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The Role of Service Centre on Rural Development: A Study of the Settlements in Hilir Perak, Malaysia

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ABSTRAK

Pusat-pusat perkhidmatan desa di negara-negara membangun menyediakan sebahagian besar perkhidmatan awam dan swasta bagi penduduk luar bandar yang berselerak. Kertas ini cuba memeriksa pola ruang pusat-pusat perkhidmatan desa di Hilir Perak dengan tumpuan terhadap struktur penyediaan dan penggunaan perkhidmatan desa dalam hubungannya dengan pembangunan luar bandar. Bagi memenuhi keperluan asas penduduk luar bandar kini, pola hierarki pusat-pusat perkhidmatan yang wujud sekarang boleh dianggap wajar. Bagaimanapun, untuk mencetuskan pembangunan desa melalui penyediaan perkhidmatan awam yang baik, pemasaran hasil tani, penasihatan dan peluang pekerjaan bukan pertanian, sistem petempatan yang ada sekarang ini belum lagi berkesan. Untuk membolehkan pusat-pusat perkhidmatan tersebut berperanan lebih aktif dalam proses pembangunan desa, kerajaan patut menggalakkan perkembangan pusat-pusat petempatan yang mempunyai kedudukan strategik sebagai pusat pertumbuhan desa.

ABSTRACT

Rural service centres of many developing countries serve the important function of providing most commercial and public services for the dispersed rural population. This paper examines the spatial patterns of rural service centres in Hilir Perak, highlighting the structure of rural service provision and utilisation in relation to rural development. For the current basic needs of the rural population, the existing hierarchy of service centres was considered reasonably adequate. For the stimulation of rural development by providing marketing and advisory functions, off-farm employment opportunities and enhanced public services, however, the existing system was not as effective. To enable service centres to play a more active role in the process of rural development, it was considered that the government should encourage the development of strategically located small towns to act as rural growth centres.

INTRODUCTION

Since its inception in the 1960s there has been a growing number of research on the strategy of Urban Function in Rural Development (UFRD). Such writers as Johnson (1970) stressed the marketing role of small agricultural towns, while Taylor (1974, 1981) emphasised the role of small service centres[1] in providing the rural region with the basic service and facilities as well as household and agricultural goods. Other important roles of the centres are the diffusion of innovation, acting as effective interaction points for local ideas, contain facilities which provide services that stimulate economic growth and the generation of employments (Rondinelli & Ruddle 1978). The service centres, especially rural based centres, are important for linking rural areas with urban functions, extending services and facilities into rural areas, and expanding markets for agricultural produce. They are the smallest place in developing nations that can accommodate urban services and facilities for efficient and effective delivery to rural areas.

Responses toward the adoption of the rural service centres strategy for achieving a more equitable growth in developing countries are varied. On one hand, authors such as Maude (1983, Hardoy and Satterthwaite (1986), tend to support the idea of developing small centres for the stimulation of rural development. By virtue of their location it is perceived that small centres are capable of performing functions and extending their roles to help people in their surrounding rural areas. On the other hand, writers like Funnel (1976) and Lo, et al. (1981) tend to argue that there are no apparent deficiencies in the inherent logic of the approach but suggest that strategies based on the efficient location of services do not in themselves resolve the fundamental inequalities or destroy the long established exploitative mechanism found in most Third World countries. Most small centres are offered little more than service functions. At the same time in most major government and private sectors, capital investment continues to reinforce the commercial and industrial economy of the larger cities. Without any effective decentralisation and investment dispersal to the level of such towns, any meaningful attempt to ensure that rural people have greater access to services and other opportunities, is unlikely to produce a fruitful result. In addition, in order to capitalise on the potential of small centre strategy, it is believed that besides strengthening the hierarchy of the lower order centres through consolidating some of the smaller service centres and by establishing new centres in areas without adequate service provision, attention should also be given on the organisation of rural settlements (Bromley 1984: 151). This will help facilitate the provision and delivery of rural services.

In recent years, however, there is a growing scepticism on the role and

function of small towns in tackling Third World rural development problems. Such writers as Dewar et al. (1983) and Dias (1984) have demonstrated that small towns and many other service centres provide vital social, commercial and administrative functions for only a limited proportion of the rural population. They argued that the strategy which is based on central place theory originated in an urban-industrial context, advantageous only from the point of view of suppliers. The rural poor people are constrained from using those services and facilities by many factors most of them not related to physical accessiblility. The fact that the poor people are poor prevents them from gaining access to many services which are, supposedly, meant to help alleviate their poverty.

The question of rural development planning involves complex elements of not only physical but social and economic issues as well. Thus, approaches such as service centres strategy and the like will continue to be expanded for adoption if they are to benefit more rural population. Although the question whether the welfare of rural population can actually be improved by the development of rural service centres remains open to debate, the role of service centres continues to become the main focus of planning attention.

The present study attempts to provide some insights to the discussion of the existing roles of small service centres in rural development. Apart from the provision of rural goods and service facilities, an assessment will also be made of whether the centres perform other roles that contribute to help develop rural areas. The basis of the assessment is the effectiveness of the centres in performing three vital functions. These are provision of agriculture inputs and marketing channels for local agricultural produce; diffusion of innovative information and new ideas; and generation of off-farm employment opportunities. Together, these provide indications on the extent to which rural service centres in the study area help to improve the socio-economic welfare of the rural households.

SETTLEMENT GEOGRAPHY OF HILIR PERAK

The District of Hilir Perak was chosen as a study area. The total area of the district is 1,727 square km. The study area comprises nine mukims with the size of each mukim ranging from the smallest, Mukim Sungai Manik, which is only 41 square km, to the largest, Mukim Hutan Melintang, which is 538 square km. The district is composed of 120 major settlements predominantly rural (population of 999 persons and below) but many are only small villages without a recognisable nucleus. Most of them are scattered traditional Malay settlements, with each comprising less than 30 detached houses. Every small village has its own name often known only

to local people. Many of the villages are connected to a main road only by dirt trails or jeep track and footpaths. In some areas, villages are several kilometres apart and separated by plantation estates or jungles. The river, gravel roads or footpaths are the only way to reach them.

