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STREETFOODS IN INDONESIA

Vendors in the Urban Food Supply

### ACKNOWLEDGEMENTS

This report of the Indonesian Urban Streetfoods Project is the fourth in an international series of studies being carried out by the Equity Policy Center of Washington, D.C.. Studies of Senegal, Bangladesh and the Philippines have already been completed. The research was funded by the Women in Development Office of the United States Agency for International Development and co-ordinated through the office of William Fuller, Director of the Indonesia AID Mission and under the supervision of Margaret Bonner, Program Officer.

While working in Indonesia, I was attached as a visiting scholar to the Informal Sector Project of the Development Studies Institute in Jakarta. It was exciting to be associated with them at the time when their staff brought to press the first two issues of Galang, the first Indonesian Journal of the Informal Sector. In addition, their experience with organizing vendor co-operatives in three cities points the way to constructive programs for income generation in informal sector endeavors.

In Bogor, the research site, I was fortunate to have the support and interest of two institutions, the Nutrition Department of the major agricultural school in the country (IPB) and the Bogor City Planning Office. The Nutrition and Family Resource Department of IPB saw the research as an opportunity for their students to gain valuable fieldwork experience. Between June, 1983 and April, 1984, 14 of their fifth-year students worked in pretesting questionnaires, interviewing, computer coding and ethnographic studies of individual vendors. In addition, three faculty members of their staff worked as consultants to the Streetfoods Project. Two of them conducted interventions with specific foods and the third investigated the relationship between mothers' time constraints and the family tendency to

purchase ready-to-eat foods. Each of their reports is a research gem in itself. All three were bound with a 30 page summary of the present study in the Indonesian version of this final report. One hundred copies of the Indonesian report were distributed to government offices and research libraries throughout Java.

The City Planning Officers in Bogor are trying to plan Bogor as a "Garden City" in the increasingly industrial area of Jakarta and its three satellite cities. They showed interest through the project by making the necessary introductions, granting permission for various surveys and even stimulating a high school class to conduct their own interviews with sidewalk vendors in front of the government offices. The most immediate use of the Bogor Streetfoods Data is by the Bogor planners themselves. I have confidence that, under the humane direction of the director, a compromise between the need for an efficient city and the need to generate jobs for vendors can be struck.

Much thanks are due to U. Sugandi Indrabrata who did the graphics and Ruth Kent, whose painstaking editing and typing dramatically improved the presentation of the report.

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## CHAPTER 1. INTRODUCTION AND OVERVIEW

The Streetfoods Project is a multi-country study of the micro-marketing of prepared ready-to-eat foods in third world cities. Directed by the Equity Policy Center (EPOC), Washington D.C., the project focuses on the income generation potential of petty vendors and the service they provide by selling nutritious cheap foods. Results from Indonesia suggest that streetfood vendors are far more numerous than previously suspected and that they play a significant role in the urban economy.

### Informal Sector Activities and Streetfood Vending

In Indonesia, as in many rapidly developing countries, urban public areas abound with micro-enterprises. Collectively termed 'the informal sector', these enterprises often consist of a single individual engaging in petty trade, such as selling oranges or peanuts on trains, walking in heavy traffic to sell newspapers, transporting people across the city in a bicycle-powered cab or selling a wide range of prepared foods, including bakso (noodle soup), kue (moist native snack cakes), martabak (chocolate-filled pancakes) and sometimes entire meals with rice. These activities require little skill and involve low capital input. Therefore, they serve as easy job-entry points both for the thousands of rural migrants seeking their fortune in the city and for poor urban dwellers. As Indonesia becomes increasingly urban, it is no wonder that informal sector activities have received increasing attention and are the object of recent focus, even by the media.

THE INDONESIAN ARCHIPELLAGO WITH BOGOR, THE RESEARCH SITE.

