilan, Pahang, Perak, Sarawak and Selangor met from March 2 to 4, 2001 as a follow-up to the micro study of 24 villages undertaken between December 2000 and February 2001 to assess food security situation of village communities in Malaysia.

As part of the process of consultation and workshop sessions, the participants generated ideas for action and made some recommendations to ERA Consumer for follow-up programmes of action.

Under Part 1, the farmer-leaders were tasked with analysing the food security situation of the villages they had selected, and then conduct a problem and potential analysis, the results of which were presented in plenary sessions. This exercise had a three-fold purpose: to recall and recapture the experiences of the participants in the survey and the study; to share these experiences and generate new analysis and insights; and to act as a 'sounding board' to help validate both the process and findings of the study.



Part 2 saw the assessment of the micro study coordinators' initial findings of the study. The participants were divided into three groups to reflect on the report, make an assessment, to provide feedback and to validate the findings. This exercise also had three purposes: to enable the volunteers and the farmer-leaders to see the macro picture and how the process is linked to the larger picture of sustainable livelihood, agriculture and food security; to analyse and generate ideas for action on how to improve the situation and to help validate the findings of the survey.

### ***The core problem***

The core problem identified during the consultation and workshop sessions was that many farm communities in Malaysia have become victims of the political games for power of the politicians, both from the parties in the government and in the opposition. One negative impact that this power game has unleashed is the "seeking assistance" syndrome.

The farm households and the rural communities have come to depend on the government and others for support and assistance. The process has become so pervasive that in every development planning, government assistance takes a focal role.

This has been identified as the cause for destruction of the spirit of self-reliance, community cooperation, creative thinking and innovative action. There is a need for an education campaign and capacity-building processes to transform the mindset of the farmers from being so dependent on the government to becoming self-reliant. A mental revolution is necessary.

Another problem that exists is in the area of finance. Small-scale farmers face difficulties getting loans, even from Bank Pertanian, to enable them to develop their farms, the reason being that they "do not have anything valuable to mortgage". Farmers struggle very hard to manage their farms but the end reward is not promising because of their meagre incomes.

According to the figures derived from the 200 Village Project that have been completed thus far, the average net profit made by a farmer for his hard work in one month is RM138. Therefore, he cannot afford to buy his own farmland, or even rent a plot of a bigger size to grow his food crops. This puts the farmer into a cycle of poverty because if he is to hope for a better lifestyle, he has to have a larger plot of land on which he can grow more food and cash crops for sale.

This incidence of low incomes suffered by the farmers is caused by the unstable prices of food commodities during harvest. As a consequence, there is a dumping of food crops or large-scale destruction of the crops as a desperate measure to protect or shore up the prices at the farm. The survey also showed that during monsoon seasons, especially in the east coast of Peninsular Malaysia, large tracts of tobacco cultivation are badly affected by too much of water.

Farmers who spend all of their working hours planting and tending to their crops have little or no knowledge about marketing their produce. This is where the middlemen step in and take advantage of the farmers. They will help the farmers to sell the produce – and they end up earning more from the produce than the ones who planted the crops. It is common knowledge in Malaysia that the prices that the middleman offers the farmer are far, far lower than the prices in the market. How much, really, the cost of transport? Government agencies or corporations are no better. The monopoly or preferences given to agencies like the national rice agency BERNAS and the Federal Agriculture Marketing Agency (FAMA) have resulted in a glut in the production of rice and vegetables during festive seasons.



The situation of poor infrastructures also affects the farmers' production. ERA Consumer's enumerators discovered that several areas in Sarawak do not have electricity supply. Communities living in the rural areas have strong cultural beliefs and they usually reject new technologies that can increase their production – for the sole purpose of protecting their customs. In such cases, they will be left behind as commercial farming embraces the developing world of technologies. Traditional farmers will continue to remain poor because of their insufficient knowledge of modern farming and marketing.

### ***The core need***

The core need for food security in Malaysia identified during the three days of consultation and workshops was that agricultural productivity and food production have to be improved. This requires focus on a new group of actors: the middle- and low-income group of people in farming communities who are employed elsewhere and often married. Many of them now undertake farming as a part-time occupation, to make productive use of spare time, to meet their food needs and as an additional source of income.

The current approach in Malaysia to train and to induce unemployed youth into agriculture so as to cut down on the high food import bill has not been successful. This is because of two reasons: the low social esteem given to farming and the fact that urban living has always been an attraction for the rural youth because of the magic of adventure, better job opportunities and the promise of fortune.

The youth in the farm households surveyed have left or are leaving their homes for the towns to seek employment to supplement the income from farming and to support their parents and elders. This phenomenon results in only the elders, the old folk and the very young remaining on the farms. In essence, farming has become marginalised in Malaysia and there are lots and lots of farmland lying idle, all over the country.

The solution proposed by several quarters and emphasised in the Third National Agricultural Policy that the private sector becomes involved in agriculture by opening up lands and carrying out commercial farming is not practical for two reasons.

First, this is a capital-centred neo-economic approach that focuses on large-scale production rather than on livelihood options. Commercialised agriculture often is monoculture, and depends heavily on chemical inputs. Both monoculture and the heavy use of chemical inputs are the classic characteristics of non-sustainable agriculture, which in the long run pollutes, depletes and destroys natural resources. Second, return from investment in agriculture is low. Huge subsidies and concessions from the government will be required to lure the private sector into agriculture and this is certainly not a good or sensible solution.

From the micro study conducted, one can come to the conclusion that the middle- and low-income group of people from farming communities, if mobilised, trained, supported and guided, can not only increase agricultural productivity but also food production without high quantities of chemical inputs. In addition, they can be transformed into a support group to link and assist small-scale farmers and help them commercialise their agriculture and make their livelihood economically more viable.





## **How farmers view food security**

Over the course of the study, the views of the farmers and fishermen were also canvassed in so far as their understanding of food self-sufficiency and how they felt that Malaysia could go about being a food secure nation. These are the issues that commonly arose:

1. Better planning on the ground level is needed. Farmers and fishermen want government officers from the district office, agriculture department, drainage and irrigation department and veterinary services, to work with them in planning or building infrastructure or when extending services to them.
2. Some farmers have outright called for the total revamp of the agriculture department.
3. They also want better health facilities, and for the villagers in general to be educated on healthy and balanced diets.
4. They see a future in cooperative farming, such as merging uneconomical small farms and using machinery and modern practices to improve output and thus, their standard of living.
5. Land shortage and shortage of farm workers is acute and the farmers want the authorities to thrash out these matters with them on an urgent basis for solutions to be found.
6. Little or no access to skills improvement. In some cases, farmers who started planting oil palm found that they do not know how to harvest the fruits, and so caused a lot of damage to the fruit bunches. This affected their income.
7. They want more and properly structured training courses in modern and safe agricultural practices and in farm management. Many even called for study tours or visits to successful farming communities for on-site learning experiences to be arranged for them.
8. They believe that support and encouragement given to them to plant more food crops and increase the variety of crops that are cultivated and assistance in helping them establish cooperatives or to link up with existing cooperatives to market their produce will put Malaysia on the path to food security.
9. They want the rivers and forests protected. This is because natural river water is excellent for the growing of food crops. The forests are a vital source of food and medicinal crops too for the surrounding communities as well as for Malaysians in general.
10. They also want more attention paid to organic fertilisers. The government should embark on projects to provide organic fertilisers to farmers, instead of chemical fertilisers. In the meantime, they want proper information on the safe use of chemical fertilisers and pesticides.
11. Food security for the household: They believe that all farmers should plant their own food crops like vegetables, and raise chicken for their home consumption. Such light duties can be given to the elderly, or even their children.

## **Recommendations**

The participants in the consultation-workshop sessions were unanimous in agreeing that innovative approaches are needed if Malaysia is to attain food security. Processes to create awareness, educate and build the capacity of farm households to transform their mindset from the “terima bantuan” or “receiving aid” syndrome to one of “semangat berdikari” (spirit of self-reliance) are required. People willing to undertake part-time food crop farming should be identified, organised and trained in production, provided access to resources and markets and helped to become the support group for rural farmers so as to effectively eliminate exploitation by middlemen.

To start the process, it was recommended that ERA Consumer establishes a pilot site in each of the six states, where focal points already exist through the contacts and partnership established during the micro study. The pilot initiative is to be a “participatory action research” initiative as well as “a doing and learning process” for generating knowledge, capacity building and empowerment. The pilot villages are to become a “lighthouse” and “demonstration village” that are food secure through the practice of sustainable agriculture and other appropriate livelihood practices.

This initiative should be undertaken to support, complement and supplement the government’s initiative to increase agriculture productivity and food production. This could be a partnership between the government, ERA Consumer, other related organisations and the farming communities for a new and innovative approach to rural development, based on the particular problems and opportunities in Malaysia. The 57 participants of the 24-village study gave ERA Consumer the mandate to initiate this action.

The aim is to begin the process of piloting, documenting, sharing, building capacities, replicating, improving and institutionalising the action as an innovative approach to contribute to increasing agricultural productivity, ensuring food security and ensuring a form of development that is sustainable. Development is not a blueprint. It is a process of the people, by the people and for the people.

Therefore, a group from the middle- and low-income category willing to become part-time farmers and act as a support group from the nearest urban centre has to be mobilised. They will be trained, supported and guided in mobilising resources to continue agricultural activities, particularly sustainable food production without chemical inputs.

In addition, they will be transformed into a support group and linked to the pilot village to assist small-scale farmers in particular and help them commercialise their agriculture and make their livelihood more viable.

The process is aimed at catalysing action, both at household and community levels, and create awareness on the efficacy of such an initiative to build food secure villages and improve agricultural productivity. This will help to solve the problems of idle lands, make idle labour productive, alleviate poverty, strengthen social harmony and ensure development that is sustainable. The model once matured will be replicated, popularised and institutionalised as a model for sustainable agriculture, making the livelihood of small farmers economically viable and the communities secure in all their food needs.

## ***Pilot Project for ERA Consumer/DHRRRA Network Malaysia***

By the end of 2006, ERA Consumer/DHRRRA Network Malaysia hope to establish:

- i. Six pilot communities for sustainable agriculture and food security, one in each of the six states, ready and capable to take on the leadership as demonstration sites that will assist in the replication and scaling-up process of their work in their respective states.
- ii. Not less than 18 resource persons (or a minimum of three in each pilot project community), out of whom not less than 10 should be women, who shall be trained in capacity to provide expert support for replication and scaling-up of farming communities in their states.
- iii. Not less than 18 farmer extension experts (with a minimum of three in each pilot community), out of whom not less than 10 should be women, selected to provide training and capacity-building services to others.
- iv. A number of innovative processes and institutional arrangements for community cooperation, increasing productivity, technology development, marketing approaches, product processing and so on, developed, documented and made available for sharing.
- v. A national networking linkage of farmer-to-farmer exchange among the six pilot sites for sharing innovations, expertise and knowledge – for collective advocacy on issues of concern and other initiatives for replication and scaling-up of achievements in the pilot projects.
- vi. A documentation of the experiences and a national strategy to institutionalise the model.

The foundation on which these activities will be carried out will be in harmony with the key principles outlined in various United Nations Development Programme (UNDP) programmes that stress conservation of the natural resources, biodiversity, sustainable agriculture, sustainable consumption and sustainable livelihood.

Running pilot projects along this programme of action, save for resources, the political will and support from government agencies and the determination to succeed, should pose no problems because from the feedback during the 24 Village Micro Study and during the consultation workshop sessions, the farmers themselves voiced their need for training and capacity-building, information on ecologically sound farming practices and expressed their desire to conserve native food crop stocks.

The pilot projects will therefore stress on integrated farming and integrated pest management, composting and the use of organic fertilisers, the growing of wild varieties of food crops and fruits, the planting of herbs, rehabilitation of idle or abandoned farmlands, monitoring the use of pesticides for the sake of food safety and even the establishment of farmers' cooperatives for the marketing of produce.

The methodology that will be observed in the execution of sustained food security programmes at the pilot project sites will be based on the workable situations that ERA Consumer Malaysia and DHRRRA Network Malaysia have experienced in some of the more recent projects. The first step is to establish contacts with a rural, depressed farming community (this will not be the concern for the pilot projects). The next is to carry out an on-going dialogue with the farmers on their problems and possible solutions, and understanding their desire for change,

if any. This will bring the farming families into collective decision-making for mutual benefit.

Such working methods have already been tried out successfully in other projects in Asia, particularly those that AsiaDHRRA has been involved in.

The next step will be to establish a working group at the project site that will come up with the Plan of Action for the community, outlining steps that have to be taken to change it from a poor, neglected community to one that works through self-help, using all available local resources, manpower and government agricultural extension facilities, to become a model community for sustainable agriculture.

With the farming families making their own decisions and implementing their thought-out development plans, they will be increasing their knowledge, acquiring new skills and confidence, building on their capacities and be on the path to becoming a self-sufficient, self-reliant community.

This pilot project will also give emphasis to women, who play an important role in the agriculture sector. Women will now be given more attention and education on farm management. Workshops and seminars on farm management will be organised for them, and not just for the men, because they play two important roles in development process: besides working hard in the farms or plantations, they are also good housewives and mothers. They are the ones who are usually seen watering, fertilising and harvesting the crops. Men, on the other hand, help in marketing the produce, wherever possible. Thus the heavier workload, more often than not, falls on the shoulders of the women.

Opening up new land for the cultivation of food crops rather than cash crops can increase local food production, and at the same time, reduce Malaysia's extremely high food import bill. The government, on its part, will be expected to provide support services and appropriate incentives, including land, to farmers involved in food production using sustainable agricultural practices.

In this respect, ERA Consumer and DHRRA Network will be using their links and contacts to acquire for the farmers services from government agencies such as research and development, training, extension and support services as well as the provision of credit facilities through institutions like Bank Pertanian (Agriculture Bank) and basic infrastructures in order to encourage the farmers in their efforts.

## **Potential for food security in Malaysia**

In the context of globalisation, ensuring food security becomes more complicated as markets are opened up and countries lose their option to decide on their own economic policies related to food security. With the growing context of globalisation, poor farmers in developing countries are forced to compete with farmers from developed countries because of the removal of trade barriers among countries.

Malaysia has great potential to produce and meet almost all the food needs of the nation. As an agricultural-based country, Malaysia is blessed with all those resources that are very suitable for food production. The weather is extremely appropriate for food growing, even the good sunshine that is required by plants. Besides that, rainfall and the dry periods around

the year provide sufficient water density and humidity for crops to grow, and protection from damage during the dry seasons.

The next focus on the potential in Malaysia's agriculture sector is the youth. They are the new generation that can provide the labour force needed to operate and manage a farm. Most of them come from farmer-based families and have experience in managing a farm because of their exposure to farming life since childhood. Furthermore, the youth possess a high level of education in the agriculture sector, through tertiary education at the universities. This means that our youth who are knowledgeable and energetic are potential to be future entrepreneurs in this important sector. They will be able to expand food production in the country, thereby helping to reduce the number of imports of food from other countries.

There is also adequate land for agriculture and farming in Malaysia. The soil suitable for agriculture makes up a whopping 14.8 million hectares, of which 7.15 million hectares are in the peninsula, 3.15 million hectares in Sabah and 4.5 million hectares in Sarawak. Malaysia is very strategically located geographically, for food production because it consists of not only the lowlands but also the highlands such as Cameron Highlands. This enables a huge variety of crops to be planted according to the different topography and because of this unique condition, we can definitely satisfy our demands and requirements locally.

In addition, food security and improvement of food productivity can be attained through the use of the middle- and low-income groups from farming communities for whom the main income is from working elsewhere. If this group is properly mobilised, trained, supported and guided, they can surely produce food of very high quality without the input of chemicals and indirectly increase agricultural productivity of the country. However, this target group continues to be the biggest ignored potential.

Malaysia has many research and development centres that can provide the information and support required for sustainable farming and carry out the research as well. These R&D centres are in a position to, with the help of farm extension workers, provide research results and train farmers in new and effective farming methods suitable to our climate.

Through such education and awareness, our farmers can gain new technological skills and knowledge and produce good quality agricultural crops. Besides this, the R&D centres can also help in the ideal marketing techniques for farmers' produce to increase their standard of living. Another function the R&D centres can play is to provide subsidies of appropriate organic seeds and fertilisers and even help to arrange for loans for farmers. Such support will definitely contribute to a higher level of food production and accessibility and the farmers – the rural poor – can expect a better livelihood.

Another positive factor about Malaysia is its strategic location that will ensure a state of continuous production of food crops. It is located on the Equator and away from all the natural disasters like earthquakes, volcanoes, typhoons and flash floods that occur often in many other countries.

# Appendix 1

## Community profile of Kampung Repek, Bachok, Kelantan

### Background

Kampung Repek is located in Kelantan, on the east coast of Peninsular Malaysia. It is about 30 km from Kota Baru, the state capital, and about 6km from the nearest town, Jelawat.

During the Japanese Occupation in the 1940s, there was a Chinese family living in the village. The people in the village called the old Chinese head of the family “Ah Pek”. Older villagers believe that this term corrupted over time to become “repek”, after which the village is now named. Today, Kampung Repek is well known in Kelantan for its tobacco and vegetables.

### Natural features:

**Agro-ecological classification:** The soil in this village is mainly coastal sand and peat soil.

**Land use and land classification:** The total land area in here is 1,215 hectares. Within this area, 970 hectares is used as agriculture land, 202 hectares as residential area and the remaining 40 hectares set aside for commercial/ industrial use. Around 690 hectares is rain-fed lowland and another 122 hectares is irrigated upland.

**Weather conditions:** The dry season in the village is from March to August and the wet season from September to February.

**Existing water bodies:** The village is located next to the sea and the main sources of water for domestic use are the rain, wells and piped supply. Kampung Repek is prone to drought and heavy rains during the monsoon season, during which tidal waves and floods are not uncommon.

**Socio-demographic characteristics:** The population growth rate is high and the population density is also quite high. Males outnumber females.