Heavy concentrations of population are mainly found in and around Telok Intan. To a lesser extent they are also observable in areas surrounding small towns particularly Langkap, Bagan Datoh and Hutan Melintang. Other densely populated areas are new villages such as Chui Chak, Changkat Jong, Pelawan, Batu Duabelas and Air Hitam, concentrated on the eastern part of the region. The remaining population inhabit numerous rural settlement clusters which are mainly found along the main roads or occupy small scattered villages in the interior, particularly in the coastal region.

Rural settlement clusters form the main basis for the present study. Various services and facilities are located within them. People from within and outside the places make regular visits to them for purchasing goods or obtaining services. These settlement clusters can be regarded as central places. There are 48 central places in the study area. The major settlements in Hilir Perak are shown in Figure 1.

Variation in consumers' demand pattern have resulted in central functions differing from one place to another in number and complexity. The larger the size of a settlement the more complex the functional attributes tend to be (Table 1). The generalised pattern of service availability and location is shown in Figure 2.

Functionally, Telok Intan is the most specialised service centre in the region offering the widest range of retail and wholesale activities. They include shops selling goods ranging from the most ubiquitous items such as food, clothing, footwear and electrical appliances to the most specialised retail activities such as motorcycle, car and tractor dealers. Commercial and professional services such as banking, car, and motorcycle repairs, photo studios, driving schools, metalworks and foundries, private clinic and legal firm service facilities are also offered alongside public services.

The number of functions performed by the smaller settlements is much fewer. In small towns like Langkap, Bagan Datok, Hutan Melintang and Selekoh, retail functions such as general stores and coffee shops occur more frequently. In addition, two or three shops sell clothing, footwear, electrical goods and hardware can also be found. Commercial and personal services are limited to bicycle, motorcycle repairs, photo studios, tailoring and private clinics. These centres also contain a complete set of public services like secondary school, health care facilities, a post office with saving bank facilities together with telephone exchange facilities, an agriculture office, Farmers Association Complex and a police sub-station. Agricultural processing industries are also located in some of these centres.

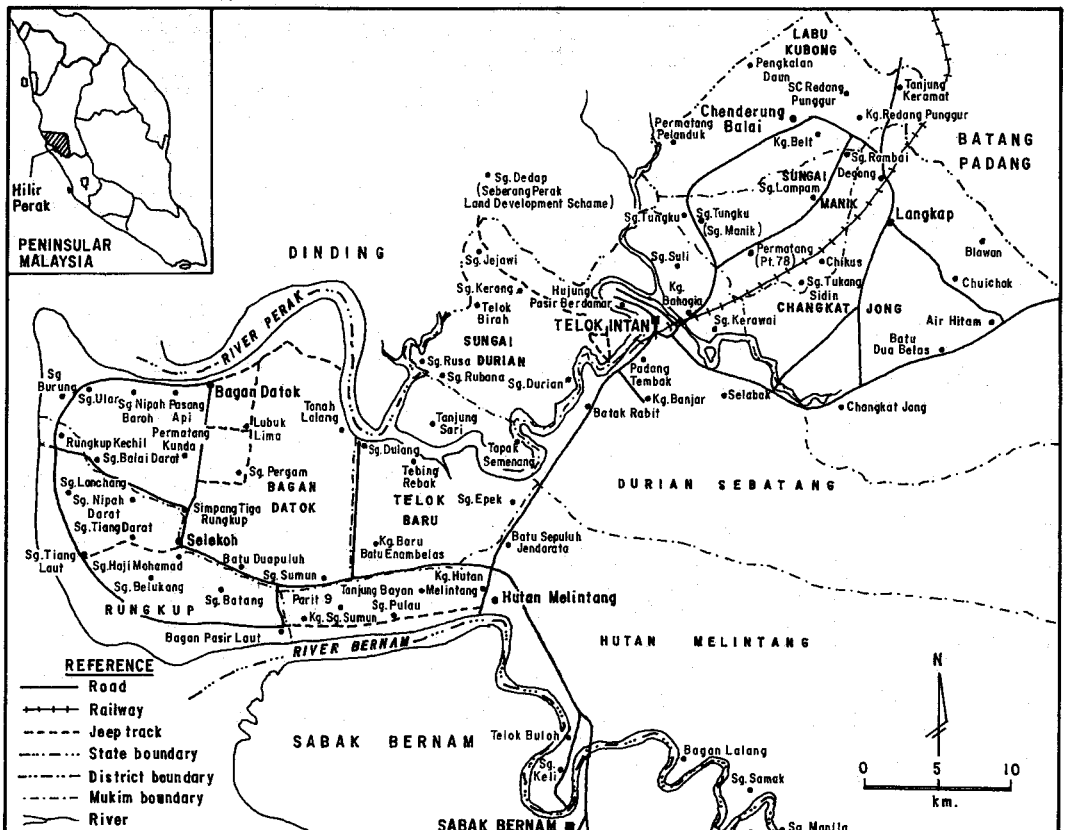

FIGURE 1: Settlements in Hilir Perak.