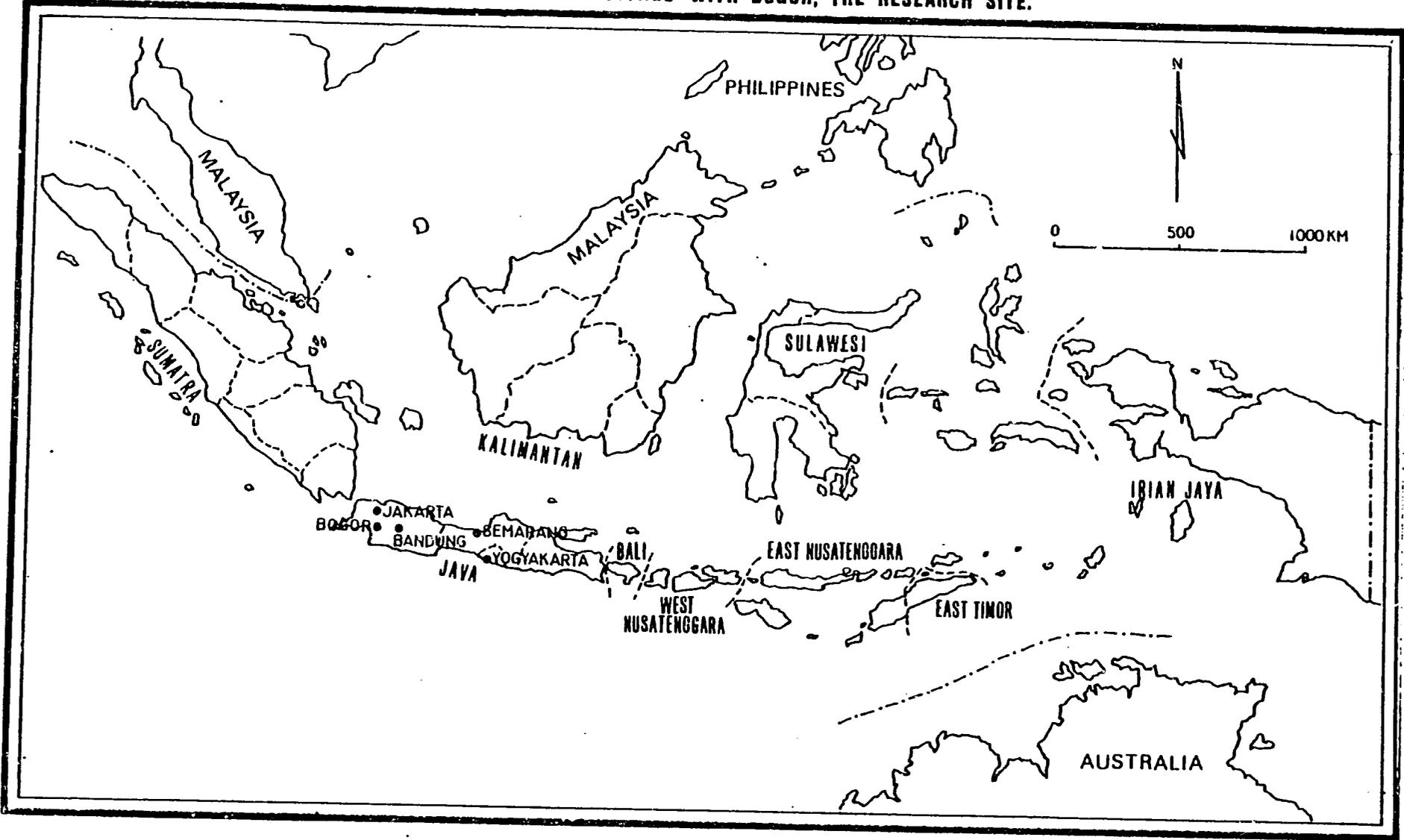


Figure 1.1

A survey of the Indonesian popular press from February, 1983 to June, 1984 reveals a high interest in informal sector occupations in both urban and rural areas. Nine out of every ten articles are critical of some aspect of these attempts at self-employment. Less often, they are neutrally described or even more rarely defended. The major objections are obstruction of traffic, threats to health, unsightliness and, one suspects, an aggravating reminder of the degree of underemployment in large Indonesian cities. Their perseverance in the face of long working hours and small profits is sometimes praised and a rare report points out the absolute necessity of streetfood vending and other informal sector opportunities to make a living in the face of a rapidly increasing workforce (increasing by 2.3 million each year) and very slowly growing formal wage opportunities. Unsung are the services they perform in creating a market at your doorstep and preventing millions of additional shopping trips which would surely clot the streets. Prepared food vendors, riding bicycles and pushing carts, provide the additional service of supplying cheap nutritious meals to women who must work long hours for low pay just to survive in the expensive urban environment.