	1999	2000
Growth rate	10%	10%
Density	85/sq-km	90/sq-km
Total urban population	200	200
Total rural population	3,300	3,400
Total population	3,500	3,600
Total male population	1,800	1,850
Total female population	1,700	1,750
Population density	3,500	3,600
Age distribution:		
14 and below	1,000	1,000
15 – 64	2,200	2,300
65 and above	300	300
Total number of households	600	600
Ethnic groups (IPs) present	20	20
Language /dialect used	Malay	Malay

The most dominant religion in this village is Islam, with 98% of the population being Muslims and the rest, Buddhists.

### Education

No education	49%
Primary school	25%
Intermediate school	20%
High school	3%
College	1 person
Post-graduate	1 person
Vocational school	1 person

Nearly half of the population in this village has no education background.

**Housing:** Some 40% of the houses in the village are made from brick and mortar and 30% of the houses semi-permanent structures made of lumber and concrete, with nipah roofing. Another 20% are semi-temporary structures made from light materials mixed with wood or timber. Around 10% of the structures are the temporary type, made from light materials like bamboo and nipah.

**Health:** The most common disease suffered by the villagers is diabetes, with 12% of the village population being sufferers. For frequency of the disease, it is 120 persons per thousand per year. Up to 6% of the villagers die from diabetes each year.

Leading causes of morbidity	Age group commonly affected	Gender commonly affected (M; F; Both)	Frequency of Occurrence (per thousand per year)
Flu	5-10 yrs	10%	100
High blood pressure	20-50 yrs	10%	100
Diabetes	30-60 yrs	12%	120

Leading causes of mortality	Age group commonly affected	Gender commonly affected (M; F; Both)	Frequency of Occurrence (per thousand per year)
High blood pressure	40-60 yrs	5%	50
Diabetes	50-60 yrs	6%	60
Old age	60-70 yrs	5%	50
Others	1-75 yrs	10%	100

**Nutritional status:** Nutrition was assessed among children below five years old (pre-schoolers). Boys and girls suffered the same level of malnourishment in this village.

Status	Boys	Girls	Total	Percentage
First degree malnourished	50	50	100	10%
Second degree	100	100	200	20%
Third degree	100	100	200	20%
<b>Total</b>	<b>250</b>	<b>250</b>	<b>500</b>	<b>50%</b>

**Basic social services:** Kampung Repek has four pre-schools, four primary schools and two secondary schools, one of them a vocational school. There is a clinic staffed by six medical assistants and a nurse who handle up to 200 patients a month. There are also two midwives and 14 traditional healers. Common sports activities here are soccer, sepak takraw and badminton. Traffic accident cases rose from one in 1999 to three in 2000.

### ***Economic activities:***

**Types of employment:** The majority of the community in this village is agro-based workers. Farmers will be the most among them, followed by fishermen, livestock/poultry breeders and those involved in the marketing of the produce. The number of people involved in non agro-based activities is comparatively low. The unemployment rate in this village is quite low.

Types of employment	1998	1999	2000
<i>Number of agro-based workers</i>			
Farmers	878	890	900
Fishermen	50	55	60
Livestock/poultry breeders	30	30	35
Marketing	10	12	15
<i>Numbers of non agro-based workers</i>			
Professional/technical job	-	-	-
Service related work	-	-	-
Construction-related work	10	10	12
Marketing	10	12	15
Others	-	-	-
Unemployed (15 – 65 years)	10	8	8

**Capital-intensive technology & irrigation:** The total amount of non-irrigated land is 890ha (year 2000) and of this, 390ha is farming land where chemical fertilisers are used.

Non-irrigated land (ha)	1998	1999	2000
Land area	810	850	850
Land area using chemical fertilisers	390	345	390
Land area using pesticides	-	-	-

### **Annual crop production:**

Crops	Effective Crop Area (ha)			Production (kg)		
	1998	1999	2000	1998	1999	2000
Rice	50	50	50	30,000	35,000	35,000
Corn	100	100	100	100,000	100,000	100,000
Tubers, bulbs & roots	50	50	50	50,000	50,000	50,000
Tobacco	820	850	960	5,640,000	5,950,000	6,720,000



**Tenure of households:** Nearly 90% of the villagers are landlords.

**Livestock population:** Poultry (chickens & ducks) are the most, compared with other types of livestock.

Livestock	Number
Buffalo	30
Cattle	100
Pigs	-
Sheep/goat	150
Poultry (chickens & ducks)	3,000

**Fisheries:** The number of villagers using non-motorised boats is twice the number of fishermen who have motorised boats.

	1998 (no.)	1999 (no.)	2000 (no.)
Motorised fishing boats	10	10	10
Non-motorised fishing boats	20	20	20
Ponds	-	-	-

**Women in economic activities:** The women of the village are very active and hardworking. Some 60% of the men are involved in either farming; livestock breeding or fishing, while women make up the other 40%. Besides this, there are equal numbers of men and women involved in the making of handicraft, tailoring and metal craft.

	Total no. of workers	Men	Women
Farming	500	300	200
Livestock breeding	50	30	20
Fishing	50	30	20
Handicraft	10	5	5
Tailoring	20	10	10
Metal craft	4	2	2
Metal workers	2	1	1

**Food availability and food-related practices:** Yam, corn, vegetables, fruits, meat/poultry and seafood make up the basic food of the villagers. Not all of these foods are available throughout the year. Vegetables are available from February to October and fruits from April to December. Yam is available from March to August while corn can only be obtained in July, August and September. Meat and poultry are available for three months only, from October to December. Seafood is available from July to November. The villagers also have storage facilities for food grains for planting during the seasons.

**Public amenities and facilities:** The common mode of transportation among the villagers is the bicycle, while stage buses and taxis are also available. There are 7km of concrete roads and 10km of dirt roads, two concrete bridges and seven footbridges.

- a. The common sources of drinking water for the households in the village are rainwater, piped water, pump wells and open wells. The villagers normally use plastic containers to store water and use refrigerators to store perishable food.
- b. Electricity is supplied to the village.

- c. Some 70% of the people have access to telecommunications and around 90% have access to the broadcast media.

#### Facilities:

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	4	
Primary schools	4	
Secondary schools	2	
Health centre/clinics	1	
Community centre/meeting hall	-	6
Mosque/religious house	9	
Park/playground	2	6
Veterinary services		6
Post office		6
Telephone lines	6	
Main road/highway	20	
Market		6
Pharmacy		6
Rural bank		6
Credit cooperative		6
Irrigation		5
Rice mill		15
Electricity supply station/sub-station		6
Community radio set		6
Drinking water supply		6
Public toilet		6
Cemetery	6	
Dump site/land fill		6

**Environmental management:** The two common practices for disposing household wastes are by burning and land fill.

**Social organisations:** The most common social organisation for the villagers are political organisations.

Name of organisation	Number of members	Type of organisation
UMNO	510	Political
PAS	1,800	Political
HAMIM	100	Political

#### Community issues and problems:

- Health and nutrition: Cost of medicines is high.
- Education: There is little knowledge about healthy diets.
- Sports and recreation: No facilities
- Food production/supply: *Tobacco* – problem of poor drainage. *Coconut* – it fetches a very low price

- e. Infrastructure: A sore lack of infrastructure
- f. Other problems: Plant diseases
- g. Natural disasters: There is a high occurrence of floods during the monsoon season.

## Community profile of RKT Chuchuh Peteri, Kuala Krai

### *Background*

RKT (Rancangan Kampung Tersusun or Planned Village) Chuchuh Peteri is located near Kuala Krai, in the northernmost state of Kelantan, on the east coast of Peninsular Malaysia. Kuala Krai is located about 100km from Kota Bharu, the state capital, and the village is about 30km from Kuala Krai.

### *Natural features:*

**Agro-ecological classification:** The village is mainly upland.

**Land use and land classification:** The total land area is 2,400 hectares. Of this, 1,920 hectares are used for agriculture, 61 hectares as residential area, 20 hectares for industrial/commercial use and 20 hectares for institutional purposes. There are also some 61 hectares of grasslands and 324 hectares has been set aside as river reserve. Around 810 hectares are rain-fed lowland, 810 hectares are irrigated upland, 845 hectares are rain-fed upland and 405 hectares are irrigated lowland.

**Weather conditions:** The dry season in RKT Chuchuh Peteri is from March to September and the monsoon season, from October to February.

The main sources of water for the village are spring water, river water and water from the surrounding hills. The village is prone to drought and heavy rains during the wet or monsoon season, when floods occur. The main types of soil are fertile sandy and fertile clay.

**Socio-demographic characteristics:** The population growth rate is high and the population density is also quite high. Men outnumber women in this village.

	1999	2000
Growth rate	10%	10%
Density	85/sq-km	90/sq-km
Total urban population	120	130
Total rural population	2,880	2,870
Total population	3,000	3,000
Total male population	1,650	1,680
Total female population	1,350	1,320
Population density	2,000	3,000

	1999	2000
Age distribution:		
14 years and below	1,000	1,050
15 – 64	1,600	1,650
65 and above	450	250
Total number of households	600	600
Ethnic groups (IPs) present	25	30
Language/dialect used	Malay	Malay

The dominant religion in this village is Islam, followed by Buddhism.

### Education

No education	47%
Primary school	39%
Intermediate school	8%
High school	6%
College	1 person
Post-graduate	1 person
Vocational school	1 person

Nearly half of the population here has no educational background, while most of the literate, or 39% of the population, were educated up to primary school or six years of formal education.

**Housing:** The most common type of houses in this village is the semi-permanent structure made of brick and cement. Another 30% of the houses are of the semi-permanent type, made of lumber and concrete, with nipah roofing. Another 20% are semi-permanent structures of brick and cement while 10% of the houses are the temporary type, made from light materials like bamboo and nipah.

**Health:** The most common disease leading to morbidity in this village is diabetes, taking up to 12% of the population, with 100 persons per thousand per year for the frequency of occurrence. Diabetes also makes up for 6% of the mortality rate in the population, or nearly 60 per thousand per year for frequency of occurrence.

Leading causes of morbidity	Age group commonly affected	Gender commonly affected (M; F; Both)	Frequency of Occurrence (per thousand per year)
Malaria	5-15 years	Both	50
Diabetes	30-60 years	Both	60
Old age	55-65 years	Both	30

Leading causes of mortality	Age group commonly affected	Gender commonly affected (M; F; Both)	Frequency of Occurrence (per thousand per year)
Malaria	5-10 years	Both	25
Diabetes	50-60 years	Both	15
Old age	60-70 years	Both	50

**Nutritional status:** The nutritional assessment of children less than five years old (pre-schoolers) that was measured indicated that the situation was fair, with boys and girls suffering the same level of malnourishment.

Status	Boys	Girls	Total	Percentage
First degree malnourished	250	250	500	25%
Second degree	200	200	400	20%
Third degree	150	150	300	15%
<b>Total</b>	<b>600</b>	<b>600</b>	<b>1,200</b>	<b>70%</b>

**Basic social services:** RKT Chuchuh Peteri has one pre-school, four primary schools and one vocational school. There is a clinic manned by four medical assistants and two nurses, who attend to some 200 patients a month. There are also two midwives and 40 traditional healers. The common sports in this village are soccer, sepak takraw and badminton. The incidence of traffic accidents was one case reported in 1999 and three cases in 2000.

### *Economic activities*

**Types of employment:** Most of the people in this village are agro-based workers, with farmers making up the biggest number, followed by livestock/poultry breeders and those involved in the marketing of farm produce. The number involved in non agro-based activity is smaller. The unemployment rate in this village is quite low.

Type of employment	1998	1999	2000
<i>Number of agro-based workers</i>			
Farmers	600	600	600
Livestock/poultry breeders	20	25	25
Marketing	30	30	35
<i>Number of non agro-based workers</i>			
Professional/technical jobs	-	-	-
Service related work	-	-	-
Construction-related work	-	-	-
Marketing	10	15	20
Others	10	10	10
Unemployed (15 – 65)	-	-	-

**Capital intensive technology and irrigation:** The total land area for non-irrigated farming is 850ha (in the year 2000) and of this, 390ha are farmed with the use of chemical fertilisers.

Non-irrigated land (ha)	1998	1999	2000
Land area	810	850	850
Land area using chemical fertilisers	332	345	390
Land area using pesticides	-	-	-

**Annual crop production:**

Crop	Effective Crop Area (ha)			Production (kg)		
	1998	1999	2000	1998	1999	2000
Rice	50	50	50	30,000	35,000	35,000
Corn	100	100	100	100,000	100,000	100,000
Tubers, roots and bulbs	50	50	50	50,000	50,000	50,000
Tobacco	820	850	960	5,640,000	5,950,000	6,720,000

**Tenure of households:** Nearly 90% of the villagers are landlords. The breeding of chickens and ducks is the main activity in the area of livestock farming.

Livestock	Numbers
Buffalo	-
Cattle	100
Sheep/goat	-
Poultry	3,000

**Fisheries:** The number of fishermen in the village using non-motorised fishing boats is twice the number of those who use motorised boats.

	1998	1999	2000
No. of motorised boats	10	10	10
Number not motorised	20	20	20
Number of fish ponds	-	-	-

**Women in economic activities:** The women here, like those in the other parts of the state of Kelantan, are very active and hardworking. Some 60% of the village men are involved in farming, livestock breeding or fishing, while women make up the other 40%. Besides this, there are equal numbers of men and women involved in tailoring, handicraft making and metal craft.

Activity	No. of workers	Men	Women
Crop farming	500	300	200
Livestock farming	50	30	20
Handicraft	10	30	20
Tailoring	20	10	10
Metal craft	4	2	2
Metal work	2	1	1

**Food availability and food-related practices:** Yam, rice, vegetables, fruits, meat/poultry and seafood make up the basic food of the villagers. Not all types of food are available throughout the year. Vegetables are available from February to October, fruits from April to December and yam from March to August. Corn is only available in July, August and September. Beef and poultry are only available for three months from October to December while seafood is available from July to November. The villagers also have storage facilities for food crop grains and seeds for seasonal planting.



**Public amenities and facilities:**

- a. The common mode of transportation in RKT Chuchuh Peteri is the bicycle, taxi and bus. There are 7km of concrete and 10km of dirt roads in the village, besides two concrete bridges and seven footbridges.
- b. The common sources of drinking water are rainwater, piped water and pump wells and open wells. The villagers normally use plastic containers to store the water and refrigerators to keep food.
- c. The source of lighting is electricity.
- d. At least 70% of the community has access to telecommunications facilities and around 90% to the broadcast and print media.

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	2	
Primary schools	1	
Secondary schools	-	
Health centre/clinics	1	
Community centre/meeting hall	1	
Mosque/religious house	4	
Park/playground	2	
Veterinary services		30
Post office		20
Telephone lines	100	
Main road/highway	1	
Market		20
Pharmacy		30
Rural bank		30
Credit cooperative		30
Irrigation		100
Rice mills		100
Electricity supply station/sub-station	1	
Community radio set		
Drinking water supply	Available	
Public toilets	4	
Cemetery	2	
Dump sites/land fill	-	

**Environmental management:** The two common modes of disposing of household wastes are by burning and landfill

**Social organisations:** The common social organisations the villagers join are political organisations.

Name of organisation	Number of members
UMNO	300
PAS	800
Small Farmers' Association	30

### Community issues and problems:

- a. Health and nutrition: The complaint is that the cost of medicines is too high.
- b. Education: There is little knowledge about balanced, healthy diets; and there are insufficient teaching aids in schools.
- c. Food production/ supply: - *Tobacco*: poor drainage in the fields. *Coconut*: the produce fetches a very low price
- d. Infrastructure: Sorely lacking.
- e. Sports and recreation: No facilities.
- f. Other problems: Plant diseases.
- g. Natural disasters: Floods are a common occurrence during the wet season.

## Community profile of Kampung Peringat, Kelantan

### *Background*

Kampung Peringat is located in Kelantan on the east coast of Peninsular Malaysia. It is about 33km from Kota Bharu, the state capital. Peringat was also known as the “insect bee” village. This insect is considered very dangerous, so people stayed away from the area. After some 100 years, the insect was no longer found and so more people came to settle there and they opened up the surrounding forest land for cultivation.

### *Natural features:*

**Agro-ecological classification:** The soil in this village suitable for lowland farming.

**Land use and land classification:** The total land area here is 92 hectares, of which 50 hectares are used for agriculture and 17 hectares for the residential area. The remaining 15 hectares are for commercial/industrial use and 10 hectares are grassland. The agriculture land in Kampung Peringat is irrigated and lowland and the soil is fertile clay.

**Weather conditions:** The dry season for the village is from February to October and the wet season from November to January.

The main sources of water for the villagers are the rivers. The village is prone to drought and floods as a result of heavy rains during the wet or monsoon season.

**Socio-demographic characteristics:** The population growth rate is high and the population density is also quite high. There are more women than men.

	1999	2000
Population growth rate	8%	10%
Density	85 / sq-km	88 / sq-km
Total urban population	200	250
Total rural population	1,100	1,200
Total population	1,300	1,450
Total male population	600	600
Total female population	700	800
Population density	-	-
Age distribution:		
14 years and below	270	300
15 – 64 years	520	600
65 and above	300	300
Total number of households	250	250
Ethnic groups (IPs) present	15	30
Language/dialect used	Malay	Malay

The dominant religion in this village is Islam, practiced by 95% of the total population, with the remaining 5% being Buddhist.

#### Education:

No education	49%
Primary school	25%
Intermediate school	20%
High school	3%
College	1 person
Post-graduate	1 person
Vocational school	1 person

Nearly half of the population at this village has no educational background. The most common level of education attained by the village people is the primary school, making 25% of the total population.

**Housing:** Most of the houses in the village (70% of them) are of the semi-temporary structures, made from light materials mixed with wood/lumber, followed by 20% of the semi-permanent type, made from lumber and concrete, with nipah roofing. Another 5% is the semi-permanent structure that made up of brick and cement. Around 5% of the structures are the temporary type made from light materials like bamboo and nipah.

**Health:** The most common disease leading to morbidity in this village is diabetes, affecting up to 12% of the population, with 100 persons per thousand per year as the frequency of occurrence. Diabetes also takes up the highest annual mortality rate, at 6% or nearly 60 per thousand per year for the frequency of occurrence.