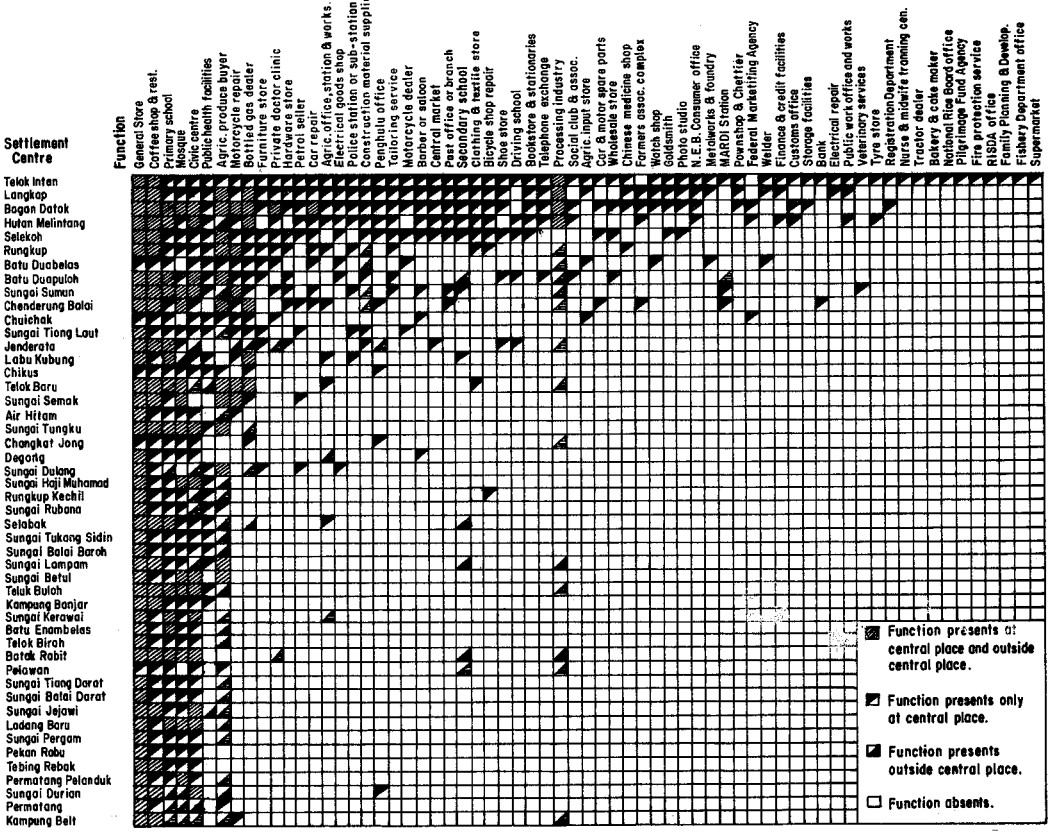

FIGURE 2: Availability and location of services an the major settlements in Hilir Perak.

TABLE 1. Functional classification of service centres in Hilir Perak

Class	Range of function	No. of settlements	Settlements
I	126	1	Telok Intan
II	19 - 49	6	Langkap, Bagan Datok, Hutan Melintang, Selekoh, Chenderong Balai and Sungai Sumun
III	15 - 18	15	Batu Dua Puluh, Chui Chak, Rungkup, Batu Duabelas, Telok Baru, Labu Kubung, Sungai Tiang, Jenderata, Chikus, Changkat Jong, Selabak, Degung, Sungai Dulang, Sungai Samak and Sungai Durian.
IV	3 - 5	26	Rungkup Kecil, Sungai Tungku, Air Hitam, Sungai Rubana, Kampung Banjar, Sg. Tukang Sidin, Sg. Lampam, Telok Buluh, Sg. Balai, Sg. Hj. Muhammad, Sg. Betul, Pelawan, Batak Rabit, Sg. Tiang Darat, Sg. Jejawi, Sg. Pergam, Pekan Rabu, Tebing Rebak, Permatang Pelanduk, Permatang and Kampung Belt.

Source: Field survey.

Generally only a set of basic services and facilities are present in the smaller service centres. They include general stores and coffee shops which often exist side by side within the same establishment. In many instances, apart from selling various foods and consumer goods, they also supply petrol, diesel, kerosine and charcoal as well as bottled gas for cooking to rural consumers. Fresh vegetables and fish are also sold by the rural general stores. Also, the shop owners often buy agricultural produce in small quantities and resell them to wholesalers or send them to the nearest factory for processing. In some places, shop-buildings are clustered together with other public service facilities such as a primary school, a rural clinic, a mosque, and a civic centre constituting a small multipurpose hall or reading room, a play ground and occassionally public telephone booth.

People from surrounding areas visit the centre by walking, cycling or motorcycle.

On the whole, functional diversity is a characteristic feature of most village stores located in Hilir Perak. Rural provisioners commonly engage in multiple business activities in order to maintain the survival of their stores due to the low level of expenditure generated by the rural population. They are lacking in many basic rural service facilities. The larger rural settlements, however, contain most of the essential basic services and facilities necessary to help improve the living condition of the farmers.

THE ROLES OF RURAL SERVICE CENTRES

The importance of the small service centres in rural development is not only on the size, number, and spatial organisation of the centres, but also on the functions and how they interact with the rural areas. In this section, an assessment is made of whether the rural service centres in Hilir Perak, effectively perform the basic roles that contribute to help develop rural areas. In evaluating the various roles of rural service centres, several criteria were used. They are utilization rate, distance travelled and usual places patronised for goods and services, as well as for the marketing of rural produce and employment.

SOURCE OF DATA

For the purpose of this inquiry, recent patterns of utilisation of rural goods and services in the study area were examined by employing data from a field survey. Several basic goods and services were chosen on the basis of their significance to the daily life of the people, and to represent a wide range of levels of goods and services in the functional hierarchy of the region. The goods and service facilities were retail outlets comprising perishable goods, general stores, clothing, electrical goods, building materials, banking and finance; public services including primary and secondary schools, post offices, and medical and dental surgeries; and agricultural support services particularly for the supply of fertilisers, insecticides, credits and machinery.

The field survey was conducted between November 1985 and June 1986 with the help of research assistants. The basis of sampling was proximity to the nearest central place. The location of the household selected for the questionnaire survey was, therefore, stratified spatially to reflect behaviour of users at varying distance from the centre. Due to uneven distribution of population in the area, a systematic random sampling was used as a basis

TABLE 2. Utilisation of main basic goods and services in the rural Hilir Perak

Type of service Retail facilities	Patronage (%)	(n)	Type of services Public utilities	Patronage (%)	(n)	Type of services Medical facilities	Patronage (%)	(n)
Perishable goods	99.4	862	primary school+	100.00	443	medical surgeries	98.4	862
Sundry goods	99.9	862	civic centre	53.6	862	dental surgeries	98.4	862
Clothings	99.1	862	post office	94.4	862	pre and post-natal		
Electrical goods	66.8	862	secondary school+	99.8	446	care	41.4	543*
Building material	42.0	862	mukim office	46.3	862			
Banking & finance	37.7	862	district office	65.8	862			

Source: field survey

+ only includes parents with children of schooling age (7-12 years old for primary and 13-15 for secondary educations).