Another set of literature, largely dittoed papers in Indonesian, reflect a trend in recent years (since 1975) for academic and government-sponsored research on the urban poor and their income-generating activities. With few exceptions, these reports reflect the investigators' affection and admiration for informal vendors. That admiration is not often shared by municipal governments, as reflected in several incidents of vendor areas and market places being sacked and burned to the ground. However, among certain sophisticated government offices, a positive attitude toward the informal sector is evident. Whatever the attitudes towards informal sector occupations, there is no doubt that vending in general and streetfood

vending in particular will be a major fact of life in Indonesian urban areas for decades.

Presently, prepared food sold in public gathering places, such as bus stations, busy markets, hospitals and factories, is a common sight in Javanese cities. The variety is enormous - from dry cookies and biscuits to full meals of rice and meat and vegetable side-dishes served on a banana leaf. Both men and women participate in the preparation and selling, though the preponderance of women and their association with particular kinds of foods varies from one city to the next. The diversity of ethnic foods from all over the archipelago in large cities is visible evidence that some migrants find food vending of ethnic foods a viable economic entry to the city. Part of the selling game is the dress and characteristic equipment of the salesman, vouching for the authenticity of the type of food offered.

Why are prepared foods so popular? Indonesians have integrated between-meal snacking into their lives, such that they often comment that eating would be boring if it were not for the variety that vended foods provide. Another element is clearly convenience of availability at a particular time and place of ready-to-eat food, reducing the inconvenience of the distances that must be travelled in a modern urban Indonesian day. Possibly too, the demands of working hours of urban jobs do not allow time for home preparation and recent migrants may not have a full household complement of cooking equipment. Finally, some people cannot afford to buy the food, fuel and utensils necessary to prepare a meal. For them, purchasing cheap, ready-to-eat snacks is the only alternative.

Given the popularity of snacking and the necessity of getting meals on the street, streetfood vending is and will be one of the informal sector's major economic institutions. Yet relatively little is known about streetfood vending. How many vendors are there? Who are they? Where do they sell?

What is their role in the urban economy? What contributions do they make to a livelihood for the poor, to household diets and family nutrition? How safe are these foods?

To provide basic information to begin addressing these questions, the Streetfoods Project was undertaken in six countries, including Indonesia. This report describes the basic information obtained in the Indonesian Project. Although data was collected in only one medium-sized city, Bogor, the study was intensive, involving a census of vendors, detailed interviews of vendors and customers, a household diet survey and participant observation case studies. Hopefully, this detail and depth will provide substantive insight into the larger questions of the role of the informal sector in Indonesian urban development.

#### Urban Development in Indonesia

The contextual background to understanding the growth of the informal sector in Indonesia lies in the historical growth of Indonesia's cities.

Several cities in Indonesia pre-date the colonial period. Examples are all the centers of ruling sultans or "kraton". Yogyakarta, Solo and other towns in East Java and Bali represent this early urban center. The original functions of such cities are the subject of much speculation, since pre-colonial Indonesian history is highly infused with myth. Almost certainly, they were first and foremost religious and political centres with secondary economic functions. Another quite separate kind of city and the largest and most modern cities in Indonesia today are the result of colonial and pre-colonial trade. Predominantly, these cities are coastal - e.g. Jakarta, Medan, Semarang and Surabaya - and served then, as they do today, as a gathering point for exports and an entrance of imports. A few high interior cities were created specifically to serve the climatic preferences of the Dutch administrators. These are usually associated with even higher

recreation "hill stations". Examples of this second type of colonial city are Bandung, Ungarang, Magelang and Bogor.