Leading causes of morbidity	Age group commonly affected	Gender commonly affected (M; F; Both)	Frequency of Occurrence (per thousand per year)
Tuberculosis (TB)	> 30 yrs	-	-
High blood pressure	> 40 yrs	-	-
Diabetes	30-60 yrs	-	-
Old age	> 65 yrs	Both	10 - 15 persons
Weak heart	> 40 yrs	-	-

Leading causes of mortality	Age group commonly affected	Gender commonly affected (M; F; Both)	Frequency of Occurrence (per thousand per year)
High blood pressure	> 50 yrs	-	30
Diabetes	> 50 yrs	-	-
Weak heart	> 40 yrs	-	-
Accidents	> 18 yrs	-	-
Fever	> 30 yrs	-	-

**Nutritional status:** No detailed information could be obtained.

**Public amenities and facilities:** There are three pre-schools and three primary schools in Kampung Peringat. There is a clinic with five medical assistants, a visiting general practitioner and six nurses who see up to 150 patients a month. There are also six midwives and 36 traditional health workers in Kampung Peringat. The common sports in this village are soccer and badminton. The common recreations fishing, cock-fighting and martial arts.

The incidence of crime has been on the rise in recent years, from 20 cases in 1998 to 28 cases in 1999 and 30 cases in 2000. The traffic accident rate is also quite, with seven cases 1998, five cases in 1999 and 10 cases in 2000. The incidence of fire in the village has been two cases in 1998, four cases in 1999 and two cases in 2000.

### *Economic activities:*

**Types of employment:** The majority of the community in this village is agro-based workers. Farmers are the majority, followed by livestock and poultry breeders and those involved in the marketing of farm produce. The people involved in non agro-based activities are few. The unemployment rate is quite high, making up 30%.

Type of employment	1998	1999	2000
<i>Number of agro-based workers</i>	50%	53%	53%
Farmers	40%	37%	35%
Livestock / poultry breeders			
Marketing	10%	10%	12%
<i>Number of non agro-based workers</i>	20	30	40
Professional/technical jobs	-	8	10
Service-related work	40	50	60
Construction-related work	5	10	20
Marketing	-	-	-
Others	-	-	-
Unemployed (15 – 65 years)	-	-	30%

**Women in economic activities:** They are very active and hardworking and other than farming and livestock breeding, are also involved in the making of handicraft, tailoring and metal craft.

	Total no. of workers	Men	Women
Handicraft	2	1	1
Tailoring	14	4	10
Metal craft	4	2	2

**Food availability and food-related practices:** Yam, rice, vegetables, fruits, meat/poultry and seafood are the basic food of the villagers. Food such as rice, yam and vegetables are available throughout the year, but fruits are available only from March to September. Beef and poultry are available throughout the year while seafood is available from March till October. The villagers also have storage facilities for food crop grains and seeds for seasonal planting. They store the food/crops in refrigerators and plastic containers. The farmers receive fertiliser subsidies from the government.

**Public amenities and facilities:**

- The common mode of transportation is the bicycle, taxi, jeep, car and bus. The total length of the village road is 2km. The road types are concrete and dirt and there are two concrete bridges and one footbridge in the village.
- The common sources of drinking water for the people are rain water, piped water and water from pump wells. The villagers normally use plastic containers to store water and the refrigerator and plastic containers to store food.
- The source of lighting is electricity.
- The villagers have easy access to telecommunication services and the broadcast and print media.

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	3	
Primary schools	3	
Secondary schools	-	
Health centre/clinic	1	
Community centre/meeting hall	1	
Mosque/religious house	13	
Park/playground	2	
Veterinary services	-	
Post office	1	
Telephone lines	3	
Main road/highway	15	
Market	1	
Pharmacy	-	
Rural bank	-	
Credit cooperative	-	
Irrigation	1	
Rice mill	1	

Facility	Number	If none, distance to the nearest facility (km)
Electricity supply station/sub-station	-	
Community radio set	-	
Drinking water supply	-	
Public toilet	-	
Cemetery	5	
Dump site/land fill	-	

**Environmental management:** The two common modes of disposing of household waste are burning and throwing into the rivers.

**Social organisations:** The most common social organisations the villagers join are the political organisations.

Name of organisation	Number (female)	Number (male)	Number of members
UMNO	218	124	342
PAS	315	129	444
Rukun Tetangga	550	650	1,200

**Community issues and problems:**

- Sports and recreation: No facilities
- Food production/supply: - *Agriculture*: unstable prices of coconut and padi. *Fisheries*: poor facilities for marketing. *Livestock*: limited demand
- Infrastructure: Lacking in infrastructures

## Community profile of Kampung Kok Seraya, Tumpat, Kelantan

### Background

Kampung Kok Seraya is located in Kelantan on the east coast of Peninsular Malaysia. It is about 12km from Kota Bharu, the state capital. Most of the people here are of Thai descent and the village was given the name of “Kok Seraya” which is the name of a small town in southern Thailand from where they came.

### Natural features:

**Agro-ecological classification:** The soil in this village is mainly for lowland crop cultivation.

**Land use and land classification:** The total land area here is 110 hectares. Within these 112 hectares, 70 hectares are used for agriculture, 17 hectares for the residential area. Another 15 hectares are for commercial/industrial use and there are 10 hectares of grassland. All the farming land in the village is irrigated and lowland. The dominant soil type is fertile clay.



**Weather conditions:** The dry season for the village is from February to October and the monsoon season, from November to January.

The main body of water for the village is the river. Kampung Kok Seraya is prone to drought and heavy rains during the wet or monsoon season, when floods occur.

**Socio-demographic characteristics:** The population growth rate is high and the population density is also quite high. Women outnumber men in this village.

	1998	1999
Growth rate	-	-
Density	-	-
Total urban population	-	-
Total rural population	580	820
Total population	580	
Total male population	260	
Total female population	320	
Population density		
Age distribution:		
14 years and below		
15 – 64		
65 and above		
Total number of households		
Ethnic groups (IPs) present		Thais/Malays
Language/dialect used		Thai/Malay

The dominant religion in this village is Islam, followed by Buddhism.

### Education

No education	49%
Primary school	25%
Intermediate school	20%
High school	3%
College	1 person
Post-graduate	1 person
Vocational school	1 person

Nearly half of the population here has no educational background. The most common level of education attained by the village people is primary school, making 25% of the total population.

**Housing:** The most common type of the houses in this village is the semi-temporary structure made up of light materials mixed with wood/lumber (70%). Some 20% of the houses are of the semi-permanent type, made of lumber and concrete, with nipah roofing. Another 5% is the semi-permanent structure of brick and cement. Around 5% of the structures are of the temporary type, made of bamboo and nipah.

**Health:** The most common disease leading to morbidity in this village is diabetes, taking up to 12% of the population, with 100 persons per thousand per year for the frequency of occurrence. Diabetes also makes up for 6% of the mortality rate in the population, or nearly 60 per thousand per year for frequency of occurrence.

Leading causes of morbidity	Age group commonly affected	Gender commonly affected (M; F; Both)	Frequency of Occurrence (per thousand per year)
Tuberculosis (TB)	> 30 yrs	-	-
High blood pressure	> 40 yrs	-	-
Diabetes	30-60 yrs	-	-
Old age	> 65 yrs	Both	10 -15 persons
Weak heart	> 40 yrs	-	-

Leading causes of mortality	Age group commonly affected	Gender commonly affected (M; F; Both)	Frequency of Occurrence (per thousand per year)
High blood pressure	> 50 yrs	-	30
Diabetes	> 50 yrs	-	-
Weak heart	> 40 yrs	-	-
Accident	> 18 yrs	-	-
Fever	> 30 yrs	-	-

**Nutritional status:** No detailed information was available.

**Basic social services:** This village has one pre-school, one primary school and one secondary school. There is a clinic in Kampung Kok Seraya, with four health personnel, who handle up to 150 patients a month. There are also three midwives and six traditional healers in the village.

The common sports are soccer and badminton and the popular recreational activities, fishing, cock fighting and martial arts.

The crime rate is increasing every year, from 20 cases in 1998 to 28 cases in 1999 and 30 cases in 2000. The traffic accident rate is also quite high, with seven cases in 1998, five cases in 1999 and 10 cases in 2000. Outbreaks of fire have been two instances in 1998, four in 1999 and two cases in 2000.

### *Economic activities*

**Types of employment:** The majority of the people in this village make up the agro-based workforce. Farmers will be the most among them, followed by livestock/poultry breeders and those in the marketing of the goods produced. The number involved in non agro-based activity is smaller. The unemployment rate in this village is quite high, at 30%.

Type of employment	1999	2000
<i>Number of agro-based workers</i>		
Farmers	220	280
Pond fish breeders	8	12
Livestock/poultry breeders	32	20
Marketing	25	30
<i>Number of non agro-based workers</i>		
Professional/technical jobs	21	30
Service related work	10	15
Construction-related work	60	80
Marketing	15	10
Others	5	8
Unemployed (15 – 65)	-	-

**Women in economic activities:** The women are very active and hardworking. There are women involved in handicraft, tailoring and metal craft.

	Total no. of workers	Men	Women
Handicraft	2	1	1
Tailoring	14	4	10
Metal craft	4	2	2

**Food availability and food-related practices:** Yam, rice, vegetables, fruits, meat/poultry and seafood are the basic food of the villagers. Foods such as rice, yam and vegetables are available throughout the year while fruits are available from March to September. Meat and poultry are available throughout the year while seafood is available from March to October. The villagers also have storage facilities for food grains or seeds for seasonal planting. Food and crops are stored in the refrigerator and plastic containers. The farmers receive fertiliser subsidies from the government.

**Public amenities and facilities:**

- The common mode of transportation in Kampung Kok Seraya is the bicycle, taxi, jeep, car and bus. The total length of the village road is 2km and the main road types are concrete and dirt. There are two concrete bridges and one footbridge.
- The common sources of drinking water are rainwater, piped water and pump well water. The villagers normally use plastic containers to store the water.
- The source of lighting is electricity.
- The community in this village has easy access to telecommunication and the broadcast and print media.

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	1	
Primary schools	1	
Secondary schools	1	
Health centre/clinics	1	
Community centre/meeting hall	2	
Mosque/religious house	2	
Park/playground	1	
Veterinary services	-	
Post office	-	
Telephone lines	3	
Main road/highway	1	
Market	-	
Pharmacy	-	
Rural bank	-	
Credit cooperative	-	
Irrigation	1	
Rice mills	1	
Electricity supply station/sub-station	-	
Community radio set	-	
Drinking water supply	-	
Public toilets	-	
Cemetery	2	
Dump sites/land fill	-	

**Environmental management:** The two common modes of disposing of household wastes are by burning and dumping them into the rivers.

**Social organisations:** The common social organisations the villagers join are political organisations.

Name of organisation	Number (female)	Number (male)	Number of members
UMNO	218	124	342
PAS	315	129	444
Rukun Tetangga	550	650	1200

**Community issues and problems:**

- Sports and recreation: No facilities
- Food production/ supply: - *Agriculture*: unstable prices of coconut and paddy. *Fisheries*: marketing difficulties. *Livestock*: limited demand
- Infrastructure: Lack of infrastructures.

## Community Profile of Kampung Batu 49, Kuala Terlak, Pahang

### *Background*

Kampung Batu 49, Kuala Terlak, is located in Cameron Highlands, Pahang. It is about 78km from Tanah Rata, the main town in Cameron Highlands. Kampung Batu 49, Kuala Terlak, was an unorganised village in 1951, when the people and the area were under the control of the communists. There were limited supplies and only four shops were allowed to operate to cater to some 600 residents. Communities like these benefited from the push for agriculture schemes by the second Prime Minister, Tun Abdul Razak Hussein, under which some 750 hectares of farm land were opened up for the people of Kampung Kuala Terlak. One Mr Karuppiah introduced "cooperative farming" to the people there in the late 1950s, and this appears to have had success.

### *Natural features*

**Agro-ecological classification:** The soil in the village is suitable for upland cultivation.

**Land use:** Some 350 hectares are used for agriculture, one hectare for institutional purposes and 40 hectares for residential units. About 350 hectares of farmland are rain-fed upland.

**Weather conditions:** The weather is dry from January to March and June to July. The wet season is from April to May and August to December.

**Dominant soil type:** Clay loam.

**Existing water bodies:** Rivers and springs.

**Socio-demographic characteristics:** The population growth rate is high and the population density is also quite high. There are more men than women.

	1999	2000
Growth rate	-	1.5%
Density	-	70/ha
Total urban population		2,800
Total rural population		
Total population		2,800
Total male population		1,420
Total female population		1,320
Population density		
Age distribution:		
14 years and below		500
15 – 64		2,150
65 and above		150
Total number of households		380
Ethnic groups (IPs) present		
Language/dialect used		

Most of the villagers are Buddhists, followed by Hindus and Roman Catholics.

**Education:** Most of the people in the settlement have completed at least six years of primary school education.

No education	20%
Primary schools	45%
Intermediate schools	-
High schools	35%
College	-
Post-graduate	-
Vocational school	-

**Housing:** The houses in Kampung Batu 49 Kuala Terlak are either made of combined lumber and concrete with nipah roofing or houses that are made of brick and concrete.

**Health:** No detailed information is available on the leading causes of morbidity or mortality.

**Nutritional status:** No detailed information.

**Basic social services:** This village has two pre-schools and one primary school. One pre-school has two teachers and 40 pupils and the other, three teachers and 36 pupils. The primary school has 17 teachers and 286 pupils. The common sports played in Kampung 49 Kuala Terlak are soccer, badminton and basketball. There is a football field and a badminton court in the village. Two traffic accident cases were reported in the year 2000.

### *Economic activities:*

Types of employment	1999	2000
<i>Number of agro-based workers</i>		
Farmers		800
Livestock/poultry breeders		-
Marketing		30
<i>Number of non agro-based worker</i>		
Professional/technical job		20
Service related work		-
Construction-related work		-
Marketing		12
Others		-
Unemployed (15 – 65 years)		-

### **Women in economic activities:**

	Total no. of workers	Women
Farming	800	300

**Food availability and food-related practices:** No information available.



**Public amenities and facilities:**

- a) The common mode of transportation in the village is taxi and bus. The total length of roads is 20km, with 16km of asphalt road. There are three concrete bridges in the village.
- b) The common sources of drinking water for the households are piped water and spring water. The villagers normally use plastic containers to store the water and use the refrigerator to store food. Harvested food crops such as vegetables for the market are stored in cold rooms until they picked up by the wholesalers.
- c) The source of lighting is electricity, generator and battery.
- d) The community has reasonable access to telecommunications facilities and the broadcast and print media.

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	2	
Primary schools	1	
Secondary schools	-	
Public library/reading centre	-	
Health centre/clinic	Under construction	
Community centre/meeting hall	1	
Mosque/religious house	2	
Community herbal garden	-	
Park/playground	1	
Veterinary services	-	
Post office	-	4km
Telephone lines	Available	
Main road/highway	Available	
Market	-	4km
Pharmacy	-	15km
Rural bank	-	15km
Credit cooperative	-	15km
Irrigation	-	
Rice mill	-	
Electricity supply station/sub-station	1	
Community radio set	-	
Drinking water supply	Piped water	
Public toilet	1	
Cemetery	-	
Dump site/land fill	-	

**Environmental management:** The usual method of household waste disposal is collection by the garbage collector.

**Social organisations:** The common social organisations that the villagers join are political parties.

Name of organisation	Number (female)	Number (male)	Number of members	Type (GO, NGO, PO)
JKKK Kuala Terlak	-	15	15	GO
Indian Farmers Assn	20	80	100	NGO
Chinese Farmers Assn	70	130	200	NGO

**Community issues and problems:**

- Sports and recreation: No facilities because of land shortage.
- Food production/supply: The shortage of land is a problem.
- Employment: The farming sector faces a shortage of farm workers.

## Community Profile of Kampung Kota Gelanggi, Pahang

### Background

Kampung Kota Gelanggi is located on the banks of the Sungai Pahang in the district of Jerantut in Pahang, on the east coast of Peninsular Malaysia.

### Natural features

**Agro-ecological classification:** The soil in this village is normal soil.

**Land use:** Some 65% of the land is used for farming, 20% for housing, 10% is forest and 5% is grassland.

**Existing water bodies:** The Pahang River

**Weather conditions:** The weather is wet and dry all year long.

**Socio-demographic characteristics:** The population growth rate is high and the population density is also quite high. The number of women is higher than that of the men.

	1999	2000
Growth rate		
Density		
Total urban population		
Total rural population		
Total population	200,000	200,000
Total male population		
Total female population		
Population density		
Age distribution:		
14 and below	40%	40%
15 – 64	40%	40%
65 and above	20%	20%
Total number of households		
Ethnic groups (IPs) present	Orang Asli	Orang Asli
Language / dialect used	Malay	Malay

The three main religions practised in the village are Islam, Hinduism and Buddhism. About 12% of the Chinese practise ancestral worship.

**Education:**

No education	15%
Primary school	35%
Intermediate school	-
High school	45%
College	2%
Post-graduate	-
Vocational school	3%

**Housing:** The villagers live in brick and wooden houses.

**Health:**

Leading causes of mortality	Age group commonly affected	Gender commonly affected (M; F; Both)
Blood pressure	30	Both
Diabetes	30	Both
Heart attack	Above 45	M

Leading causes of morbidity	Age group commonly affected	Gender commonly affected (M; F; Both)
Tuberculosis	30 & above	Both
Diabetes	30 & above	Both

**Nutritional status:** No detailed information.

**Basic social services:** Kampung Kota Gelanggi has two pre-schools, one primary school and one secondary school. The pre-schools have two teachers each with 160 pupils. The primary school has 10 teachers and 160 pupils. The secondary school has 30 teachers and 190 students. There is a clinic in this village, with two hospital assistants, two midwives and four nurses. There are also six traditional healers in the village. The common sports in this village are soccer, badminton and sepak takraw.