* per cent of total number of housewives age between 15 and 45 years old surveyed.

of locating households for the survey. A total of 862 formal interviews were completed. The number of respondents is about three per cent of the total number of rural households in Hilir Perak.

THE PROVISION OF RETAIL, PUBLIC AND MEDICAL FACILITIES

Functional Analysis of Settlement in Hilir Perak shows that service centres in the region contain the most basic shopping facilities required by the rural users. The majority of users utilised most of the basic goods and services provided for them (Table 2). Basic rural goods and services such as foodstuffs, clothing, educational and medical facilities were used more widely than the more specialised services like electrical appliances, banking and finance, and dental surgeries. This reflects the level of development observable in the study area.

An analysis of the usual trips for obtaining the basic goods and services confirms the pattern. The varying attraction of each hierarchical category of settlements in the region for different goods and services are apparent from Table 3.

The consumers' travel pattern for perishable foodstuffs and other convenience good, does not indicate any clearcut trend. Although a considerable concentration occurred at the local and village centres, a substantial proportion of the rural consumers preferred to travel on one extreme to the regional centre (Class I) and on the other to non-central places (Class V). Goods offered at the smaller centres are adequate for meeting basic needs of the rural population. For a better choice, the larger centres were visited particularly by those who could afford the cost.

For the high order retail goods, the influence of Telok Intan (Class I) and other centres in the cetegory outside the region, is much more apparent. At least 60 per cent of consumers in the survey area visited such centres for the purchase of clothing, electrical appliances and used banking and finance facilities. For these functions, visits to the local centres (Class II) is also of secondary importance, although the pattern does not extend significantly to the lower order centres. In the Class I centres the number of bank and finance institutions, shops and department stores selling a wide range of goods is numerous. Many latest-fashion clothing, domestic appliances, as well as other goods such as motor vehicles and agricultural machinery can be acquired on credit. By contrast, the smaller centres only offer a limited range of goods. There are no supermarkets or shops selling specialised goods, very few shops in the Class II centres sell ladies clothing and electrical goods such as television sets, cooker, and refrigerators. Also, banks and finance institutions rarely exist. It is clear, therefore, that the availability of choice for better goods and services attracted the rural

TABLE 3. Usual places patronised for basic goods and services in Hilir Perak

Goods and services	Cases	Percentage of patronage by category of centre*						
		I	II	III	IV	V	Other	Total
Retail services								
perishable goods	857	12.7	27.3	20.7	15.5	23.0	0.8	100.0
sundry goods	861	10.3	28.1	18.7	20.0	22.2	0.6	100.0
clothing	854	65.0	25.3	4.5	0.3	0.2	4.1	100.0
electrical goods	576	62.2	29.7	4.2	0.6	0.3	3.0	100.0
building material	362	31.8	42.2	15.9	4.7	1.1	4.3	100.0
banking & finance	325	74.5	23.4	0.9	0.0	0.0	1.2	100.0
Public services								
mosque	706	0.6	20.8	8.8	35.5	34.3	0.0	100.0
civic centre	462	4.3	31.2	13.2	26.2	25.1	0.0	100.0
primary school	443	8.8	25.6	15.4	31.9	16.3	2.0	100.0
post office	814	25.2	49.2	7.3	7.4	8.0	2.9	100.0
secondary school	465	32.7	46.1	9.2	0.0	2.2	9.8	100.0
mukim office	399	19.1	63.6	2.8	3.3	11.2	0.0	100.0
Medical services+								
medical surgeries	771	35.1	48.7	5.1	5.4	2.0	3.6	100.0
dental surgeries	471	44.4	51.7	0.2	0.8	0.4	2.5	100.0
pre and post-natal	225	24.4	40.9	16.9	13.3	3.6	0.9	100.0

Source: field survey

+ public and private facilities

* the classification of centres is based on Table 1

consumers to conduct their shopping at the larger centres.

Generally, it can be said that except for the regional centre (Class I), the service centres of the lower levels in Hilir Perak are lacking in many high order functions. They are deficient in commercial banks, farming and earth moving equipment supplies, and agricultural input supplies - fertilisers and insecticides. The lack of retail facilities selling expensive durable goods is also apparent.

The lack of important high level functions in the lower order centres may be attributed to many factors. In the case of Hilir Perak, a low standard of rural income is, perhaps, the most influential variable. The majority of the population are poor farmers earning less than M$350.00 a month. Clothing, for example, is only purchased once or twice a year especially during festive seasons or before the start of a new year when school term begins.

With regard to household goods, it is apparent that only those with above-average incomes make regular purchases. Such electrical goods as refrigerators, colour television sets, washing machines, sewing machines, vacuum cleaners, and electric ovens are expensive and are normally paid by instalments. These goods are mainly available in the regional centre. In the lower-order centres there is no store offering these products.

Furthermore, due to the low standard of rural income, the more specialised retail establishments such as clothing stores, book and stationary stores, photo studios, furniture stores, and hardware stores are only able to survive on lowering profit-margin. This is shown by the low turnover of the small town shops as indicated in an earleir study (Cheng 1979). Many rural shops diversify their operations rather than provide specialised functions (Cohen et al. 1977). Also, in many localities, periodic markets and vendors take over a significant proportion of the total retail trade. The study shows that at least 42 percent of the consumers in Hilir Perak visited periodic markets or mobile sellers to purchase perishable items. The corresponding figure for clothing is 17 percent. Those who are well-off travel farther distances to obtain a better choice of goods and services. As public and private transportation become available, competition from the more competitive facilities in the larger towns, inside and outside the region, reduces the retailing functions of small service centres to selling foodstuffs and other basic household goods.