Unlike other countries in Southeast Asia, where the capital city is primate in the sense that it is far and away the largest (and usually only) growth centre, Indonesia has five cities with a population of well over one million. They are, in order of size: Jakarta - 6,503,449; Surabaya - 2,027,913; Bandung - 1,462,637; Medan - 1,378,955 and Semarang - 1,026,671 (Official 1980 Census). The growth rate of the largest two slowed between the 1961-to-1971 and 1971-to-1980 intercensal periods, but Medan leaped to an annual growth rate of 8.88% and Semarang increased to an annual growth rate of 5.21%. The fastest annual growth rates between 1971 and 1980 were in smaller cities, such as Bogor, where annual growth rates of 10% and 12% were recorded (1980 Data Book).

These very high growth rates are fed by rural to urban migration and are probably severe undercounts, because of inadequate definitions of what is urban versus rural (ESCAP Country Report #III). By several indices, life in urban areas is more conducive to well-being than life in the rural areas. Child mortality is lower and expectation of life higher in urban areas. Expenditure for consumption is consistently higher in cities. Health care is more available, indicated by numbers of hospital beds, doctors and health practitioners. Urban areas have an under-representation of dependent children and the elderly, which indicates that they are receivers of young adults, typically those most inclined to move.

Yet, a move from a rural to an urban place does not necessarily mean a move from the traditional to the modern or from the informal to the formal sectors. Supas Data 1976 indicated that 85% of rural labor was engaged in cottage industry, yet, even in urban areas, 45% of the labor force was similarly employed.

By comparison with the rest of Southeast Asia, the rest of the third world and even the entire world, Indonesia has a low rate of urbanisation. Part of this discrepancy may be explained by artificial urban boundaries, but Hugo feels that Indonesians have substituted circular migration for permanent migration. Thus, they maintain their families in rural areas and, for census purposes, are counted there, despite their working largely in the city.

Regarding the contrasts in economic activity between migrants and non-migrants, the 1971 Census records some striking differences. Migrants tend not to be attending school and a higher percentage of female migrants are in the housewife category, evidence which is used to conclude that many female migrants are following or joining their husbands. Residents tend to be "own-account" workers, whereas migrants tend to be employees. A striking pattern is the pattern of migrants employed in the "services" category (64% of males and 84% of females). Hugo associates this with "ease" of entry into these occupations (becak driver, vendor, shoe repairer, haircutter) as opposed to manufacturing.

#### Indonesia's Labor Market and the Informal Sector

The development of Indonesia's labor market, with its low rate of unemployment but high underemployment, is closely related to the growth of the informal sector. To explain this relationship, we must look closely at recent trends in Indonesia's labor situation. Between 1971 and 1980, Indonesia's labor force grew at a rate of 2.6% per year, but, in the most recent period, 1980 to 1984, it expanded by 3.2% per annum (World Bank 1981; World Bank 1983). Two million new persons a year entered the labor market between 1980 and 1984. Moreover, because of the nation's age structure, wherein 65% of the population is below the age of 24 and 31% below 10 years, 2 to 2.4 million persons a year will enter the labor force in the rest of

the 1980s. Fortunately, the Indonesian economy has been strong and employment growth has paralleled the rising labor force. From 1971 to 1980, employment grew at 3.4% per annum, a rate high enough that, in 1980, open unemployment stood at only 1.8% or 919,000 persons. But such optimistic macro statistics mask deep underlying problems.

To begin with, in the most recent period 1980-1984, employment growth has slowed considerably. Some estimates place the number of new job openings at about 1.5 million per year. When contrasted with 2 million people entering the job market, this leaves an annual shortfall of almost 500,000 jobs (World Bank 1981). Since no official statistics have yet been released for this period, these projections are based on annual growth rates and estimated employment elasticities. Yet, even as estimates, they raise serious questions regarding the present capital intensive development strategy now being pursued in Indonesia.

Another problem is that open unemployment in developing countries is almost never serious. Unemployment is normally low in a developing country because people must work to survive. The real issue is underemployment - people working only a few hours a week or working long hours for little pay. In 1976, 9.9 million people on Java alone were either unemployed or underemployed and the combined rate was 32%, representing 10.3 million people (Keadaan Angkatan Kerja di Indonesia 1961-1980).