***Economic activities:***

**Types of employment:** The majority of the villagers are agro-based workers. Farmers are the most, followed by livestock/poultry breeders and those marketing farm produce. Only a few people are involved in non agro-based activity.

Types of employment	1998	1999	2000
<i>Number of agro-based workers</i>			
Farmers	30%	32%	35%
Fishers	15%	15%	14%
Livestock / poultry breeders	30%	30%	30%
Marketing	20%	22%	30%
<i>Number of non agro-based workers</i>			
Professional/technical job	10%	12%	18%
Service related work		16%	18%
Construction-related work			
Marketing	10%		
Others	30%		
Unemployed (15 - 65 years)			

**Food availability and food-related practices:** The main food items of the villagers are rice, corn, tapioca, vegetables, fruits and freshwater fish and prawns. Rice is available throughout the year, while corn is not available from May to July and in December. Meat from cattle and poultry, fish, vegetables and tapioca are also available throughout the year. Food is normally stored in plastic and metal containers and in the refrigerator.

**Public amenities and facilities:**

- The common mode of transportation in this village is bicycle, bus, taxi and car. The roads are concrete roads.
- Piped water is supplied, but water from the spring and water from the well is also used. The villagers normally use plastic containers and refrigerators to store water.
- The sources of lighting are electricity and LPG.
- The community has adequate access to telecommunication facilities and the broadcast media.

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	2	
Primary schools	1	
Secondary schools	1	
Public library/reading centre	1	
Health centre/clinic	1	
Community centre/meeting hall	-	
Mosque/religious house		
Community herbal garden	1	
Park/playground	1	
Veterinary services	1	
Post office	1	
Telephone line		
Main road/highway	1	

Market	1	
Pharmacy	1	
Rural bank	5	
Credit cooperative	1	
Irrigation	Available	
Rice mill	1	
Electricity supply station/sub-station	1	
Community radio set	-	
Drinking water supply	Available	
Public toilet	Available	
Cemetery	Available	
Dump site/land fill	Available	

**Environmental management:** Household wastes are removed by garbage collectors.

## Community Profile of Brinchang, Cameron Highlands, Pahang

### *Background*

Brinchang is located in Cameron Highlands, a popular hill resort in Pahang, the largest state in Peninsular Malaysia. It is about 56km from Kuantan, the state capital.

### *Natural features:*

**Agro-ecological classification:** The soil in this village is mainly for upland farming.

**Land use and land classification:** Total land area in Brinchang, located 15km from Tanah Rata, the main town in Cameron Highlands, is 71,200 hectares. Of this, 5,130 hectares of the land has been taken up for agriculture, 1,315 hectares for residential purposes, 230 hectares for institutional use, 12 hectares for commercial/industrial purposes and 90 hectares for a golf course. A total of 64,423 hectares is forest area and there is no grassland. Of the total area for agriculture, 1,500 hectares are irrigated upland farming area and 68,835 hectares are rain-fed upland.

**Weather conditions:** The wet seasons are from April to May and September to December and the dry season, from January to March and June to August.

The dominant soil type in the village is 100% clay, which is excellent for agriculture. The existing water bodies for the area are springs and rivers.

**Socio-demographic characteristics:** The population growth rate is high and the population density is also quite high. The number of men is higher than that of women.

	1999	2000
Growth rate		-
Density		-
Total urban population		-
Total rural population		3,500
Total population		-
Total male population		51%
Total female population		49%
Population density		900/km <sup>2</sup>
Age distribution:		
14 and below		32%
15 – 64		57%
65 and above		11%
Total number of households		-
Ethnic groups (IPs) present		-
Language / dialect used		-

Most of the villagers are Buddhists, with the rest being Hindus and Muslims.

**Education:** The information provided could not be verified.

**Housing:** Three percent of the houses in the village are made from wood and lumber, 9% from combined lumber and concrete with nipah roofing and the balance 88% are made from brick and cement.

**Health:** No detailed information was available on either the leading causes of morbidity or the leading causes of mortality.

**Nutritional status:** No detailed information was available.

**Basic social services:** The village has two pre-schools, Brinchang Kindergarten and Kelas Tabika Rinching, with 78 and 34 students each. The teacher-student ratio is 1:26. There is one primary school, SJK(C) Brinchang, which has 184 students and 11 teachers. The common sports in this village are soccer, badminton and basketball. Though there is a golf course in the area, none of the villagers are members, nor do they play golf. However, they have their own basketball and badminton courts.



### ***Economic activities:***

**Types of employment:** The majority of the people in the village are agro-based workers, most of them farmers, followed by livestock/poultry breeders and those marketing farm produce. The number of people involved in non agro-based activities is small.

Type of employment	1999	2000
<i>Number of agro-based workers:</i>		
Farmers	N/A	120 families
Livestock/poultry breeders		-
Marketing		8 families
<i>Number of non agro-based workers:</i>		
Professional/technical jobs	N/A	20
Service related work		
Construction-related work		
Marketing		
Others		
Unemployed (15 - 65 years)	-	-

**Women in economic activities:** They are very active and hardworking. There are 180 women involved in farming, and many of them are also involved in the making of handicraft and tailoring.

	Total no. of workers	Women
Handicraft	20	5
Tailoring	3	1

**Food availability and food-related practices:** No detailed information could be gathered.

### **Public amenities and facilities:**

- The common mode of transportation in this village is jeep, taxi and bus. The total length of road in the area is 110km, of which 75% asphalt roads, 15% concrete and 10% dirt roads.
- The main sources of drinking water for the households in the village are piped water and spring water. The villagers normally use plastic containers and clay jars to store the water, and they have refrigerators and plastic containers to store food.
- The source of lighting is electricity and a number of households also have generators and wet-cell batteries.
- The people in this village get their information from the broadcast and print media and telecommunications services are readily available.

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	2	
Primary schools	1	
Secondary schools	-	5km
Public library/reading centre	-	
Health centre/clinic	2	5km
Community centre/meeting hall	-	5km
Mosque/religious house	4	
Community herbal garden	-	
Park/playground	1	
Veterinary services	-	
Post office	1	
Telephone lines	Sufficient	
Main road/highway	1	
Market	1	
Pharmacy	-	
Rural bank	1	
Credit cooperative	-	
Warehouse/storage facilities	2	
Irrigation	-	
Rice mill	-	
Electricity supply station/sub-station	1	
Community radio set	-	
Drinking water supply	All households	
Public toilet	1	
Cemetery	-	8km
Dump site/land fill	-	6km

**Environmental management:** Household waste is collected by the garbage collector.

**Social organisations:** The most common social organizations that the villagers join are political organisations.

Name of organisation	Number (female)	Number (male)	Number of members	Type (GO, NGO, PO)
Rukun Tetangga Brinchang	1,700	1,800	3,500	GO
Cameron Highlands Vegetables Growers Association	10	85	95	NGO

**Community issues and problems:**

- Sports and recreation: Insufficient facilities.
- Food production/supply: Shortage of land for farming.
- Employment: Shortage of farm workers.
- Infrastructures: Lack of a community meeting hall

**Natural disasters:** Landslides are a problem in this area.

## Community Profile of Kampung Ulu Jengka 4, Pahang

### *Background*

Kampung Ulu Jengka is located 32km from Maran and about 110km from Kuantan, the state capital of Pahang Darul Makmur, on the east coast of Peninsular Malaysia. The Ulu Jenka area was formerly known as "Jin Pertendang" and originally populated by the indigenous races or the orang asli, who lived off the jungle and sold jungle produce like petai, wild fruits and herbs in the towns and villages.

Agriculture programmes for the poor introduced by the second Prime Minister Tun Abdul Razak Hussein saw the Federal Land Development Authority (FELDA) open 25 land settlement schemes in Pahang. Many of these schemes were in the Jengka area, with each scheme involving the settlement of 400 people in about 1,000 hectares of land. The Jengka area remains an important centre for agriculture, producing rubber, palm oil, vegetables and livestock.

### *Natural features:*

**Agro-ecological classification:** The soil in this village is mainly for lowland crops.

**Weather conditions:** The wet season is from November to December and the dry season from January to October.

**Dominant soil type:** Fertile soil.

**Existing water bodies:** Rivers.

**Socio-demographic characteristics:** The population growth rate is high and the population density is also quite high. There are more men than women in Kampung Ulu Jengka 4.

	1999	2000
Growth rate		
Density		
Total urban population		
Total rural population		
Total population	2,100	2,052
Total male population	1,002	1,050
Total female population	1,098	1,002
Population density		
Age distribution:		
14 years and below	35 %	65 %
15 - 64	35 %	65 %
65 and above		
Total number of households	398	402
Ethnic groups (IPs) present		
Language/dialect used	Malay	Malay

Most of the villagers are Muslims.

**Education:** No proper information was available.

**Housing:** All the houses are made of brick and cement.

**Health:**

Leading causes of morbidity	Age group commonly affected	Gender commonly affected (M; F; Both)	Frequency of Occurrence (per thousand per year)
High blood pressure	40	20% M	15% F
Heart attack	40	10% M	5% F
Diabetes	40	20% M	20% F

Leading causes of mortality	Age group commonly affected	Gender commonly affected (M; F; Both)	Frequency of Occurrence (per thousand per year)
Stroke	> 40 years	-	
Diabetes	> 40 years	-	

**Nutritional status:** No detailed information available.

**Basic social services:** Kampung Ulu Jengka 4 has one pre-school with three teachers and 60 pupils, and one primary school with 30 teachers and 350 pupils and one secondary school. There is a midwife and five traditional medicine men. The common sports played are soccer, badminton and sepak takraw and there is also a recreation centre, called Taman Selesa.

As for crime, 30 cases were reported in the year 2000, compared with 42 cases in 1999. Ten traffic accident cases were reported in 1999, compared with three cases 2000. There was no incidence of fire reported in the two years.

***Economic activities:***

**Types of employment:** Most of the villagers are agro-based workers, with farmers being the most. Next come livestock/poultry breeders and those who market farm produce. The number involved in non agro-based activity is small.

Types of employment	1998	1999	2000
<i>Number of agro-based workers</i>			
Farmers	400	400	400
Livestock / poultry raiser	45	45	50
Marketing	40	40	42
<i>Number of non agro-based workers</i>			
Professional/technical jobs			
Service-related work	150	150	150
Construction-related work	-	-	-
Marketing	-	-	-
Others	-	-	-
Unemployed (15 – 65 years)	35	40	65

**Women in economic activities:** The women in the village are very active and hardworking.

	Total no. of workers	Women
Making of snacks	3	3
Tailoring	12	10

**Food availability and food-related practices:** No detailed information was available.

**Public amenities and facilities:**

- The common mode of transportation is bicycle, car, taxi and bus. The roads here are concrete.
- The main source of drinking water is piped water. The villagers normally use the refrigerator to keep water and store food.
- The source of lighting is electricity.
- The people of the village get their information from the broadcast media, followed by print media and telecommunications.

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	1	
Primary schools	1	
Secondary schools	1	
Public library/reading centre	1	
Health centre/clinic	1	
Community centre/meeting hall	1	
Chapel/religious house	1	
Community herbal garden		
Park/playground	1	
Veterinary services		1km
Post office		1km
Telephone lines	3	
Main road/highway	2	
Market	1	
Pharmacy		5km
Rural bank		4km
Credit cooperative	1	
Warehouse/storage facilities		1km
Irrigation		1km
Rice mill		
Electricity supply station/sub-station		1km
Community radio set		
Drinking water supply	1	
Public toilet	1	
Cemetery	1	
Dump site/land fill	-	

**Environmental management:** The common practices in disposing of household wastes are burning, throwing into rivers, land filling and collection by garbage collectors.

**Social organisations:** The most common social organisations that the villagers join are political organisations.

Name of organisation	Number (female)	Number (male)	Number of members	Type (GO, NGO, PO)
Village Security and Development Committee	280	65	345	GO

**Community issues and problems:**

- Health and nutrition: Difficult to get medication as the hospitals and clinics are far away.
- Education: Insufficient living quarters for teachers
- Peace and order: High incidence of house-breaking and the large presence of drug addicts in the community.
- Food production and supply: No serious problem was raised.
- Employment: No problem was raised.

**Natural disasters:** The village is prone to drought during the dry season and floods during the wet season.

## Community Profile of Kampung Parit Buntar, Perak

### *Background*

Kampung Parit Buntar is located in Perak. It is about 40km from Taiping and 70km from Ipoh, the state capital. Most of the farmers have their own land and the principal crop planted is paddy. This is a traditional Malay village, with 50% of the land owned by Malays, 35% by the Chinese and 15% by the Indians. In recent years, many of the farmers have left the interior places because of wild animals that have been displaced from elsewhere. Paddy continues to be planted on a small scale, with some support from the government.

### *Natural features*

**Agro-ecological classification:** The soil in this village is mainly for lowland and coastal farming.

**Weather conditions:** The weather is wet from August to September and dry from December to July.

**Dominant soil type:** Fertile clay.

**Existing water bodies:** Rivers and spring. The village is prone to drought and floods.

**Socio-demographic characteristics:**

	1999	2000
Growth rate		
Density		
Total urban population	5,800	6,000
Total rural population	3,599	3,650
Total population		
Total male population (rural)	1,790	1,800
Total female population	1,809	1,850
Population density		
Age distribution:		
14 years and below		
15 - 64		
65 and above		
Total number of households		
Ethnic groups (IPs) present		
Language/dialect used		

Most of the villagers are Muslims, followed by Hindus and Buddhists

**Education:**

No education	48%
Primary school	40%
Intermediate school	12%
High school	-
College	-
Post-graduate	-
Vocational school	-

**Housing:** About 15% of the villagers live in brick houses and the rest in houses made of wood.

**Health:**

Leading causes of morbidity	Age group commonly affected	Gender commonly affected (M; F; Both)
Heart attack	45-70	Both
High blood pressure	40-70	Both
Diabetes	38-70	Both



Leading causes of mortality	Age group commonly affected	Gender commonly affected (M; F; Both)
Old age	65-70	-
Accident	10-45	-

**Nutritional status:** No detailed information.

### *Economic activities:*

Type of employment	1999	2000
<i>Number of agro-based workers</i>		
Farmers		75 %
Livestock/poultry breeders		15 %
Marketing		5 %
<i>Number of non agro-based workers</i>		
Professional/technical job		5 %
Service related work		10 %
Construction-related work		-
Marketing		10 %
Others		-
Unemployed (15 – 65 years)		5 %

**Women in economic activities:** The women in this village are very active and hardworking, with a number of them involved in the making of handicraft, tailoring, metal craft and snacks for sale.

**Food availability and food-related practices:** No information available.

### **Public amenities and facilities:**

- The common mode of transportation in Kampung Parit Buntar is bicycle, taxi and bus.
- The main sources of drinking water are piped water and rain water. The villagers normally use refrigerators store the water and food. They also use plastic containers to store food.
- Electricity is supplied to the village.
- The people have access to telecommunication services and the broadcast and print media.

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	36	
Primary school	4	
Secondary school	1	
Public library/reading centre	1	
Health centre/clinic	1	
Community centre/meeting hall	2	
Mosque/religious house	6	
Community herbal garden	-	
Park/playground	2	
Veterinary services	-	
Post office	1	
Telephone lines	40	
Main road/highway	1	
Market	1	
Pharmacy	-	
Rural bank	1	
Credit cooperative	-	
Irrigation	-	
Rice mill	-	
Electricity supply station/sub-station	-	
Community radio set	-	
Drinking water supply	2	
Public toilet	-	
Cemetery	10	
Dump site/land fill	-	

**Environmental management:** The usual ways of disposing household waste are by burning, throwing into the rivers, dumping at unused places or by land filling.

**Social organisations:** The usual social organisation the villagers join are political organisations.

Name of organisation	Number (female)	Number (male)	Number members	Type (GO, NGO, PO)
Farmers' Units				GO
UMNO				PO
Alternative Front				PO

**Community issues and problems:**

- a. Food and Nutrition: Health standard is minimal, because of unhygienic practices in food preparation and storage.
- b. Education: A lot of negative influences are prevalent.
- c. Sports and recreation: No facilities

- d. Food production/supply: Land and facilities are a problem. Some of the reasons are the indifferent attitude of the farmers, high costs, the role of government extension agencies with which the farmers do not agree. There are large tracts of idle land.
- e. Employment: No labour for the agriculture sector as farm workers migrate to the urban areas because of low salaries.
- f. Infrastructure: Not sufficient.

## Community Profile of Kampung Pondok Tanjung, Perak

### *Background*

Kampung Pondok Tanjung is located in Larut Matang, Perak. It is about 25km from Larut Matang and 125km from Ipoh the state capital of Perak. The village got its name from the meeting point of two rivers, called "tanjung". The people there, the farmers and fishermen, built their huts (pondok) around this point and that is how the village came to be known as Pondok Tanjung.

### *Natural features*

**Agro-ecological classification:** The soil in this village is suitable for upland, lowland and coastal crop farming.

**Land use:** Total land area is 10,000 hectares, of which 800 hectares are used for agriculture, 2,000 for residential units, 200 hectares for institutional purposes and 10,000 hectares are forest. Another 1,000 hectares are grassland while 7,000 hectares are irrigated lowland, 2,500 hectares are rain-fed lowland and 8,500 hectares are irrigated upland. Of the total farmland available, some 6,000 hectares are lying idle.

**Weather conditions:** The weather is wet from September to December.

**Dominant the soil type:** Clay and sandy.

**Existing water bodies:** Rivers, a lake and springs.

Kampung Pondok Tanjung is prone to floods.

### **Social-demographic characteristics:**

	1999	2000
Growth rate		
Density	5,500	5,000
Total urban population	1,200	1,000
Total rural population	4,300	4,000
Total population	5,600	5,000
Total male population	2,200	2,000
Total female population	3,400	3,000
Population density	5,500	5,000

Age distribution:		
14 years and below		
15 - 64		
65 and above		
Total number of households	660	600
Ethnic groups (IPs) present	Malay, Indian	Malay, Indian
Language / dialect used	Malay, Tamil	Malay, Tamil

Three main religions in this village are Islam, Buddhism and Hinduism.