In the case of credit facilities, except for the purchase of motorcycles (hire purchase), poor farmers normally go to any of the various government agencies particularly the Department of Agriculture. Members of the Local Farmers Association may also obtain credit from these institutions. Interest-free credit facilities can also be obtained from the Agriculture Bank of Malaysia (a government controlled bank) with

flexible terms of repayment. In addition, agricultural inputs such as fertilisers and insecticides can be purchased from local farmers' co-operative stores at a greatly subsidized price, thus reducing the demand for such facilities in the open market.

Unlike retail facilities, however, visits to the nearest centres for the use of public and medical service facilities are very frequent. Most of the users travel a distance of less than 10 km., which is the range recomended by most writers (for instance see Johnson 1970: 238; Friedmann & Douglass, 1978: 42). For the use of essential public facilities such as civic centres, primary schools and mosques, the majority of users in Hilir Perak patronised the lower order centres. Only a small fraction of the population travelled to centres of the high categories. This occurred among people living in the proximity of the Class I centre particularly workers who commuted to the centre from their villages.

The attraction of the Class II centres, and to a lesser extent Class III centres is clearly marked for the use of high order public facilities. The service centres were heavily patronised for facilities such as post offices (56 per cent), and secondary schools (55 per cent). A similar finding is noted for visits to medical and dental services facilities (53 per cent). Many of these facilities do not occur at Class IV centres. Thus availability of services explains for these concentrations. The influence of the Class I centres is also considerable. For instance, 44 per cent of the users visited these centres for dental surgeries. The corresponding figure for the use of medical surgeries and secondary schools is 30 per cent respectively.

Clearly, the Class I and to some extent Class II centres offer a wide range of choice of services. For many users, visits to these centres were compelled by the lack of available supplies in high order services in the smaller centres. For others, visits to these centres reflect the users' ability to travel for a better choice of specialised services. However, for the use of lower order services, such as mosque, civic centres, primary schools and medical facilities, the smaller centres (Class III and Class IV centres) were patronised by the majority of the users. This pattern suggests that for obtaining basic services visits to lower-order centres are adequate.

On the whole, specialised retail and service facilities are hardly available in the small service centres. The regional centres (Class I), in contrast offers a wide range of facilities. This suggests the potentially dominant role that the centre offers for any possible increase in consumption expenditure. The permanent facilities, particularly retailing, of the smaller centres, on the other hand, are undergoing functional decline and physical degradation. Only the basic service facilities survive to serve the rural population. Under such a situation, it is doubtful that their present status can be sustained adequately.

OTHER ROLES

Along with the provision of retail, public, and medical facilities, rural service centres can also play other roles to stimulate rural development. The present discussion focuses on the extent to which the rural population benefit from rural service centres in the study area. The role of rural service centres is assessed in relation to the supply of agricultural inputs and the marketing or rural produce; the diffusion of health and agricultural information; and the availability of off-farm employment.

THE SUPPLY OF AGRICULTURAL INPUTS AND THE MARKETING OR RURAL PRODUCE

Agricultural development in Hilir Perak is currently carried out in several types of activities. Co-ordinated by the Department of Agriculture (Ministry of Agriculture), the activities vary with the type of farming in different localities. They are the new Integrated Agricultural Development Programme (extension programme); the Youth Agricultural Development Programme; the food crops production development scheme; the production and supply of seed crops; cocoa, rubber, oilpalm and coconut replanting and rehabilitation schemes; tropical fruits rehabilitation and development schemes; and market gardening development scheme. In addition to these *in situ* development programmes, RISDA and FELCRA are also actively pursuing similar objectives but concentrate more on certain crops, rubber in smallholdings in particular. In the case of the latter, however, the programmes are directly under the control of the respective institution. For the purpose of the present discussion, attention is focused on those programmes co-ordinated by the Department of Agriculture of Hilir Perak.

Under the newly adopted integrated rural development programme, the provision of agricultural support services is to be made in a package form. Services are channelled through the Local Farmers Associations under the newly established extension system - 'Training and Visiting' or known locally as '2L' (Latihan dan Lawatan). The supporting services offered include research and development in paddy growing and agricultural technology, the supply of seeds, crop disease protection, the supply of fertilisers and insecticides, credit facilities, machinery, transportation and marketing. Several government agencies are directly involved in the implementation of the programme. They are the Drainage and Irrigation Department, the Department of Agriculture, Farmers Association authorities, the Agriculture Bank of Malaysia, the Malaysian Agricultural Research and Development Institute (MARDI), the National Paddy and Rice Authority (LPN), and land office. All the activities are under the

TABLE 4. The use of government agricultural support facilities

Facilities	Users (n = 100%)	Percentage of users by agency: Agric. Dpmt.	Farmers Assoc.	RISDA	FELCRA	MARDI	FAMA	Agric. Bank	Others[++]	Total
Fertilisers and insecticides[+]	364	59.6	28.8	6.3	0.5	0.0	0.0	0.0	4.8	100.0
Seed and clones	275	66.9	19.3	6.9	0.7	0.0	0.0	0.0	6.2	100.0
Advice	268	63.4	19.9	7.1	0.7	2.6	4.9	1.1	0.4	100.0
Financial assistance	134	63.4	11.8	20.1	1.5	0.0	0.0	0.0	3.2	100.0
Training	112	58.9	18.8	5.4	1.8	7.1	3.6	0.0	4.4	100.0
Credits	55	40.0	10.9	10.9	3.6	0.0	0.0	27.3	7.3	100.0
Machinery	33	42.4	24.2	12.1	6.1	0.0	0.0	0.0	15.2	100.0

Source: Field Survey

[+] includes part-time farmers

[++] includes agencies which were not clearly stated by the respondents

coordination of the Ministry of Agriculture. It should be noted here that these programmes are to be implemented in line with the objectives of the New Economic Policy where the highest priority is given to the poor farmers, irrespective of race or origin. In line with the purpose of this study, the present discussion assesses to what extent farmers in the region use the facilities.