A further element necessary to understand Indonesia's labor situation is the distinction between rural and urban employment patterns. In rural areas where 75% of the labor force works, unemployment is a mere 1.2%. Everyone finds some menial task to keep busy, whether it is weeding, washing the livestock, planting crops or making pillows. But this is not full-time employment and thus the rate of underemployment rises to 37%. In urban areas, because the menial opportunities found in rural areas are unavailable,

open unemployment is much higher. In 1980, 5% of the urban workforce was found to be jobless (World Bank 1983). From 1980 to 1984, national strategies have emphasized capital intensive and modern sector development for urban areas and open unemployment has expanded dangerously. In Jakarta for example, the open unemployment rate is estimated to range between 6.5% and 13% (World Bank 1981; Jakarta Post - April 23, 1984). Even with these high rates, the level of underemployment in cities is still officially placed at 18%.

The development of the informal sector relates closely to the problem of underemployment and recent trends in the urban labor market. Papanek underscores this point with his examination of the urban poor in Jakarta in 1972. His study was one of the earliest attempts to understand the survival strategies of what later came to be known in the literature as the informal sector. At that time, the informal sector was extremely varied, consisting of petty sidewalk traders, cigarette butt collectors, pedicab drivers, people doing odd jobs and prostitutes. The poorest of the poor spent most of their income on food. Papanek does not comment on where they could get the cheapest food, but of course our speculation is that streetfoods play a key role here. The common link among all the informal occupations, however, was that they were a direct result of the situation of underemployment. As urban residents had to do something to survive; since there were no formal sector jobs available, they had to turn to the informal sector.

#### Studies of the Informal Sector in Indonesia

This brings us to the actual studies of the informal sector. Let us begin with a summary of a Dutch researcher, Dijk (1982), who examined a small sample in Salatiga, Central Java. He compares the informal sector here with those he had previously studied in Dakar and Ouagadougou (West Africa). He found the informal sector of Salatiga surprisingly well educated

Of a sample of 20, several had high school educations and one had some college education. Only four were illiterate. Most were without licences and legal status. Investments and monthly profits ranged enormously. One food hawker reported Rp. 5,850 income per month, a tempe maker and krupuk (chip) maker Rp. 18,000 and 30,000 monthly respectively, while a restaurant reported Rp. 100,000 profit in a month. Their enterprises were barely distinct from the household and all labor was unpaid family labor; a constraint on expansion is the reluctance to move beyond family labor. He summarized his findings as follows:

1. Productivity in this sector is very low
2. Many enterprises are illegal in the sense that they do not have special licences or pay taxes
3. The sector is an important one for women
4. It provides a survival niche for people who, according to their job history, have often tried several other occupations
5. Most entrepreneurs carry out other (economic) activities as well
6. Relations with adjacent villages are quite developed; people may live there or the villages may supply raw material or finished products to the city, while also part of the income of these villages is spent in the city.

Another study of the informal sector focuses on garbage pickers in Bandung and smaller surrounding cities. These studies (1981; 1982) reveal the organisation of an informal sector business about which very little is known. Formerly, the city of Bandung employed only 28 people to carry away the refuse of a population of 1.5 million. This seems illogical, but the studies reveal that there are whole squatter communities in Bandung whose business it is to collect and categorize for resale various kinds of recyclable garbage: plastic, glass, paper, etc.. Despite this valuable

service, their activities are neither licenced nor sanctioned by the city government and the very existence of their settlement is currently in doubt. The real beneficiaries of the system, as it exists, are the few middlemen who buy up the different categories of garbage for re-use. The papers are an original contribution to the understanding of this little understood part of the informal sector.

A 1977 study of the informal sector of Bandung (Hidayat) included a questionnaire survey of 1,000 enterprises of the informal sector. Five kinds of enterprises were singled out for study: manufacturing, construction, transportation, trade and services. He found the construction trade the most lucrative, followed by transport and manufacturing, with trade and services at the bottom. Rather than a gradual advance of workers out of the informal sector as some have suggested, he found considerable "two-way traffic" between the two sectors.