#### Education:

No education	15%
Primary school	65%
Intermediate school	10%
High school	10%
College	-
Post-graduate	-
Vocational school	-

**Housing:** About 10% of the villagers live in brick houses and the rest in houses made of wood.

**Health:** There is no detailed information on the leading causes of morbidity and mortality.

**Nutritional status:** No detailed information.

**Basic social services:** Kampung Pondok Tanjung has one pre-school and two primary schools. The pre-school has one teacher and 40 pupils. The primary schools have 18 and 14 teachers each. There is no secondary school in this village. The village clinic has a midwife and five nurses who see an average of 300 patients a month. There is also a traditional healer in the village. The common sports played are soccer and sepak takraw.

#### *Economic activities:*

**Types of employment:** The majority of the people are agro-based workers, with farmers making up the biggest number, followed by livestock/poultry breeders and those marketing farm produce. Only a small number are involved in non agro-based activities.

Types of employment	1998	1999	2000
<i>Number of agro-based workers</i>			
Farmers	700	600	600
Fishermen	50	50	50
Livestock/poultry breeders	200	250	300
Marketing	150	120	150
<i>Number of non agro-based workers</i>			
Professional/technical job	25	20	24
Service related work	100	80	100
Construction-related work	30	30	25
Marketing	1,000	1,200	1,300
Factory and plantation workers	4,000	4,000	4,000
Unemployed (15 - 65 years)	-	-	-

**Women in economic activities:** The women of Kampung Pondok Tanjung are very active and hardworking. There are women involved in the making of handicraft, tailoring, metal craft and the preparation of snack food for sale.

**Food availability and food-related practices:** Rice, corn, fruits, poultry and seafood make up the basic food of the villagers. Availability of food depends on food production, market supplies, weather and the purchasing power of the villagers. Rice, fruits, poultry and seafood are available throughout the year but corn is only available in January, May, September and December. The villagers normally use the refrigerator to store their food.

**Public amenities and facilities:**

- a. The common mode of transportation in the village is bicycle and bus. Total length of village roads is 10km and there is one concrete bridge.
- b. Piped water is supplied to the village but the villagers also use water from the wells, springs and a nearby waterfall. They use plastic containers to store the water and also to store food.
- c. The source of lighting in the village is electricity.
- d. The community in this village has telecommunication service.

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	1	
Primary schools	2	
Secondary schools	-	
Public library/reading centre	-	
Health centre/clinic	2	
Community centre/meeting hall	-	
Mosque/religious house	2	
Community herbal garden	-	
Park/playground	1	
Veterinary services	-	
Post office	-	
Telephone line	1	
Main road/highway	-	
Market	-	
Pharmacy	-	
Rural bank	-	
Credit cooperative	-	
Irrigation	-	
Rice mill	-	
Electricity supply station/sub-station	-	
Community radio set	-	
Drinking water supply	Piped water	
Public toilet	-	
Cemetery	-	
Dump site/land fill	-	

**Environmental management:** The main methods of disposing of household waste are burning and collection by the garbage collector.

**Social organisations:** The most common social organisation that the villagers join are political parties.

Name of organisation	Number (female)	Number (male)	Number of members	Type (GO, NGO, PO)
Rukun Tetangga	2,000	1,000	3,000	GO
JKKK	2,500	3,000	5,500	GO
UMNO/MIC	800	1,000	1,800	Political

**Community issues and problems:**

- a. Education: Centres of learning are far from the village.
- b. Sports and recreation: No facilities.
- c. Employment : There are many jobless people.
- d. Idle land: This is a serious problem in the community. There are some 6,000 hectares of land left idle and village heads say the owners are just too lazy to work on their land.
- e. Social problems: Drug abuse and other social problems are said to be on the rise because of the high unemployment among the youth.

## Community Profile of Kampung Semanggol, Perak

### *Background*

Kampung Semanggol is located near Taiping in Perak, about 264km from Ipoh, the state capital. In 1850, 44 Malays from the state of Kedah came to establish a settlement in the area. They then discovered an indigenous race, the Semang, living on the "tunggul" trees there. That is how the village, as it grew, came to be called "Semanggol".

### *Natural features*

**Agro-ecological classification:** The soil in this village is mainly for lowland farming.

**Land use:** The total land area is 150 hectares. There are 60 houses in the village and some 80 hectares are being used for agriculture.

**Weather conditions:** The weather is wet all year long.

**Dominant soil type:** Clay.

**Existing water bodies:** Rivers. The village is prone to hurricanes.

**Social-demographic characteristics:** The population growth rate is high and the population density is also quite high.

	1999	2000
Growth rate		
Density		
Total urban population	2,300	5,000
Total rural population	300	500
Total population	5,300	5,500
Total male population	200	400
Total female population	800	800
Population density		
Age distribution:		
14 years and below		
15 – 64		
65 and above		
Total number of households		
Ethnic groups (IPs) present		
Language/dialect used	Malay	Malay

All the villagers are Muslims.

#### **Education:**

No education	12%
Primary school	55%
Intermediate school	33%
High school	-
College	-
Post-graduate	-
Vocational school	-

**Housing:** The houses in the village are semi-temporary units, made of light materials and lumber.

**Health:** There is no detailed information about the leading causes of morbidity or mortality.

**Nutritional status:** No detailed information.

**Basic social services:** Kampung Semanggol village has two primary schools and one secondary school. There are 200 pupils 20 teachers in one primary school and 500 pupils and 35 teachers in the other. The secondary school has 500 students with and teachers. There are two clinics in the village and the common played there are soccer, badminton, and sepak takraw.



### ***Economic activities:***

**Types of employment:** Most of the people here are agro-based workers. Farmers make up the majority, followed by livestock/poultry breeders and those marketing the produce. The people involved in non agro-based activity are few.

**Food availability and food-related practices:** No information available

### **Public amenities and facilities:**

- a. The common mode of transportation in this village is motorcycle, taxi and bus. Total length of village road is 2km and all the roads are concrete. There are eight concrete bridges.
- b. Piped water is supplied to the households. The villagers normally use plastic containers, clay jars and the refrigerator to store the water. Refrigerators and plastic containers are used to store food.
- c. Electricity is supplied to the village.
- d. The community in this village has access to telecommunications and the broadcast and print media.

### **Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	2	
Primary schools	1	
Secondary school		8km
Public library/reading centre		20km
Health centre/clinic	2	
Community centre/meeting hall	6	
Mosque/religious house	50	
Community herbal garden	-	
Park/playground	-	
Veterinary services	-	
Post office	1	8km
Telephone lines	30	
Main road/highway		20km
Market	-	
Pharmacy	-	20km
Rural bank	-	
Credit cooperative	-	
Irrigation	-	
Rice mill	-	
Electricity supply station/sub-station		20km
Community radio set	1	
Drinking water supply	Piped water	
Public toilet	-	
Cemetery	10	
Dump site/land fill	-	

**Environmental management:** The main means of disposing of housing hold garbage is by burning, throwing into the rivers, land filling and collection by garbage collector.

**Social organisations:** Most of the villagers are members of political organisations, largely the opposition party, PAS.

**Community issues and problems:**

- a. Food and Nutrition: Health among the villagers is average because of their improper eating lifestyle.
- b. Education: There are many negatives influences among the school-going.
- c. Sports and recreation: There is not much support for this because of the absence of places for recreation and the lack of sport facilities.
- d. Food productivity: There is a lack of technology, infrastructure and land. The cause appears to be the attitude of the farmers who remain unclear about the proposals of government farm extension agencies. There are large tracts of idle land.
- e. Employment: The farm sector workforce is shrinking because the low salary is causing workers to migrate to the urban areas.
- f. Infrastructure: Not sufficient

**Natural disasters:** The village is prone to hurricanes.

## Community Profile of Kampung Gopeng, Kampar, Perak

### *Background*

Kampung Gopeng is located in Kampar. It is about 19km from Ipoh, the Perak state capital, and 9km from the nearest town, Batu Gajah. Gopeng Village was the first mining town populated by the Hakka clan who came from China. Tin mining on a commercial scale came to an end 30 years ago and the second and third generations of these tin miners switched to farming, which is the family activity until today. Much of the land in the area has been turned over to housing and industry by the state government. Marginalised under this programme of the State Economic Development Corporation, the farmers are fighting to keep their land, with assistance from the Perak Consumers Association.

### *Natural features*

**Agro-ecological classification:** The soil in this village is mainly mining soil.

**Land use:** A total of 276,000 hectares are used for agriculture, 34,944 hectares for housing and 436,977 hectares are forest. Grassland accounts for 1,421 hectares, 84,460 hectares are planted with rubber trees and 156,345 hectares are planted with palm oil.

**Weather conditions:** The weather is wet and dry all year long.

**Existing water bodies:** The Gopeng River and disused mining pools, several of which are also used for farming freshwater fish. The village is prone to floods.

**Socio-demographic characteristics:** The population growth rate is high and the population density is also quite high. There are more women than men in Kampung Gopeng.

	1999	2000
Growth rate		
Density		
Total urban population	100,800	101,000
Total rural population		
Total population		
Total male population		
Total female population		
Population density		
Age distribution:		
14 years and below		
15 - 64		
65 and above		
Total number of households	10,000	10,030
Ethnic groups (IPs) present		
Language/dialect used	Malay	Malay

The most dominant religion in the village is Islam, followed by Chinese ancestral worship and Hinduism.

### Education

No education	15%
Primary school	45%
Intermediate school	5%
High school	30%
College	2%
Post-graduate	-
Vocational school	3%

**Housing:** Some 60% of the houses in the village are brick houses while the rest are made of wood.

### Health:

Leading causes of morbidity	Age group commonly affected	Gender commonly affected (M; F; Both)
Heart attack	40 and above	Both
Diabetes	40 and above	Both
Traffic accidents	20 years	M

Leading causes of morbidity	Age group commonly affected	Gender commonly affected (M; F; Both)
Cough and cold		Both
Fever		Both
Diabetes		Both
High blood pressure		Both

**Nutritional status:** No detailed information.

**Basic social services:** Kampung Gopeng has eight pre-schools, six primary schools (including one Chinese and one Tamil), and two secondary schools. The pre-schools each have two teachers and 30 pupils. The primary schools have a total of 44 teachers with a student ratio of 30:1. One of the secondary schools has 30 teachers and 200 students. There is a clinic in the village, manned by health personnel who see an average of 300 patients a month. There are two doctors, two midwives and two nurses in this clinic. There also are four traditional healers in the village. The villagers have a passion for fishing.

### *Economic activities:*

**Type of employment:** The majority of the community in this village is agro-based workers, with farmers making up the largest number, followed by livestock/poultry breeders and those marketing the produce. A small number of people is involved in non agro-based activities.

In 1997, some 2,600 hectares were planted with vegetables, which were bought and re-distributed by middlemen, and another 40,715 hectares planted with paddy. In addition, the farmers also raise cattle, chicken, ducks, hogs and freshwater fish. Much of the farmlands have also been developed in recent years as mini-estates, producing vegetables and fruits.

Type of employment	1998	1999	2000
<i>Number of agro-based workers</i>			
Farmers	20%	23%	23%
Fishers	25%	30%	30%
Livestock / poultry breeders	25%	25%	25%
Marketing	30%	22%	22%
<i>Number of non agro-based workers</i>			
Professional/technical job	2,000	3,000	4,000
Service related work			
Construction-related work			
Marketing			
Others			
Unemployed (15 – 65 years)			

**Women in economic activities:** The women of the village are very active and hardworking. Some of them are also involved in tailoring.

**Food availability and food-related practices:** No detailed information available.

**Public amenities and facilities:**

- a. The common modes of transportation in this village are bicycle, taxi and bus.
- b. All households in Kampung Gopeng are supplied with piped water. The villagers normally use plastic containers to store water and use the refrigerator, plastic containers to store food.
- c. The sources of lighting used in the village are electricity, generator and oil.
- d. The community in this village has telecommunications and broadcast media.

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	8	
Primary schools	6	
Secondary schools	2	
Public library/reading centre	-	
Health centre/clinic	2	
Community centre/meeting hall	4	
Mosque/religious house	Available	
Community herbal garden	-	
Park/playground	1	
Veterinary services	1	
Post office	1	
Telephone lines	Available	
Main road/highway	1	
Market	3	
Pharmacy	1	
Rural bank	2	
Credit cooperative	1	
Irrigation	-	
Rice mill	-	
Electricity supply station/sub-station	1	
Community radio set	1	
Drinking water supply	1	
Public toilet	2	
Cemetery	Available	
Dump site/land fill	Available	

### Social organisations

The common social organisations the villagers join are political organisations. Membership details could not be ascertained.

Name of organisation	Number (female)	Number (male)	Number of members	Type (GO, NGO, PO)
JKKK				
UMNO				
Belia 4B				
PIBG				
MIC				
MCA				
Rukun Tetangga				

## Community Profile of Kampung Baru Kundang, Rawang, Selangor

### Background

Kampung Baru Kundang, is located about 10km from Rawang in Selangor. This village was the first place tin was mined in Selangor and was originally known as Pengakalan Kundang. During the mining days, there were 150 Chinese and six Indian families living there. All mining activity has since ceased and the people moved into farming and raising hogs.

### Natural features

**Agro-ecological classification:** The soil in this village is suitable for lowland farming.

**Land use:** Some 30 acres have been taken up for housing, 100 acres are grassland and 50 acres are farmed.

**Weather conditions:** The weather is wet and dry all year long.

**Existing water body:** The Kundang River.

**Socio-demographic characteristics:** The population growth rate is high and the population density is also quite high. Women outnumber men.

	1999	2000
Growth rate		
Density		
Total urban population		
Total rural population		
Total population	4,905	5,000
Total male population	2,905	2,500
Total female population	2,000	2,500
Population density		
Age distribution:		
14 years and below		
15 - 64		
65 and above		

Total number of households	360	400
Ethnic groups (IPs) present	Malay, Indian & Chinese	Malay, Indian & Chinese
Language/dialect used	Malay	Malay

Most of the villagers are Muslims, with the Chinese largely being Buddhists and the Indians, Hindus.

#### Education:

No education	5%
Primary school	45%
Intermediate school	-
High school	40%
College	2%
Post-graduate	-
Vocational school	3%

**Housing:** All the houses are made of brick and wood

#### Health:

Leading causes of morbidity	Age group commonly affected	Gender commonly affected (M; F; Both)
Blood pressure	40	Both
Cancer	45-50	Both
Diabetes	35-68	Both
TB	15	Both

Leading causes of morbidity	Age group commonly affected	Gender commonly affected (M; F; Both)
Blood pressure	40	Both
TB	15	Both
Asthma	-	-

**Nutritional status:** No detailed information was available.

**Basic social services:** Kampung Baru Kundang has two pre-schools and one primary school. Each pre-school has three teachers and 25 pupils. The primary school has 400 pupils and 25 teachers. There is a clinic in the village manned by three medical assistants, four nurses and a midwife. A government doctor comes on certain days of the week. There are also three traditional healers in the village. The common sports played here are soccer, badminton and sepak takraw.



***Economic activities:***

Type of employment	1999	2000
<i>Number of agro-based workers</i>		
Farmers	10%	10%
Fishers	1 %	1 %
Livestock / poultry breeders	2%	2%
Marketing	4%	4%
<i>Number of non agro-based workers</i>		
Professional/technical jobs	21	28
Service-related work	12	18
Construction-related work	3	9
Marketing	20	30
Others	-	-
Unemployed (15 – 65 years)		

**Women in economic activities:** The women of Kampung Baru Kundang are very active and hardworking. There also are women involved in tailoring.

**Food availability and food-related practices:** Rice, tapioca, corn, fruits and meat make up the general food intake of the people and except for the fruits, which are seasonal, the other food items are generally available throughout the year. The food crops produced by the farmers are sold to middlemen who come in trucks, load the produce and sell them to wholesalers.

**Public amenities and facilities:**

- a. The common mode of transportation in the village is bicycle, taxi and bus. Total length of road is 200m and all the bridges are made of concrete.
- b. The sources of drinking water for the households are piped water, rain water and water from the well. The villagers normally use plastic containers and the refrigerator to store the water. The refrigerator is also used to store food.
- c. The source of lighting is electricity and liquefied petroleum gas.
- d. The community has easy access to telecommunications services and the broadcast media.

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	4	
Primary schools	1	
Secondary schools	1	
Public library/reading centre	-	
Health centre/clinic	1	
Community centre/meeting hall	1	
Mosque/religious house	1	
Community herbal garden	1	
Park/playground	1	
Veterinary services	-	
Post office	-	
Telephone line	Available	
Main road/highway	-	
Market	-	
Pharmacy	-	
Rural bank	-	
Credit cooperative	-	
Irrigation	-	
Rice mill	-	
Electricity supply station/sub-station	-	
Community radio set	-	
Drinking water supply	-	
Public toilet	-	
Cemetery	Available	
Dump site/land fill	-	

**Social organisations:** Many of the villagers are members of political organisations.

Name of organisation	Number (female)	Number (male)	Number of members	Type (GO, NGO, PO)
UMNO			800	PO
MCA			2,000	PO
MIC			400	PO
Youth club (Kau Cho)	60	72	132	

## Community Profile of Kampung Seri Tiram Jaya, Selangor

### Background

Kampung Seri Tiram Jaya is located about 10km from the coastal town of Tanjung Karang in Selangor. It was formerly known as Kampung Tiram Buruk and established in 1932. Kampung Tiram Buruk was divided into three divisions: Kampung Tiram Buruk (now Kampung Seri Tiram Jaya); Kampung Baru Tiram Buruk and Kampung Ulu Tiram Buruk.

In the earlier days, Kampung Tiram Buruk was the most populated, with the residents being largely Malays. The Chinese lived in Kampung Baru Tiram Buruk. Kampung Tiram Buruk was established by the Malays and it grew to a community of some 3,000 people living in 350 houses. Later people from the Indonesian state of Java came and settled in the village, opening up more land. Some of this land was sold to the Chinese. The name of Seri Tiram Jaya was given to the village by the then Menteri Besar (Chief Minister) of Selangor, Tan Sri Muhammad Muhammad Taib, on July 1, 1989.