Responses to questions on whether or not farmers in the region utilised the facilities were analysed. The results show that only a few of the facilities were utilised to a considerable degree (Table 4). Such common agricultural input facilities as the supply of fertiliser and insecticides, seeds and clones, were used by a large number (more than 59 per cent) of farmers. In contrast other facilities like credit, training, and machinery were less used (less than 30 per cent). The majority of the users received facilities from the Agriculture Department and the Local Farmers Associations.

Several reasons may be suggested to explain these differences. It is highly unlikely, however, that distance travelled (physical accessiblity) for the use of facilities is one of them (Table 5). Some farmers were not members of the Local Farmers Association. This prevented them from having access to the facilities. A few were tenant farmers who did not require the facilities because agricultural inputs were supplied by the land owners. However, a considerable number of farmers did not use credit facilities because they were afraid to borrow for fear of falling into debt as a result of a poor crop. This suggests that human factors such as illiteracy and poverty, may have a bearing on the use of the facilities. In the face of high incidence of poverty and illiteracy in the region, it is justifiable to say that the problems of acceptability and awareness, resulting from the farmers' lack of understanding and their indifferent attitude toward the programmes, may act as a deterrent in the use of credit, training, and machinery facilities.

The importance of rural service centres in the study area, Class II and Class III in particular, for the provision of these government supported-agricultural services in clearly evident. Farmers visited the centres for consultation with the various agencies (Table 6). Although not all facilities are permanently present in the centres, under the 2L system, many activities such as farmers-officers' dialogues, talks, and demonstrations, were held at the various centres regularly.

For the marketing of agricultural produce, however, the pattern is reversed. Only 33.5 per cent of the farmers marketed their agricultural produce at service centres in Class II and Class III. The majority sold their produce in their own village (Table 7).

TABLE 5. Distance travelled for consultation with the major government agricultural support agencies

Agencies	Users (n = 100%)	Percentage of users when distance travelled (km) is: 1-5	6-10	11-15	>15	total users	mean (km)
Agricultural Office	341	57.8	26.4	9.4	6.4	100.0	6.5
Local Farmers' Association	220	57.3	24.5	11.4	6.8	100.0	6.6
FAMA (agric. marketing)	137	52.6	31.3	7.2	8.8	100.0	6.9
MARDI (agric. research)	74	55.4	21.6	13.5	9.5	100.0	6.8

Source: Field Survey

TABLE 6. Service centres visited for consultation with major agrucultural support agencies

Agencies Consulted	Percentage of users when centre visited is					
	Class I	Class II	Class III	Other categories	Total	Users
Department of Agriculture	14.8	44.9	23.8	16.5	100.0	341
Local Farmers Association	5.4	62.5	16.4	15.7	100.0	220
FAMA	7.1	33.9	48.2	10.8	100.0	137
MARDI	7.1	77.1	4.2	11.6	100.0	74

Source: Field Survey

TABLE 7. Marketing channels for agricultural produce by category of centres

Market Channels	Percentage of farmers when centre patronised is (n = 498): Class I	Class II	Class III	Other categories	Total
Local dealers	5.5	20.5	16.2	57.8	100.0
Government agencies	9.1	12.6	9.8	68.5	100.0
Other channels	16.7	33.3	14.3	35.7	100.0
All channels	7.5	19.2	14.4	58.9	100.0

Source: Field Survey

Except in plantations as well as in a few RISDA and FELCRA land development schemes where marketing activities were under control of the authorities, farmers in other areas used various channels for marketing their farm products. The majority (61 per cent) sold their farm products to local dealers within their own village. Only a small number of farmers (29.0 per cent) marketed their produce through government agencies such as (Federal Agricultural Marketing Authority (FAMA), LPN and local Farmers Association. A few (8.5 per cent) sold their produce directly to consumers or nearby processing factories.

The importance of local dealers in the marketing of agricultural produce in the region may be due to several reasons. Apart from convenience, private dealers often offered services such as direct collection from the farmsteads, advance cash payments, and were not very particular in the grading and the quality of produce. In addition, unlike the government agencies which have specific business hours, the local dealers provided marketing services at any time including weekends (personal communication). Furthermore, such traditional marketing institutions had been in existence since the nineteenth century when the settlements were opened (particularly settlements in the mukims of Bagan Datok, Rungkup, Hutan Melintang, Telok Baru and Sungai Durian). For generations farmers had established business and social relationships with the dealers through buying and selling activities. This retains a strong element of inertia in marketing function.

Although local dealers played a dominant role in agricultural marketing in Hilir Perak, the government marketing agencies regulated the markets by issuing licenses to the dealers. Several conditions had to be strictly observed by the dealers before a license could be issued. This helped to control market prices of the commodities and reduced malpractices in rural marketing. However, this did not help to reduce the influence of local dealers on agricultural marketing in the region.

The presence of agricultural processing factories in the rural areas also contributed significantly to the weakening of marketing function of the principal rural service centres. These factories processed agricultural produce into semi-finished products for export, normally via major ports in the country. Apart from processing, the factories also purchased agricultural produce in a large quantity from local dealers, Local Farmers Association, FAMA, and individual farmers. Most of these factories are located outside the service centres. Such marketing activities clearly bypassed rural service centres and thus weakens the agricultural collecting and marketing roles of service centres in the region.

The overall pattern suggests that the principal rural service centres are important for the provision of government agricultural support facilities (Class I and Class II). This, however, cannot be extended to marketing.

Neither the regional centre (Class I) nor local and rural service centres (Class II and Class III) provided a major market for agricultural produce in the district. Most sold their farm products to dealers in their own village. Only a small number of farmers sold to government or local co-operative agencies (Farmers Associations, FAMA and LPN). Even so, only a small number of selling and buying activities were conducted in the service centres. The role of service centres as a market and collecting point was therefore limited to that of minor activities. Many co-operative marketing agencies in these centres were facing closure. This was partly due to instability of market prices, and partly because of the strong competition from local dealers and nearby processing factories (Hilir Perak 1986). This clearly indicates that the role of rural service centres in the region in rural marketing is less significant.