An important survey of hawking in Asia was conducted under the direction of McGee and Yeung (1977). They standardised definitions of hawkers and used a standard questionnaire. In Indonesia, Jakarta and Bandung were studied. They estimated a total of 50,000 hawker units in Jakarta and another 10,024 in Bandung at the time of the survey in 1973. Since many hawker units employed more than one seller, the number of hawkers approached 100,000 in Jakarta and 20,048 in Bandung. Because of the difficulty of enumerating mobile hawkers, the researchers decided to study only fixed concentrations of vendors, even though this ensured that important aspects of hawking in Indonesia would not be studied. One of the more interesting findings was that hawkers lived in the cities themselves; only 3% of the hawkers in Jakarta and 1% in Bandung lived outside the city. However, 31% and 20% respectively had moved to the city within the last three years. Only in the Philippines did women predominate or equal the number of male sellers.

Two articles, different in tone, reflect conflicting attitudes towards street vendors. Roosman documents the prevalence of rural to urban migration and the growing number that turn to street vending. He clearly expresses the elite and city government official view that street vendors are a nuisance. Official contact with them has been either through tax collectors or police raids and he notes that "discipline and abiding by the law are not virtues of the informal sector". He clearly belongs to the school of thought that assumes that the informal sector can and should be eliminated with development. A contrasting view is presented by Jellinik (1976) in her case study of Ibu Bud, a seller of complete meals at night in a prohibited district of Jakarta. Jellinik documents the police harrassment, but with a sympathetic eye. She describes Ibu Bud as a successful businesswoman, because she knows how to balance business acumen with information about the next police raid. Many of her best customers are the police themselves.

A final study by Peluso (1981) gives the clearest and most detailed depiction of the lives of Javanese vendors. Since the study combined a small survey with participant observation, a clear picture emerges of the way women manage their professional lives as vendors with their domestic responsibilities. Women deliberately choose jobs which are more or less demanding, depending on the ages of their children and the time they can spend away from home. Two of Peluso's seven categories of women vendors involve prepared foods. Their returns per hour are the lowest of all categories, but the occupation requires the lowest working capital. The vendors frequently change location of work when their children are young, but they do not reduce the number of work hours, indicating that their income is a family necessity. This is not surprising, since the women from villages outside Yogyakarta, where landlessness approaches 65% of all households and where recent advances in agricultural technology has further

reduced women's work opportunities (Peluso, 1981).

It is a major concern of the Streetfoods Project to discover whether foods vended on the street in the developing world are merely "snacks", unnecessary or even deleterious additions to the meals cooked at home or important additions to the urban diet. But, to understand the contribution of streetfoods in Indonesia, we have first to understand a pattern of food consumption very different than that in the Western world.

#### Food Pattern and Nutrition Levels in Indonesia

Food Supply: For most of the people in the archipelago, the ideal diet is a large plate of steamed rice accompanied by small helpings of curried vegetables and processed soy-protein three times a day. Indonesia is the home of several fermented legume cakes, the most famous of which is "tempe" made from soybeans, but local areas have, in addition, fermented cakes of kidney beans, black peas and leucaena glauca. West Java's own speciality is the fermented groundnut cake. The extent to which this ideal is realised is reflected in the statistics based on a 1976 national food balance sheet (Tekon and Suwardi, 1982). According to their calculations, rice constituted 54% of the calorie value of food available within the country. Another 27% of calories came from other starchy staple substitutes (tubers, corn, sugar), leaving only 18% of the diet from fruits, vegetables and animal products.

Most of the protein in the diet is of vegetable origin. Total average animal protein increased from only 9.9 grams per capita per day in 1970 to 10.2 grams in 1976. In fact, per capita protein consumption from animal and vegetable sources on Java decreased in this same time period (Tekon and Suwardi, 1982 - based on several SUSENAS surveys).

Most of the food in Indonesia is produced with labor intensive techniques. Typically, land is plowed with a water buffalo and rice is harvested by sickle. This is not to say that agricultural technology has

not changed drastically in the last 20 years. In a series of programs to revolutionise rice production, the Indonesian Government has introduced new rice strains, fertilisers, pesticides, agriculture extension programs and credit programs. One result was a 4.5% increase in rice production between 1979 and 1983 (Mubgarto, 1982 - p.108). Another, which we will discuss later, was the elimination of women's jobs such as the traditional harvesting of rice by hand razor (ani-ani) and, almost simultaneously, the replacement of hand-pounded hulling of rice with kerosene-powered mills.