### Natural features

**Agro-ecological classification:** The soil in this village is mainly for lowland farming.

**Land use:** Some 2,100 hectares are being used for agriculture, 1,600 hectares are irrigated lowland and the residential areas have taken up 500 hectares.

**Weather conditions:** The weather is wet all year long.

**Dominant soil type:** Brown clay and fertile soil.

**Existing water bodies:** Rivers.

**Social-demographic characteristics:** The population growth rate is high and the population density is also quite high. There are more women than men in Kampung Seri Tiram Jaya.

	1999	2000
Growth rate	-	-
Density	-	-
Total urban population	-	-
Total rural population	2,840	2,500
Total population	2,840	2,500
Total male population	1,280	1,240
Total female population	1,560	1,260
Population density	-	-
Age distribution:		
14 years and below	450	485
15 – 64	1967	1955
65 and above	63	60
Total number of households	474	478
Ethnic groups (IPs) present	Javanese	Javanese
Language/dialect used	Javanese, Malay	Javanese, Malay

All the residents of the village are Muslims.

**Education:**

No education	-
Primary school	60%
Intermediate school	-
High school	35%
College	5%
Post-graduate	-
Vocational school	-

Almost all the villagers have attained at least six years of primary school education.

**Housing:** Some 35% of the villagers live in brick houses while the rest of the houses are made of timber.

**Health:** No detailed information is available on the leading causes of mortality.

**Nutritional status:** No detailed information.

**Basic social services:** Kampung Seri Tiram Jaya has one pre-school, two primary schools and a secondary school. The pre-school has two teachers. The primary schools have 18 and 10 teachers each, while the secondary school has 30 teachers. There is a clinic in this village with 18 health personnel, among them two midwives and two nurses, who see average of 350 patients a month. The common sports in this village are soccer, badminton, volleyball, table-tennis, netball and sepak takraw. The common recreations are cycling and jogging.

Four cases of crime were reported in 1996 was and 2000, there were five cases. Traffic accident cases have dropped from three in 1999 to two in 2000. There was no incidence of fire in the year 2000 but there was one fire case in 1999.

***Economic activities***

**Types of employment:** The majority of the people in this village are agro-based workers. Farmers will be the most among them, follow by livestock / poultry raiser and marketing. The people involve in non agro-based is fewer comparatively.

Types of employment	1998	1999	2000
<i>Number of agro-based workers</i>			
Farmers	314	310	310
Livestock/poultry breeders	1	1	1
Marketing	6	8	8
<i>Number of non agro-based workers</i>			
Professional/technical job	25	25	25
Service related work	41	42	48
Construction-related work	12	16	20
Marketing	16	16	14
Others	-	-	-
Unemployed (15 – 65 years)	-	-	-

**Women in economic activities:** The women in the village are very active and hardworking. There are women who are involved in the making of handicraft, tailoring, metal craft and junk food.

	Total no. of workers	Women
Handicraft	2	2
Tailoring	6	6
Metal craft	2	2
Junk food	3	3

**Food availability and food-related practices:** No information available

**Public amenities and facilities:**

- The common mode of transportation in this village is motorcycle and car. Total length of road is 15km and all the bridges are concrete.
- The common source of drinking water for the households is piped water. The villagers normally use plastic containers to store the water and use the refrigerator and plastic containers to store food.
- The village is supplied with electricity.
- The villagers have access to telecommunication services (40%), broadcast media (100%) and print media (55%).

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	1	
Primary schools	1	
Secondary schools	1	
Public library/reading centre	1	
Health centre/clinic	1	
Community centre/meeting hall	3	
Mosque/religious house	4	
Community herbal garden	2	
Park/playground	1	
Veterinary services	-	15 km
Post office	-	10 km
Telephone lines	Available	
Main road/highway	Available	
Market	1	
Pharmacy	-	10 km
Rural bank	-	10 km
Credit cooperative	1	
Irrigation	Available	
Rice mill	2	
Electricity supply station/sub-station	1	

Community radio set	-
Drinking water supply	Piped water
Public toilet	Available
Cemetery	Available
Dump site/land fill	-

**Environmental management:** The three common ways of disposing of household wastes are burning, throwing into the rivers and land filling.

**Social organisations:** The most common social organisation the villagers is the political party.

Name of organisation	Number (female)	Number (male)	Number of members	Type (GO, NGO, PO)
Farmers' organisation	332	210	542	NGO
Co-op Society	45	-	45	NGO
Women's clubs	-	130	130	NGO
Youth clubs	45	60	105	NGO
UMNO	250	20	450	Political
PAS	80	60	140	Political
Keadilan	50	30	80	Political

A project called "Rice Estate Project", implemented by a government agency, has been carried out in Kampung Seri Tiram Jaya since 1984.

#### Community issues and problems:

- a. Nutrition: Many women are becoming obese and often succumb to illnesses such as high blood pressure, diabetes and heart problems. The cause of it is little exercise and high cholesterol food.
- b. Education: There are graduates who are still jobless and village elders say this is perhaps because they are choosy about the jobs they want to do.
- c. Sports and recreation: No facilities

**Natural disasters:** Floods are a problem that have not been resolved and sometimes the houses are destroyed by thunder and lightning.

## Community Profile of Kampung Sungai Serai, Selangor

### Background

Kampung Sungai Serai is located about 18km from the town of Sungai Buloh in Selangor, on the west coast of Peninsular Malaysia. It was famous for the serai plant, or lemon grass, and is today home to 1,750 people from 205 households. Some 10% of the total population of women play an important role in agriculture. This village was one of the beneficiaries of the "Green Book Scheme" of the government, under which villagers were encouraged to grow food crops. Under the plan, the government built 145 houses with land and distributed them to 103 Malay families, 22 Chinese families and 20 Indian families. Most of the people here today practise farming part-time.

### Natural features:

**Agro-ecological classification:** The soil in this village is mainly for lowland crop cultivation.

**Land use:** Some 156 hectares of land is used for crop farming and another 26 hectares for housing and home gardening of food crops.

The village is prone to floods.

**Socio-demographic characteristics:** The population growth rate is high and the population density is also high. The number of women is higher than that of men. The majority of the people in Kampung Sungai Serai are Muslims, followed by Hindus and Buddhists.

### Education:

No education	45 %
Primary school	45 %
Intermediate school	8 %
High school	2 %
College	-
Post-graduate	-
Vocational school	-

**Health:** No detailed information was available on the leading causes of morbidity.

**Nutritional status:** No detailed information.

### Economic activities:

Types of employment	1998	1999	2000
<i>Number of agro-based workers</i>			
Farmers	50 %	50 %	50 %
Fishermen	20 %	20 %	20 %
Livestock / poultry breeders	20 %	20 %	20 %
Marketing	10 %	10 %	10 %



<i>Number of non agro-based workers</i>				
Professional/technical jobs	-	-	-	-
Service-related work	-	-	-	-
Construction-related work	-	-	-	-
Marketing	-	-	-	-
Others	-	-	-	-
Unemployed (15 - 65 years)	-	-	-	-

**Food availability and food-related practices:** No information available.

**Public amenities and facilities:**

- The common mode of transportation for the villagers is the bicycle, bus and car.
- Besides piped water, the villagers also use water from open wells and pump wells. They normally use plastic containers and the refrigerator to store food and water.
- The source of lighting is electricity.
- The community in this village has access to telecommunications facilities and the broadcast and print media.

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	1	
Primary schools	1	
Secondary school	-	3km
Public library/reading centre	-	
Health centre/clinic	1	
Community centre/meeting hall	1	
Mosque/religious house	1	
Community herbal garden	-	
Park/playground	1	
Veterinary services	1	
Post office	Mobile service	
Telephone lines	1	
Main road/highway	-	3km
Market	-	
Pharmacy	-	
Rural bank	-	
Credit cooperative	1	
Irrigation	-	
Rice mill	-	
Electricity supply station/sub-station	1	
Community radio set	-	
Drinking water supply	Piped water	
Public toilet	-	
Cemetery	1	
Dump site/land fill	1	

**Environmental management:** The common practice in disposing household wastes is to throw them into the rivers.

## Community Profile of Kampung Parit 4, Sungai Burung, Selangor

### Background

Kampung Parit 4, Sungai Burung is located about 8km from the coastal town of Tanjung Karang in Selangor. The villagers there started growing padi in 1945 and the ripening padi was attacked by the “burung pipit”, causing production to fall drastically. At the same time, they were also harassed by the communists. After Independence in 1957, the area was divided into three farming zones, with the Malays owning 3,000 hectares of land, the Chinese owning 750 hectares and the Indians, 400 hectares. From the early 1960s, modern padi planting techniques were introduced and today, the farmers even use padi harvesting machines.

### Natural features

**Agro-ecological classification:** The soil in this village is mainly for lowland cultivation.

**Land use:** A total of 320 hectares are being used for agriculture.

**Weather conditions:** The weather is wet from January to March, May, July, August, November and December. The dry seasons are in April, June and September.

**Existing water bodies:** Rivers.

**Social-demographic characteristics:** The population growth rate is high and the population density is also quite high. There are more women than men in Kampung Parit 4.

	1999	2000
Growth rate		
Density		
Total urban population		
Total rural population	1,280	1,300
Total population		
Total male population	830	850
Total female population	450	450
Population density	-	-
Age distribution:		
14 years and below	-	-
15 - 64	-	-
65 and above	-	-
Total number of households	-	-
Ethnic groups (IPs) present	-	-
Language dialect used	-	-

There are Muslim, Hindu, Buddhist and Christian villagers.

Education:

No education	-
Primary school	2
Intermediate school	2
High school	3
College	-
Post-graduate	-
Vocational school	-

**Housing:** There are concrete and semi-concrete houses in the village.

**Health:** No detailed information on the leading causes of mortality.

**Nutritional status:** No detailed information.

**Basic social services:** Kampung Parit 4 has one primary school with 321 pupils and 12 teachers. There is a clinic in this village, manned by a nurse and a midwife. There are also two traditional healers in the village.

The number of traffic accident cases has increased from five cases in 1999 to seven cases in 2000.

***Economic activities:***

**Types of employment:** The majority of the people in the village is agro-based workers. Farmers make up the most, followed by livestock/poultry breeders and those who market the produce. The number involved in non-agro-based activity is small.

Types of employment	1998	1999	2000
<i>Number of agro-based workers</i>			
Farmers	400	400	400
Fishers	20	20	30
Livestock / poultry raiser	-	-	-
Marketing	3	3	3
<i>Number of non agro-based workers</i>			
Professional/technical job			
Service-related work	15	15	15
Construction-related work	30	30	30
Marketing	10	10	10
Others	60	80	150
Unemployed (15 - 65 years)	-	-	-

**Food availability and food-related practices:** Rice, corn, yam, vegetables, fruits, poultry, seafood are the main food of the villagers. The availability of food depends on food production, market supplies, weather and the purchasing power of the villagers. Rice, corn, vegetables, fruits, poultry and seafood are available throughout the year while yam is available seasonally. The villagers normally use the refrigerator to store food.

**Public amenities and facilities:**

- a. The common mode of transportation in the village is bicycle, taxi, bus and car.
- b. Piped water and rainwater are the main sources of water for drinking The villagers use plastic containers and refrigerator to store their food and water.
- c. Electricity is supplied to the village.
- d. The people have reasonable or adequate access to telecommunication facilities and the broadcast and print media.

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	1	
Primary schools	2	
Secondary schools	-	
Public library/reading centre	-	
Health centre/clinic	1	
Community centre/meeting hall	2	
Mosque/religious house	8	
Community herbal garden	-	
Park/playground	1	
Veterinary services	-	
Post office	-	
Telephone lines	10	
Main road/highway	1	
Market	-	
Pharmacy	-	
Rural bank	-	
Credit cooperative	-	
Irrigation	1	
Rice mill	-	
Electricity supply station/sub-station	-	
Community radio set	-	
Drinking water supply	1	
Public toilet	-	
Cemetery	2	
Dump site/land fill	-	

**Environmental management:** The main methods of household waste disposal are by burning, throwing into rivers and land filling.

**Social organisations:** The common social organisations that the villagers join are political organisations.

Name of organisation	Number (female)	Number (male)	Number of members	Type (GO, NGO, PO)
UMNO Youth	20	30	50	Political
MIC Youth	20	10	30	Political
WI	-	80	80	NGO

**Community issues and problems:**

**Education:** Little religious education because there are not enough teachers.

## Community Profile of Kampung Ulu Melang, Kuala Pilah, Negeri Sembilan

### *Background*

Kampung Ulu Melang is located off Jalan Melang, about 2km from the nearest town, Kuala Pilah, and 35km from Seremban, the capital of Negeri Sembilan. The village was formerly known as Keviel Estate, and owned by a European. The estate of about 75 hectares was later bought by an Indian and after the May 13, 1969 race riots in Malaysia, was broken up and sold to individuals. From these partitioned grew settlements like Batu Intan, Kampung Delima and Batu 46. Subsequently, with the implementation of a few public housing projects, these settlements were merged and called Kampung Ulu Melang. The village remains an agricultural-based sector, producing rubber, vegetable, freshwater fish and livestock food.

### *Natural features*

**Agro-ecological classification:** The soil in this village is mainly for upland and lowland crop cultivation.

**Weather conditions:** It is wet from September to January and dry from February to April.

**Dominant soil type:** Fertile soil, sandy and red earth.

**Existing water bodies:** Rivers.

The village is prone to drought.

**Socio-demographic characteristics:** The details provided were scanty and could not be verified. The majority of the people in Kampung Ulu Melang are Muslims (70%), following by Hindus (20%) and Catholics (10%).

**Education:**

No education	-
Primary school	20 %
Intermediate school	70 %
High school	30 %
College	-
Post-graduate	-
Vocational school	-

**Housing:** Some 70% of the villagers live in brick houses and the rest in houses made of wood.

**Health:** No detailed information was available on the leading causes of morbidity and mortality.

**Nutritional status:** No detailed information.

**Basic social services:** The village has two pre-schools, two primary schools and one secondary school. Each pre-school has two teachers and 25-30 pupils. The secondary school has 20 teachers and 125 students. There is a clinic in this village, manned by five health personnel who see an average of 30 patients a month. There is also a traditional healer in the village.

***Economic activities:***

**Types of employment:**

Types of employment	1999	2000
<i>Number of agro-based workers</i>		
Farmers		5
Pond fish breeders		5
Livestock / poultry breeders		2
Marketing		2
<i>Number of non agro-based workers</i>		
Professional/technical jobs		10
Service-related work		25
Construction-related work		10
Marketing		-
Others		6
Unemployed (15 – 65 years)		5 -10

**Food availability and food-related practices:** Rice, corn, yam, vegetables, fruits, poultry and freshwater fish are the basic food of the villagers. The availability of food depends on food production, market supplies, weather and the purchasing power of the villagers.

Rice and corn are available throughout the year but not corn and fish. Yam is only available during July, August and September while chicken is available whenever there is an excess of mature birds and the fruits are seasonal. The villagers use the refrigerator to store their food.

**Public amenities and facilities:**

- a. The common mode of transportation for the villagers is the jeep, bus and car. Total length of the village road is 2km and 20% of road is dirt road, 20% is asphalt and the balance is tarred road.
- b. Besides piped water, the villagers also use water from open wells and pump wells. They normally use plastic containers and the refrigerator to store food and water.
- c. The source of lighting is electricity, battery and generator.
- d. The community in this village has telecommunication (100%) and broadcast media (50%).

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	2	
Primary schools	2	
Secondary school	-	1km
Public library/reading centre	-	
Health centre/clinic	1	
Community centre/meeting hall	2	
Mosque/religious house	-	
Community herbal garden	-	3
Park/playground	1	
Veterinary services		
Post office		1
Telephone lines	1	
Main road/highway		
Market		1
Pharmacy		
Rural bank		
Credit cooperative		1
Irrigation		1
Rice mill		1
Electricity supply station/sub-station		
Community radio set		
Drinking water supply		
Public toilet		
Cemetery		3
Dump site/land fill		

**Environmental management:** The normal methods used by the villagers to dispose of their household waste are by burning, throwing into water bodies and land filling.

**Community issues and problems:**

- a. Food and nutrition: No problems.
- b. Education: No guidance for the young after their complete secondary school education.
- c. Sports and recreation: No facilities or activities
- d. Employment: Most of the villagers are labourers.

**Natural Disasters:** Kampung Ulu Melang is prone to drought.

## Community Profile of Kampung Batu 10 Pantai, Seremban

### *Background*

Kampung Pantai is located about 15km from Seremban, the state capital of Negeri Sembilan. The village was formerly known as Langsat Pantai and was famous for the “buah langsung”. It is a traditional Malay village, spread over 320 acres and is populated by Malays, Chinese and Indians. The Malays own all the land, the Chinese carry out small businesses and the Indians work in the surrounding oil palm plantations. The government has since introduced housing schemes in the area, but farming is still the main activity of the villagers who produce food crops, fruits and vegetables.

### *Natural features*

**Agro-ecological classification:** The soil in this village is mainly for lowland and highland farming

**Weather conditions:** Wet and dry all year long.

**Existing water bodies:** Rivers and springs.

**Socio-demographic characteristics:** The population growth rate is high and the population density is also quite high. There are more women than men in Kampung Batu 10 Pantai.

---

1999

2000



Growth rate		
Density		
Total urban population		
Total rural population		
Total population	6,000	6,200
Total male population	3,000	3,300
Total female population	3,000	2,900
Population density		
Age distribution:		
14 years and below		
15 – 64		
65 and above		
Total number of households	1,100	1,200
Ethnic groups (IPs) present	Malaysian	Malaysian
Indian		
Language/dialect used	Malay	Malay

The dominant religions in this village are Buddhism and Islam, followed by Hinduism and Christianity.