With the continuing downward trend of the marketing role it is doubtful that principal rural service centres can improve contribution to the marketing of agricultural produce in the region.

DIFFUSION OF HEALTH AND AGRICULTURAL INFORMATION

It has been reported elsewhere that one of the major reasons why rural users often fail to take advantage of services, even if they are available, is the lack of information about the services; or the intended beneficiaries have little idea what their use entail (IBRD 1980: 77). Direct information campaigns in local media and through institutions can help to diffuse the information that may change the attitude of rural users towards services. Apart from the mass media, forums, talks, and discussions are also influential in diffusing new ideas. Research on the diffusion of new ideas suggests that interpersonal communication can also be effective by way of information campaigns. Rural service centres (Class II and Class III) are the lowest level of settlements in the national urban hierarchy where these facilities can be provided. Their role in the diffusion of information is considered critical.

The government official reports suggest that information campaigns concerning rural health care have been carried out rigorously in Hilir Perak. For instance, since 1970, the Department of Public Health of Hilir Perak has organised various health educational programmes, focusing on informal talks and dialogues. About 1,66 formal and informal talks have been given annually by medical staff at various localities in the region. This includes talks during the weekly clinic sessions which are held regularly at the local health centres or rural clinics. Topics ranging from mother and child health care to communicable diseases have been covered (Hilir Perak 1985: 22). In addition, a total of 266 health demonstrations have been organised to educate rural mothers on various topics such as healthy

cooking and the use of inexpensive healthy foods. Health talks in schools have also been organised to educate school children on the importance of health care. Normally, the talks are held during regular medical check-up sessions at various kindergartens, primary and secondary schools.

Similarly in the field of agricultural development, under the 2L system, various educational programmes have been arranged to teach or inform farmers of the latest developments in agricultural technology. A series of short courses have been arranged regularly for farmers in the region. In 1985 alone, a total of 18 such courses were held at various localities (Department of Agriculture 1986). Topics ranged from an introduction to a new paddy breed to a new method for mushroom farming. Along with these courses, regular visits to farms by extension officers, dialogues, and informal talks were also carried out as part of an effort to diffuse new information to farmers in the region.

The general response of the people in the study area confirms the importance of the diffusion roles mentioned above. A total of 52 per cent of respondents interviewed felt that most new ideas and technical information relevant to help improve rural life were learnt effectively through personal contact with officers, public talks, discussions, and demonstrations held locally. Only 19 per cent felt that the mass media was more important; 17 per cent considered informal meetings in local coffee shops as the most useful means of learning new ideas; while others viewed meetings at various religious functions as the best opportunity to acquire new knowledge.

The way information on new ideas was passed down to the rural people, however, seems to vary from one function to another. Table 8 demonstrates these differences. For advice relating to the importance of personal hygiene, environmental cleanliness, and the control of communicable diseases, the mass media was found to be more influential. However, for advice concerning family health care and planning, local medical staff seem to be the most important source.

Television and radio ownership confirmed their opinions. Most of the rural population have access to a television set (89 per cent) or a radio receiver (92 per cent) in their home. The media have been used effectively by the government in a nation-wide campaign against communicable diseases such as dengue fever, malaria, cholera and smallpox. Various forms of advertisement appeared in the media warning people of the danger of such diseases and how to prevent them. Similar results did not occur, however, for the diffiusion of knowledge concerning family health care and planning. Since the main beneficiaries of such programmes are women, an information campaign through closed dialogues, informal talks, and house-to-house visits by midwives and other medical staff, as

TABLE 8. Source of information on matters related to health care (n = 862)

Type of advice	Source of advice (% households)							
	Mass media	Medical staff	Children & neighbour	Local leaders	Other gov. servants	Other sources	Not sure	Total
Physical environment and dengue fever	55.6	29.6	6.6	1.3	0.8	0.2	5.9	100.0
Personal hygiene and communicable diseases	48.5	28.2	8.2	1.5	1.9	0.1	11.6	100.0
Dietary and diseases	35.8	33.5	14.2	0.8	1.7	0.7	13.2	100.0
Family health care and planning	24.9	44.2	8.1	1.5	2.0	2.2	17.1	100.0

Source: Field Survey

well as interpersonal communication among them, seem to be more effective than any other means. This is especially so in the society where illiteracy is still widespread.

Another example of information diffusion can be shown by tracing the origin of agricultural-technical advice and current commodity prices received by farmers in the region. The sources of this information differ significantly from one piece of information to another. In the case of technical advice, the majority of the farmers received this from officers of the Department of Agriculture and the Local Farmers Associations (Table 9). By contrast, information on current commodity prices mostly originated from local dealers or middlemen. The role of government agencies in relaying the current market prices was of secondary importance. The influence of local dealers and middlemen over the marketing of agricultural produce in the region, as discussed earlier, explains this latter feature.

TABLE 9. Sources of (a) technical advice (b) commodity prices

(a) Technical advice (n=498)		(b) Commodity prices (n=498)	
Source	Households (%)	Source	Households (%)
Department of Agriculture	63.4	local dealers/middlemen	52.7
Local Farmers Association	19.8	government agencies	28.9
RISDA and FELCRA	7.8	mass media	7.2
Other agencies	9.0	others	11.2

Source: field survey

On the whole it can be said that the role of the government developmental agencies in the region such as health centres, Department of Agriculture, Local Farmers Associations, FAMA, and MARDI in diffusing new ideas and information is not dominant. Only specific information such as technical advice and family planning methods originated from the government agencies. This tends to indicate the limited role that the agencies play through the rural service centres (Class II and Class III), in the diffusion of information through the study area.

AVAILABILITY OF OFF-FARM EMPLOYMENT

The role of service centres in the provision of off-farm employment opportunities is also vital. Increased off-farm employment would help towards raising rural incomes. This study investigates the extent to which the rural population of Hilir Perak benefits from the availability of non-farm employment at service centres.