#### Education:

No education	20%
Primary school	28%
Intermediate school	30%
High school	-
College	2%
Post-graduate	-
Vocational school	20%

**Housing:** Some 80% of the villagers here live in brick houses while the rest in houses made of wood.

#### Health:

Leading causes of morbidity	Age group commonly affected	Gender commonly affected (M; F; Both)
Cancer	50 and above	Both

Leading causes of mortality	Age group commonly affected	Gender commonly affected (M; F; Both)
Diabetes	30 and above	Both
Blood pressure	30 and above	Both
Cough, cold, fever	1yr-50 above	Both

**Nutritional status:** No detailed information.

**Basic social services:** There are two pre-schools and one primary school. There is a clinic in the village that has five medical assistants, a doctor who comes on certain days of the week, a midwife and four nurses. They see an average of 85 patients a month. There is also a traditional healer in the village. The common sports are soccer and badminton.

### *Economic activities:*

Type of employment	1998	1999	2000
<i>Number of agro-based workers</i>			
Farmers	30%	25%	25%
Fishermen	10%	15%	15%
Livestock/poultry breeders	30%	30%	30%
Marketing	30%	30%	35%
<i>Number of non agro-based workers</i>			
Professional/technical jobs	30%	35%	38%
Service-related work	10%	10%	10%
Construction-related work	10%	10%	12%
Marketing	40%	42%	42%
Others	10%	8%	-
Unemployed (15 – 65 years)			

### **Women in economic activities:**

	Total no. of workers	Women
Handicraft		3
Tailoring		15

**Food availability and food-related practices:** No information available

### **Public amenities and facilities:**

- The usual modes of transportation are bicycle, taxi, bus car and jeep. There are two bridges and the roads are concrete.
- The main sources of drinking water for the households are piped water and water from the wells. The villagers normally use plastic containers and the refrigerator to store water and use the refrigerator and plastic containers to store food.
- The source of lighting is electricity.
- The community in this village has telecommunications (80%), broadcast media (100%) and print media (80%).

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	2	
Primary schools	1	
Secondary schools		8km
Public library/reading centre		15km
Health centre/clinic	1	
Community centre/meeting hall	1	
Mosque/religious house	2	
Community herbal garden	-	
Park/playground	-	
Veterinary services	-	
Post office	-	
Telephone lines	4	
Main road/highway	-	
Market	1	
Pharmacy	-	
Rural bank	-	
Credit cooperative	-	
Irrigation	-	
Rice mill	-	
Electricity supply station/sub-station	-	
Community radio set	-	
Drinking water supply	-	
Public toilet	-	
Cemetery	10	
Dump site/land fill	-	

**Environmental management:** The three main ways household wastes are disposed of are by burning, collection by the garbage collector and land filling.

**Social organisations:** The common social organisations for the villagers are political parties. Membership details, except for UMNO, could not be ascertained.

## Community Profile of Kampung Taman Jaya, Negeri Sembilan

### Background

Kampung Taman Jaya is located 5km from the town of Bahau in Negeri Sembilan, on the west coast of Peninsular Malaysia. The settlement was once known as Bahau Estate, owned by a local Indian. Later, the land was partitioned and sold to the plantation workers. Most of the people there were Indians (70%), followed by Chinese (20%) and the Malays (10%). Most of them operate their own vegetable farms and some of them have also planted rubber and oil palm.

### Natural features:

**Agro-ecological classification:** The soil in this village is mainly for lowland crops.

**Existing water bodies:** A lake.

**Socio-demographic characteristics:** The population growth rate is high and the population density is also quite high. There are more women than men in Kampung Taman Jaya.

	1999	2000
Growth rate		
Density		
Total urban population	2,400	2,200
Total rural population	920	800
Total population	3,320	3,000
Total male population	45%	45%
Total female population	55%	55%
Population density		
Age distribution:		
14 years and below	26%	25%
15 - 64	63%	65%
65 and above	11%	10%
Total number of households	950	1,020
Ethnic groups (IPs) present	Indian, Chinese, Malay	Indian, Chinese, Malay
Language/dialect used	Tamil, Chinese, Malay, English	Tamil, Chinese Malay, English

Some 35% of the villagers are Muslims, followed by 28% Buddhists and those who worship Chinese ancestral gods, 21% Hindus and 10% Roman Catholics.

**Education:** The details provided were sketchy.

**Housing:** All the houses in Kampung Taman Jaya are made of brick.

**Health:** No detailed information was available on the leading causes of morbidity or the leading causes of mortality.

**Nutritional status:** No detailed information available.

**Basic social services:** Kampung Taman Jaya has six primary schools and four secondary schools. There are two clinics in the village, besides four traditional healers. The common game played is badminton. As for crime, six cases were reported in 1999 and 12 cases in 2000. No incidence of fire was reported in the two years.

### Economic activities:

**Types of employment:** Most of the villagers are agro-based workers, with farmers being the most. Next come livestock/poultry breeders and those who market farm produce. The numbers could not be properly ascertained or verified.

Types of employment	1998	1999	2000
<i>Number of agro-based workers</i>			
Farmers	60%	48%	50%
Freshwater fish rearers	10%	11%	14%
Livestock/poultry breeders	18%	22%	23%
Marketing	12%	19%	11%
<i>Number of non agro-based workers</i>			
Professional/technical jobs	10	15	20
Service-related work	-	-	-
Construction-related work	-	-	-
Marketing	-	-	-
Rubber tappers & factory workers	1,000	1,200	1,800
Unemployed (15 – 65 years)	-	-	-

**Food availability and food-related practices:** Rice, vegetables, fruits, poultry and seafood are the basic food of the villagers. Availability of food depends on food production, market supplies, weather and the purchasing power of the villagers. Rice, poultry, seafood and vegetables are available around the year and fruits only from January to April.

### Public amenities and facilities:

- The common mode of transportation is motorcycle, bus and car. Total length of the village roads is 10km and all the roads are concrete and asphalt.
- The main sources of drinking water are piped water, rainwater and pump wells. The villagers normally use the plastic containers and clay jars to store water and the refrigerator for food.
- The source of lighting is electricity.
- The people of the village get their information from the broadcast media and have adequate telecommunications facilities.

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	4	
Primary schools	6	
Secondary schools	4	
Public library/reading centre	1	
Health centre/clinic	2	
Community centre/meeting hall	1	
Mosque/religious house	6	
Community herbal garden	-	
Park/playground	4	
Veterinary services	1	
Post office	2	
Telephone lines	Many	
Main road/highway	1	
Market	1	
Pharmacy		
Rural bank		
Credit cooperative	1	
Warehouse/storage facilities	3	
Irrigation		
Rice mill		
Electricity supply station/sub-station		1 km
Community radio set		
Drinking water supply	Available	
Public toilet		
Cemetery	3	
Dump site/land fill	-	

**Environmental management:** The common practices in disposing of household wastes are burning, land filling and collection by garbage collectors.

**Social organisations:** The most common social organisations that the villagers join are political organisations.

## Community Profile of Kampung Lundu, Sarawak

### *Background*

Kampung Lundu is in the East Malaysian state of Sarawak. It is a place of tourism, located in Gunung Gading Lundu and surrounded by mountains. The daily activities are farming and fishing, which have been the main occupations of the villagers for the past 100 years. Much of the land come under native customary rights.

### *Natural features*

**Agro-ecological classification:** The soil in this village is mainly for upland cultivation.

**Land use:** The land is used for housing, farming and communal orchards. The surrounding forests are also a source of livelihood for the villagers.

**Weather conditions:** The weather is wet and dry all year long.

**Dominant soil type:** Clay and stony.

**Existing water bodies:** Rivers and springs.

**Socio-demographic characteristics:** The population growth rate is high and the population density is also quite high. Some 78% of the people are holders of native customary rights land, 10% are share-croppers and 12% landless rural workers.

	1999	2000
Growth rate	-	-
Density	-	-
Total urban population	491	450
Total rural population	3,809	3,900
Total population	4,300	4,350
Total male population	-	-
Total female population	-	-
Population density	-	-
Age distribution:		
14 years and below	-	-
15 – 64	-	-
65 and above	-	-
Total number of households	310	310
Ethnic groups (IPs) present	Bidayuh	Bidayuh
Language/dialect used	Bidayu/Malay	Bidayu/Malay

Almost all the villagers are Roman Catholics.

**Education**

No education	60%
Primary school	35%
Intermediate school	5%
High school	-
College	-
Post-graduate	-
Vocational school	-

**Housing :** Most of the villagers here live in brick houses.

**Health**

Leading causes of morbidity	Age group commonly affected	Gender commonly affected (M; F; Both)
Flu, fever	3-6 years	Both

Leading causes of mortality	Age group commonly affected	Gender commonly affected (M; F; Both)
Old age	> 60 years	Male

**Nutritional status:** No detailed information.

**Basic social services:** Kampung Lundu has one pre-school and one primary school. The pre-school has one teacher and 30 pupils. The primary school has 20 teachers and 250 pupils. There is a clinic in this village that has a visiting doctor, a medical assistant, four, nurses, and two midwives. The common sports are football and badminton.

**Economic activities:**

**Types of employment:** Most of the people in this village are agro-based workers. Farmers make up the biggest number, followed by livestock/poultry breeders and those who market the produce. The people involved in non agro-based activities are few.

Type of employment	1998	1999	2000
<i>Number of agro-based workers</i>			
Farmers			
Livestock / poultry breeder	50%	35%	49%
Marketing	36%	49%	36%
<i>Number of non agro-based workers</i>			
Professional/technical job	-	-	-
Service-related work	10%	10%	10%
Construction-related work	-	-	-
Marketing	5%	4%	4%
Others	-	-	-
Unemployed (15 – 65 years)	-	-	-



**Food availability and food-related practices:** No information available.

**Public amenities and facilities:**

- a. The common mode of transportation in Kampung Lundu is bus, van and lorry. Total length of the village road is 3km and all the roads are concrete and dirt roads.
- b. The sources of drinking water for the villagers are piped water and spring water. The villagers normally use plastic containers to store the water and use food containers to store food.
- c. The source of lighting is electricity and generator.
- d. The community in this village has broadcast media (100%) and print media (50%).

**Facilities:**

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	1	-
Primary schools	1	-
Secondary schools	-	-
Public library/reading centre	-	-
Health centre/clinic	-	-
Community centre/meeting hall	-	-
Mosque/religious house	-	-
Community herbal garden	-	-
Park/playground	-	-
Veterinary services	-	-
Post office	-	-
Telephone lines	-	-
Main road/highway	-	-
Market	-	-
Pharmacy	-	-
Rural bank	-	-
Credit cooperative	-	-
Irrigation	-	-
Rice mill	-	-
Electricity supply station/sub-station	-	-
Community radio set	-	-
Drinking water supply	-	-
Public toilet	-	-
Cemetery	-	-
Dump site/land fill	-	-

## Community Profile of Kampung Sekuduk, Sarawak

### *Background*

Kampung Sekuduk is located in Sarawak. It is about 38 km from the state capital, Kuching, and 4km from the nearest town.

### *Natural Features*

**Agro-ecological classification:** The soil in this village is mainly sandy

**Land use:** Some 162 hectares is used for housing and agriculture, and about one hectare is set aside for institutional used.

**Weather conditions:** The weather is dry from March to October and wet from December to February.

**Dominant soil type:** Sandy, clay and fertile.

**Existing water bodies:** Rivers.

The village is prone to typhoons and floods.

**Social-demographic characteristics:**

	1999	2000
Growth rate		
Density		
Total urban population		
Total rural population		
Total population	380	460
Total male population	210	220
Total female population	170	240
Population density		
Age distribution:		
14 and below	46	68
15 – 64	150	102
65 and above	-	-
Total number of households	56	60
Ethnic groups (IPs) present	3	3
Language/dialect used	Bidayuh	Bidayuh

The villagers follow the Islamic and the Christian ways of life.

**Housing:** The people of Kampung Sekuduk live in brick and wooden houses.

**Health:**

Leading causes of morbidity	Age group commonly affected	Gender commonly affected (M; F; Both)
Diabetic	50 above	Both
Blood pressure	50 above	Both

Leading causes of mortality	Age group commonly affected	Gender commonly affected (M; F; Both)
Old age	75	Both
Cancer	50	Male

**Nutritional status:** No detailed information.

**Basic social services:** The village has one pre-school, one primary school and one secondary school. The pre-school has two teachers and the teacher-pupil ratio is 45:1. There is a clinic in this village, manned by six health personnel. The common sport in this village are football.

***Economic activities***

Type of employment	1998	1999	2000
<i>Number of agro-based workers</i>			
Farmers	60	80	120
Fishers	10	25	35
Livestock / poultry breeder	-	-	-
Marketing	10	20	30
<i>Number of non agro-based workers</i>			
Professional/technical jobs	20	40	65
Service-related work	50	85	130
Construction-related work	5	8	11
Marketing	2	5	8
Others	-	-	-
Unemployed (15 – 65 years)	20	20	20

**Food availability and food-related practices:** No information available

**Public amenities and facilities:**

- a. The common mode of transportation is the bus. Total length of roads is 38km and all the roads are concrete.
- b. The sources of drinking water are piped water, rain water and water from the wells. The villagers normally use plastic containers, clay jugs and the refrigerator to store the water. Refrigerators and plastic containers are also used to store

food.

- c. The sources of lighting are electricity, LPG and oil.
- d. The community in this village has access to the broadcast media.

Facilities:

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	2	
Primary schools	1	
Secondary schools	1	
Public library/reading centre	1	
Health center/clinic	1	
Community centre/meeting hall	1	
Chapel/religious house	1	
Community herbal garden	-	
Park/playground	1	
Veterinary services	-	20 km
Post office	-	10 km
Telephone lines	-	
Main road/highway	Available	
Market	-	
Pharmacy	-	
Rural bank		20km
Credit cooperative	-	
Irrigation	2	
Rice mill	4	
Electricity supply station/sub-station	-	
Community radio set	Available	
Drinking water supply	Available	
Public toilet	-	
Cemetery	1	
Dump site/land fill	-	

**Environmental management:** The usual practice of disposing of household waste is by land fill.

**Social organisations:** The most common social organisations for the villagers are the political organisation.

Name of organisation	Number (female)	Number (male)	Number of members	Type (GO, NGO, PO)
JKKK	75	15	90	GO

## Community Profile of Kampung Simpok, Sarawak

### *Background*

Kampung Simpok is located at Km7, Jalan Padawan, and is about 43km from the Sarawak state capital of Kuching. It is a Bisapuh-speaking Bidayuh village. In the early days, the Bidayuh originally come from Tanjung Datu. They were primarily engaged in growing hill rice by shifting cultivation and collecting forest products.

### *Natural features*

**Agro-ecological classification:** The soil in this village is mainly for lowland crop cultivation.

**Land use and land classification:** Total land in the are is 39,500 hectares, of which 12,500 hectares are for agriculture, 12,500 hectares for residential purposes and the remaining 14,500 hectares are planted with hill paddy or secondary forest owned by holders of native customary rights (NCR). A total of 4,500 hectares are upland irrigated farms and 8,000 hectares are rain-fed lowland.

**Weather conditions:** The wet season is from November to February and the dry season, from May to August.

**Dominant soil type:** Clay loam.

**Existing water bodies:** Rivers. The village is prone to floods.

**Socio-demographic characteristics:** The population growth rate is high and the density is also quite high. There are more men than women in Kampung Simpok.

	1999	2000
Growth rate	0.94%	0.91%
Density	-	-
Total urban population	-	-
Total rural population	-	-
Total population	2,023	2,206
Total male population	1,058	1,165
Total female population	967	1,041
Population density	-	-
Age distribution:		
14 years and below		
15 – 64		
65 and above	642	648
Total number of households	250	258
Ethnic groups (IPs) present		
Language / dialect used	Bidayuh	Bidayuh

Most of the villagers here are Roman Catholic.

**Education:** Most of the villagers have attained at least six years of primary school education.

**Housing:** Most of the houses in the village are either made of combined lumber and concrete with nipah roofing and or concrete, well-finished structures.

**Health:** There is no detailed information on the leading causes of mortality.

Leading causes of morbidity	Age group commonly affected	Gender commonly affected (M; F; Both)	Frequency of Occurrence (per thousand per year)
Cancer	45 years	Both	10 per 100

**Nutritional status:** No detailed information.

**Basic social services:** Kampung Simpok has one pre-school and one primary school. The pre-school has two teachers and 40 pupils while there are 26 teachers and 300 pupils in the primary school. There are two clinics in this village, each having a midwife and two nurses. There are also two traditional healers. The common sports in the village are soccer and badminton. They have a football field, a playground and a community hall. A health project for women and children was carried out in September 2000.

### *Economic activities:*

**Types of employment:** The majority of the people are agro-based workers, with farmers making up the most, followed by livestock/poultry breeders and those involved in the marketing of the produce. The number involved in non agro-based activity is small.

**Women in economic activities:** The women in the village are very active and hardworking and many of them are involved in the making of handicraft.

**Food availability and food-related practices:** No information available.

### **Public amenities and facilities:**

- The normal mode of transportation in the village is motorcycle, bus and car. Total length of road is 3km and the roads are concrete and dirt road. There is a concrete bridge and a footbridge in the village.
- The source of drinking water for the households is piped water. The villagers normally use plastic containers and refrigerators to store water. They also use the refrigerator and food containers to store food.
- The village is supplied with electricity.
- The community in this village has adequate telecommunication services.

Facilities:

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	1	
Primary schools	1	
Secondary schools	-	
Public library/reading centre	1	
Health centre/clinic	2	
Community center/meeting hall	1	
Mosque/religious house	1	
Community herbal garden	-	
Park/playground	1	
Veterinary services	-	
Post office	-	
Telephone line	Available	
Main road/highway	Available	
Market	-	
Pharmacy		120km
Rural bank		120km
Credit cooperative	-	
Irrigation	Available	
Rice mills	2	
Electricity supply station/sub-station	-	
Community radio set	-	
Drinking water supply	Available	
Public toilet		
Cemetery	1	
Dump site/land fill	-	

**Environmental management:** The main practices in disposing of household waste are burning, throwing into the rivers and removal by garbage collectors.

**Social organisations:** The main social organisation for the villagers are political parties.

Name of organisation	Number (female)	Number (male)	Number of members	Type (GO, NGO, PO)
Catholic Church Group	890	900	1, 790	NGO

**Community issues and problems:**

- a. Food and Nutrition: Generally poor.
- b. Education: No higher education facility and most cannot afford it because of financial burden.
- c. Peace and order: Disorder occurs during feast days because of alcohol consumption.
- d. Sports and recreation: There is great interest in sports among the villagers, but

there are no programmes or training.

- e. Employment: many school/college leavers are jobless because the job market is competitive.

**Natural disasters:** Crops in low-lying areas are regularly destroyed by flash floods.

## Community Profile of Kampung Batu 8, Bintulu, Sarawak

### Background

Kampung Batu 8 is located about 13km from the port town to Bintulu in Sarawak, East Malaysia. Some 500 families live there and they follow the traditions of the Iban. Their main source of livelihood is the farming of food crops, pepper and fruits. They live in longhouses and have to walk to Bintulu for the food and other items that they need.

### Natural features

**Agro-ecological classification:** The soil in this village is mainly clay, sand loam and clay loam, and is suitable for lowland crop cultivation.

**Weather conditions:** The dry season is from April to September and the wet season from October to March. The village is prone to drought.

**Existing water body:** River.

### Socio-demographic characteristics:

	1999	2000
Growth rate	-	-
Density	-	-
Total urban population	-	-
Total rural population	-	-
Total population	2,300	2,300
Total male population	-	-
Total female population	-	-
Population density	-	-
Age distribution:		
14 and below	-	-
15 – 64	-	-
65 and above	-	-
Total number of households	500	500
Ethnic groups (Ips) present	Iban	Iban
Language/dialect used	Iban, Malay	Iban, Malay

The majority of the people in Kampung batu 8 are Roman Catholics, but there are some Methodists too.



**Education:** Some 80% of the villagers are illiterate and today, some 20% of the children attend primary school.

**Housing:** Besides the longhouses, there are also a few brick houses.

**Health:** No detailed information was available on the leading causes of morbidity.

**Nutritional status:** No detailed information.

**Food availability and food-related practices:** No detailed information.

**Basic social services:** There are no facilities for schooling or a health service in the settlement. A mobile health clinic calls at the place once a week. The villagers will have to travel to Bintulu for their health or other needs.

## Community profile of Kampung Gayu, Kuching

### *Background*

Kampung Gayu is located in Padawan and it is about 16km from Kuching, the Sarawak state capital. The Bidayuh of Kampung Gayu and its 13 derivative villages are collectively known as the Pinyawa. Although similar to other Bidayuh, the Pinyawa have been recognised as a distinct group whose evolution is traced to the origin and development of the parent village, Kampung Gayu.

Village elders told the story of Kampung Gayu. Sejaw, a semi-mythical warrior, is said to be the founder of Kampung Gayu, who was responsible for introducing the customs for the worship of their god, Tapa. The formal history of the village starts in the 19<sup>th</sup> Century with explorers' accounts of their travels in the hinterland being verified by the village's oral history. It was only during the first half of the 20<sup>th</sup> Century that changes started filtering into the village.

In the early days, the people of Serin or Serin-Gayu (as Kampung Gayu was then known) lived in individual houses on the banks of the rivers Sungai Serin and Sungai Bengin, the later being a tributary of the former. They were primarily engaged in growing hill rice by shifting cultivation and collecting forest produce. Growing hill rice by shifting cultivation involved one year of cultivation, followed by a 10- to 20-year fallow period, during which the forest that was cleared regenerates.

Growing hill rice was central to the life of the Bidayuh farmer. In fact it was so important that some have suggested that the Bidayuh had what could be described as a hill rice cult. In the month of May, farmers fell the forest area identified for farming. After two or three months of drying, the felled vegetation would be tinder dry and it is set alight. This is in August, one month before the start of the new season's rains. As soon as the first rains come, the hill rice is dibbled and sown on the farms. Farmers also plant a wide range of secondary crops like cucumbers, pumpkins, gourds, beans, ginger, garlic and tubers.

## Natural features

**Agro-ecological classification:** The soil in the village is mainly for upland farming. Much of the land is irrigated. The soil types in this village are clay, sandy loam, clay loam and rocky.

**Weather conditions:** The wet season is from September to February and the dry season, from March to August.

**Existing water bodies:** Rivers and springs. The village is prone to landslides.

**Socio-demographic characteristics:** No detailed information. Most of the villagers are Roman Catholics, and the “padi cult” is also practiced.

**Education:** Most of the villagers, at least up to 75% of them, are not educated.

**Housing:** The villagers have all types of house structures

**Health:** No detailed information was available for the leading causes of mortality and morbidity.

**Nutritional status:** No detailed information.

**Basic social services:** Kampung Gayu has no pre-school but one primary school with four teachers and 120 pupils. There is a clinic in this village with two health personnel who provide emergency service and assist in childbirth. The common sports in this village are football and badminton. There is a football field and a community hall.

**Economic activities:** No detailed information was available.

### Public amenities and facilities:

- a. The common modes of transportation in the village are motorcycle and bus. Most of the roads are dirt roads.
- b. The sources of drinking water for the people are springs and rivers, but piped water is available 20 minutes away by walk.
- c. Lighting is through the use of batteries, generators and kerosene lamps.

### Facilities:

Facility	Number	If none, distance to the nearest facility (km)
Pre-schools	-	-
Primary schools	1	
Secondary schools	-	5km
Public library/reading centre	-	
Health centre/clinic	1	
Community centre/meeting hall	1	
Mosque/religious house	1	
Community herbal garden	-	-
Park/playground	1	
Veterinary services	-	-
Post office	-	-
Telephone lines	-	-

Main road/highway	-	5km
Market	-	15km
Pharmacy	-	-
Rural bank	-	-
Credit cooperative	-	-
Irrigation	-	-
Rice mill	1	
Electricity supply station/sub-station	-	
Community radio set	-	
Drinking water supply		20 mins walk from village
Public toilet	-	-
Cemetery		20 min walk from village
Dump site/land fill	-	-

**Environmental management:** The three common ways of disposing of household waste are burning, dumping in a area not far from the dwellings or building a land fill.

**Community issues and problems:**

- a. Health and nutrition: The villagers do not have a proper diet
- b. Education: Facilities are lacking. There is no pre-school, and most parents appear to be reluctant about encouraging the children to study. Most of the school leavers work in the farms as manual labourers.
- c. Sports and recreation: Inadequate facilities
- d. Food production/supply: No subsidy of any form is given, and quite often the farmers can't plant because they do not have the funds.
- e. Employment: There hardly are any opportunities for those with a low level of education.
- f. Infrastructure: No electricity and no proper water supply.

**Natural disasters:** Floods are a problem, and sometimes thunder and lightning destroy the houses.

## Appendix II

### A FOOD SECURE VILLAGE: CASE STUDY OF KAMPUNG SUNGAI SERAI

This case study was conducted after the completion of the 24 Village Micro Study Project of ERA Consumer Malaysia to assess the level and understanding of food security in a typical Malaysian village.

The state of Selangor was picked for this particular study, and Kampung Sungai Serai was chosen for further study. The village is located in the district of Gombak, which is within reasonable travel time from the federal capital of Kuala Lumpur.

Kampung Sungai Serai is a farming community and it is located 5km from the nearest town, Kuang. It is a lowland village, and dependent on, like neighbouring villages, irrigation for farming.

Much of the rural and agricultural sectors of the country are isolated from the thriving urban centres and therefore, generally neglected by the authorities. One consequence of this is a high poverty rate, low productivity, lack of support services and a high rate of unemployment and underemployment. Such is also the case of Kampung Sungai Serai.

#### *The Village*

Kampung Sungai Serai is home to 1,750 residents belonging to 205 households. About 20% of the residents are below 21 years and 10% of them are children below 10 years. Some 10% of the women are full-time farmers.

The majority of the people there do not own the land they till. They live in fear of eviction by the state. The people also do not have adequate clean water, electricity or sanitation. The food they eat is very simple and comprises largely of carbohydrates, mainly rice, vegetables they grow themselves, eggs and salted fish.

Most of them practise farming on a part-time basis and sell the food crops they produce to the market themselves. All their food purchase needs are done in Kuang. The traditional joint family system characterised by one or two male members earning an income is typical of the households in this village.

The following are the crops grown in Kampung Sungai Serai:

A total of 16 hectares is used up for the production of vegetables and the vegetables grown are brinjals, cucumber, long beans, sayur manis, bunga kantan, curry leaves, cili padi, chillies, kasturi, lengkuas, okra, pandan leaves, pegaga, lemon grass and selum.

There is mixed cropping of tubers covering an area of 4.5 hectares and the crops grown are cassava (ubi kayu), tumeric, ginger, groundnuts and tapioca.

Orchards make up a total of 72 hectares in the village and the fruits grown are banana, ciku, durian, mango, papaya and rambutan.

Roses and jasmines are planted on some 0.5-hectare of land.

The farmers also integrate the breeding of livestock in their vegetable farms and orchards. Chicken, duck and cattle are kept for meat, eggs, salted eggs, milk and beef.

There are also six fish ponds in the village, taking up a total area of four hectares. The fish bred are tilapia, kaloi, haruan and hantu. Giant fresh water prawns or udang galah are also bred.

All of the produce are consumed by the villagers and also sold directly in the market and to a lesser extent, sold to middlemen.

### *Is The Village a Food Secure Community?*

1. **Food availability:** Sufficient vegetables, meat egg and milk are produced in the village for the needs of the villagers as well as for sale. Rice is not grown and so has to be bought from the nearest town. Problems to food production are pests (including monkeys) and diseases and flash floods during the rainy season.
2. **Food accessibility:** It is dependent on food price and availability of food. The villagers also exchange crops with their neighbours and those without transport get the assistance from others to buy for them food needs such as rice, flour and canned food stuff.
3. **Diet and Nutrition:** Farming household incomes are low so nutritious diets are not a priority. Expenditure on food is small.

### *Support Systems for the Farmers*

- (a) The Gombak/Petaling District Agriculture Department provides fertiliser at subsidised rates and provides the farmers with information on farming techniques.
- (b) The Gombak/Petaling District Fisheries Department provides subsidy in the form of fish fries and information on breeding them.
- (c) The Farmers Organisation Authority, besides selling all the farming tools such as fertilisers and pesticides, also provides the latest information on farming techniques while the Department of Veterinary Services looks after the farmers livestock health needs.

The farmers spend most of the time working and all their free time watching television. The household expenses are largely on satellite television (Astro), electricity, water, gas, children, clothing, food and labour costs.

- (a) **Shortage of land for farming:** The agricultural land faces serious competition from urbanisation, industries and other development. Some of the land is wasted, idle land and some of the land has been taken for development under the national development plan.
- (b) **Natural disasters:** There is no irrigation system in the village. If it rains for more than

two hours flooding sets in and most of the crops are destroyed.

- (c) **Government subsidies:** The incomes of the farmers fell after the government reduced the subsidies given to them upon signing the Agreement on Agriculture under the World Trade Organisation.
- (d) **Marketing:** There is no organisation or assistance to the farmers to help them market their produce. They have to sell their produce on their own in the market. For their food needs, the farmers also barter trade their produce with one another for example tapioca for poultry or eggs.
- (e) **Food and nutrition:** Although the villagers produce different crops, fruits, livestock and fish, food production is not sufficient to meet the needs of the people. They still have to buy food from outside and cannot afford a balanced nutritious diet every day. The children also suffer from poor nutrition although the government has implemented a food assistance programme for poor students in the village school, the food provided does not constitute a balance diet. The school canteen only sells biscuits and junk food.
- (f) **Unsustainable poor farm management:** The farmers are dependent on chemical fertilisers and pesticides and many of them practise mono-cropping. Some of the farmers do not fully utilise their land.
- (g) **Pest and diseases:** Pest and diseases attack 50% of the crop production. The main problems of the farmers are monkeys, insects and weeds.
- (h) **Transportation:** The market is in Kuang about 5 km from the village. Those without transport will have difficulty accessing food or marketing their produce. Road conditions in the village are poor.
- (i) **Lack of interest in farming among the youth:** The youth are not interested in farming which means that in time to come much of the farming land will be laid to waste. Parents do not encourage their children to work in the farm because of the hard work under the hot sun, exposure to hazardous chemicals and the low incomes.

### *Steps to Improve the Situation*

- (a) **Increasing farmers income:** A good farming system can mean high production with low inputs and therefore a better income and improved lifestyle for the farming community.

The farmers can be organised under a cooperative for self-help, exchange of knowledge, tackle problems as a group and better market their produce at stable prices.

Cooperatives of farmers can increase the sustainability of farmers activities by reducing input costs and increasing profits, thus reducing the risks. Small farmers can gain economies of scale in technical and enterprise support, supply of inputs and wider access to markets. Cooperatives can also provide skill training for farmers, move into small-scale food processing, gain access to new agricultural technologies and even move into organic food farming.
- (b) **Shortage of land:** The farmers should be encouraged to fully utilise the farming land. Assistance should be provided to rehabilitate idle land and they should also be encouraged to move into mixed farming, rotation farming and to integrate the raising of livestock on the farmland.

- (c) **Improving nutrition:** The government has to play a role here in educating the villagers about food and nutrition and the dangers of excessive chemical inputs in food production. Food and nutrition should also be taught in schools and the health authorities should always be providing advice about food and nutrition. School canteens should be barred from selling junk food and parents and teachers should encourage the children to eat healthy food.

### ***Policy Recommendations***

The assessment of the food security situation in Kampung Sungai Serai and in discussions with the farmers it is seen that the government has a major role to play in building a food secure nation and in introducing sustainable food crop production practices. In fact the government has a key role to play in various areas if Malaysia is to be a food secure nation.

It is therefore recommended that the government:

- (a) Institutes and reforms to provide for equitable redistribution of land to the landless and poor and restructure concentration of land ownership among non-cultivating or absentee landlords.
- (b) Offers direct subsidies for the adoption of sustainable and organic farming technologies and removes subsidies that encourage polluting activities.
- (c) Implements schemes to discourage abandoning of farmlands, encourages planting of food crops and introduces irrigation systems.
- (d) Encourages introduction of new food crops, help farmers market their produce and facilitate direct marketing between farmers and consumers.
- (e) Provides adequate and equitable allocations to assist poor farming communities to uplift their socio-economic status and provide infrastructure facilities to improve their lifestyles.

There are also several other steps that the government should take for Malaysia to become food secure. These are:

- (1) **Reduce the gaps between disciplines, professions and departments:** In the biological sphere, neglected areas can be found in various linkages between crops, animals, fodder, trees, groundwater and fish. These have often fallen between disciplines and between departments. For example, animal specialists are concerned about veterinary science and animal health than animal nutrition. Agriculturalists are concerned with field crops. Fish ponds have fallen between fishery departments concerned more with large scale and marine fisheries, and agriculture and forestry which might provide feed for the fish. Crop wastes have been neglected by all. In these example, the built-in specialisation, conservatism and rigidities of university teaching, research institutes, and government department point away from the opportunities. Government should develop new professional to link all the disciplines, professional.
- (2) **Introducing new crops:** Wild fruit plants like rambutan pacat, redan, kelat layu, kasai, mata kucing, isau, sau and kakus which are easily found in Peninsular Malaysia, Sabah and Sarawak. They have great potential as popular fruits if cultivated on a commercial scale. They are resistant to pests and diseases because they are wild and easily live in forest without intensive management. Bunching onion (*Allium fistulosum* L.) is a new

potential lowland crop. Bunching onion is more tender, sweeter and less fibrous than leek. The plants are generally tolerant to moisture stress. Bunching onion can be harvested at 2 ½ -3 months after transplanting. The yield obtained ranges from 35-45 tonnes per hectare and at an ex-farm price of RM1/kg, the estimate net returns per hectare is RM7,325.

- (3) **Pesticide-free crop production:** Pesticide-free vegetables can be cultivated under rain shelters. The rain shelter provides a more suitable environment for the crops while reducing incidence of pests and diseases, giving high yields and better quality produce. Crops under the rain-shelter are protected from rain water, reducing the incidence of diseases which normally spread during wet periods, thus keeping chemical usage to a minimum.
- (4) **Precision farming:** This is an applied agriculture practise aimed at increasing the economic and biological efficiency of farming and, at the same time, reducing the impact of agrochemical waste on the environment. Nutrition deficiencies can reduce crop growth and lower crop quality, while over-application of fertilisers can also reduce yields, crop quality and pollute the environment. Precision farming can effect both input costs and crop production revenue.

There is potential for:-

- greater yields with the same level of inputs, simply redistributed;
  - greater yields with reduced inputs, or
  - the same yields with much reduced inputs.
- (5) **Irrigated agriculture:** This is essential to raise the production of food and fibres - which are necessary for securing such basic needs as nutrition and clothing. On the other hand, irrigated agriculture is increasingly having to compete for dwindling water resources. To improve water use efficiency, use method of “water-harvesting” which means collecting surface run-off and using it to water crop and livestock. The efficiency of water use can be physically improved by reducing the amount of water used per unit of crop yield. Farmers also can use the water collected from the fish pond. Recycle use of the water.



### ***ERA Consumer Malaysia***

ERA Consumer Malaysia is an NGO founded in 1985 with the vision of creating self-reliant, empowered community-based groups that can assert and protect themselves as consumers. It seeks to achieve this through its research and advocacy work, at the same time networking with a wide range of organisations at all levels. Among its recent programmes are the Self-Reliant Community Project for poor rural farmers, consumers, and indigenous communities and establishing a "Corporation Watch" to monitor the impact of corporate globalisation on vulnerable communities in Malaysia.

### ***DHRRANetwork Malaysia***

The DHRRANetwork works in partnership with different strategic resource agencies to build potential of human resources in rural areas of Malaysia. The DHRRANetwork continues to aim for a closer dialogue and understanding among groups of different races and build genuine solidarity among its partner-communities.

### ***Consumers International***

Consumers International is a federation of consumer organisations dedicated to the protection and promotion of consumers' interests worldwide through institution-building, education, research and lobbying of international decision-making bodies. An independent foundation, Consumers International currently links more than 263 member groups in over 121 countries and territories.

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