Table 10 shows that the number of households in the study area employed in off-farm jobs is very small (23 per cent) compared with those engaged in agricultural activities (more than 60 per cent). Of this, about one-third are government servants such as teachers, officers, clerks, policemen, and hospital assistants. The remainder are small scale traders and contractors, shopkeepers, and a few technicians and factory workers. They are concentrated in Class I and Class II centres, although a considerable number of these workers are also present in Class IV centres. Industrial workers are mainly employed in palm oil and rice processing factories at various localities in the mukims of Bagan Datok, Changkat Jong, Sungai Manik and Hutan Melintang. Only a small number of households are employed in manufacturing particularly in Telok Intan, Hutan Melintang, and Langkap.

The incidence of off-farm employments in Hilir Perak is still very limited. The government sectors, mainly administration, research and services, constitute the major portion. In the commercial and trading sectors, except for a few modern establishments in Telok Intan, most firms employ family workers. Small-scale manufacturing like furniture making, food processing and packaging operates on a similar basis. Only a small number of modern medium-scale factories examplified by a maufacturer of aluminium product in Hutan Melintang and a match factory in Telok Intan, employ a considerable number of workers. Again only a few factories such as the cocoa processing plant near Batu Duapuluh (Rungkup), a LPN rice processing complex near Sungai Lampam (Sungai Manik), and an edible oil products industry near Telok Intan, employ more than 50 workers. The larger service centres are too small and many are also lacking in basic infrastructural facilities which are required for the development of a manufacturing industry. They simply fail to attract new investments.

The lack of off-farm employment opportunities in the region is quite evident. Analysis on the employment and places of work of other rural household members (spouses, first and second working son or daughter) also confirms this (Table 11). The majority of the rural labour force, youth in particular, are employed outside the region particularly Ipoh and Kuala Lumpur. Those employed locally, are mostly farmers. Only a few are

TABLE 10. Employment of the head of household by category of places of work

Employment all places	(n)	Category of places of work (%) Class I	Class II	Class III	Class IV	Other places	Total
Farmer[+]	359	0.0	7.5	9.2	82.2	1.1	100.0
Labourers[++]	211	12.3	19.9	25.1	37.0	5.7	100.0
Commerce[+++]	129	22.5	34.1	14.7	21.7	7.0	100.0
Government	72	43.1	20.8	9.7	22.2	4.2	100.0
Others	91	14.3	12.1	8.8	23.1	41.7	100.0

Source: Field Survey

[+] includes fishermen

[++] mainly agricultural labourers

[+++] includes trade and industry

TABLE 11. Employment of other households by places of work

Employment all places	(n)	Category of places of work (%) Class I	Class II	Class III	Class IV	Other places	Total
Farmer[+]	132	0.0	3.8	17.4	76.5	2.3	100.0
Labourers[++]	187	8.6	12.3	17.6	15.5	46.0	100.0
Commerce[+++]	135	15.6	12.6	6.6	16.3	48.9	100.0
Government	204	21.6	10.8	2.9	4.9	59.8	100.0
Others	80	12.5	16.2	10.0	20.0	41.3	100.0

Source: Field Survey
n includes working spouse, first and second son or daughter only

[+] includes fishermen
[++] mainly agricultural labourers
[+++] includes trade and industry

employed in non-farming jobs. Compared to those working outside, their number is insignificant.

On the whole, the lack of off-farm employment in the rural service centres of the study area is quite obvious. Only a limited number of such jobs have been generated at the centres. Therefore, their role in helping to absorb the rural labour surplus has not materialised.

CONCLUSION

The role of service centres in relation to the rural households of Hilir Perak has been briefly assessed and its results can now be summarised. The limited role of the rural service centres in the provision of shopping facilities was confirmed. It was obvious that the smaller service centres (Class III and Class IV in particular) in the region are not likely to develop higher order functions for several reasons. Rural incomes are low, strong competition exists from periodic markets and itinerant traders, while the attractions of the larger centres (Class I) inside and outside the region are important. The smaller rural service centres, however, were highly accessible for the use of basic retail facilities.

The role of the rural service centres as the main providers of the basic public service and medical facilities, was also confirmed. The distribution of the basic public services is not in favour of any socio-economic group, although the well-off population have a wider choice for obtaining better services. This supports the notion that the rural service centres (Class II, Class III, Class IV) are functionally effective in servicing the rural population of the region.

However, this cannot be extended to other roles. For instance, to obtain credit facilities and machinery, the smaller rural service centres were only used to a lesser degree. Only the common inputs facilities such as fertilisers and insectcides were widely available. These facilities were mainly provided by the Agricultural Department and the Local Farmers Associations which are mostly located in the centres not very far from the users' place of residence. The service centres (including the Class I centre) also did not function as a significant collecting or processing centre for rural products. For marketing, most of the farmers sold their produce to dealers in their own village. Processing factories which are mostly located in the plantations and villages also contributed significantly to the weakening of the marketing and collecting roles of these centres.

Although public agencies in the smaller service centres provided most of the basic specific health and technical information like family planning advice and new farming techniques, other information was mostly learnt from the mass media, or from the main government offices in Telok Intan.

They did not fully function as the main provider of innovative knowledge as had been envisaged. Neither did they absorb the rural labour surplus by providing off-farm employment for the people. Off-farm employment was extremely limited in number and very few such job opportunities were generated at the service centres. This was confirmed by the fact that a substantial number of the villagers, the youth in particular, were employed in off-farm jobs outside the region.

The conclusion that can be drawn from this study is that the smaller service centres (Class II and Class III) provide most basic service facilities required by the rural population. However, their economic roles are not significant. This indicates that under existing conditions, the smaller service centres are not capable of stimulating economic development for the rural region. More public investment is needed if the service centres are to play an active role in rural development.

NOTE

1. Service centres are defined here as central places that provide functions and services to their tributary area. Normally these centres perform various types of commercial, administrative and social functions. Their main function is to provide goods and services demanded by the population living in its hinterland. The hinterland in return, supplies the centres with agricultural, mining, forestry and other products for processing, storage and packaging, before being marketed in the larger cities.

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