In early national plans, the government had aimed for "rice self-sufficiency", but, as the projection levels rose, so did the population and per capita demand. Despite production successes in the early 1980s, Indonesia is still the world's largest rice importer. The most recent five-year plans (Repelita III and IV) have made explicit the national goal of diversifying the diet for nutritional and foreign exchange advantage.

Consumption Pattern: National per capita calorie intakes based on the 1976 SUSENAS Household Consumption Survey (1979) were marginally adequate, but disaggregation by area or expenditure group reveals starkly how unequal consumption levels are between provinces and among certain groups. West Java had the highest calorie and protein almost reaching suggested intakes. On the same island in Yogyakarta province, intakes were lowest for both categories, with only 1,423 calories and 25.6 grams of protein per capita per day.

The cause of these low intakes is low purchasing power. In the 1980 National Consumption Survey, rural residents spent on average 74% of their total expenditures for food, while urban residents spent 60%. Although each of these figures represents four percentage points diminution since the 1976 survey, most household incomes leave very little after food purchases for life's other necessities, such as medicines, clothing, soap, fuel, etc.

(Biro Pusat Statistic, 1982).

Nutrition Profile: The narrow varietal base of the diet and the limited capacity of the poorer 70% of the population to supply themselves with even adequate calorie intakes produces a spectrum of nutritional deficiency diseases common in the third world. In Indonesia, the most common are goiter, generally believed to be caused by iodine deficiency, xerophthalmia, a blindness caused by severe Vitamin A deficiency, anemia caused by iron shortage and protein-energy malnutrition. On a basis of spot surveys, each is believed to have high prevalence over the archipelago.

Malnutrition is a pervasive problem in Indonesia. Small body size, for example, is taken for granted. Children's growth rates and achieved adult heights are commonly used as indices of nutritional adequacy. Rose and Gyorgy (1970) observed that the contemporary growth curve of Javanese males is comparable to that in Japan at the turn of the century. Of course, with improved diets after World War II, Japanese growth patterns and achieved height have changed dramatically. It is obvious, too, that off Java, where protein levels are more adequate, achieved body size is larger than on Java.

Another directly measurable indicator of malnutrition is anemia or low red blood cell count. In spot surveys, 40% of male manual workers have been found to be anemic (Abunain, 1979). This figure is telling, because iron-deficiency anemia in males is most rare in the developed world. Usually, it is women (whose per capita iron needs are 50% greater than men) who suffer from this.

A nation-wide survey for nutritional blindness conducted in 1977 found 3.2 to 9.6 cases of active corneal disease resulting from Vitamin A deficiency per 10,000 throughout the archipelago. The author estimates that over 800,000 new cases of Vitamin A-related eye disease develop each year in Indonesia. Most are pre-school children and many will become

permanently blinded (Sommer, 1982).

Infants and children are particularly susceptible to the irremediable damage caused by insufficient calories, protein, Vitamin A and iodine, since their needs per unit of body weight are so much higher than adults' needs.

Research Site: Bogor

The choice of Bogor for the research was a compromise between wanting to study an Indonesian city with an abundance of streetfoods (which would have dictated one of the five cities over a million in population) and a city which could adequately be studied in its entirety during the limited time of the Streetfoods Project. Bogor is a West Javanese city of 250,000 with a lively streetfoods scene. It is large enough and complex enough in its functions to partake of most of the attributes of the fully developed streetfoods complex in large Javanese cities.

Bogor's location 50 km from Jakarta (see Figure 1.1) and in the middle of the Jakarta-Bandung industrial belt of the nation make the city a major node through which primary products travel to Jakarta and finished goods are shipped to West Java. Bogor also serves as residence for many nearby factory workers and executives, as well as suburban home for a rapidly growing number of Jakarta employees. No fewer than 25 round trips are made by the commuter train to Jakarta each day. Additionally, convenient car access between Jakarta and Bogor is provided by the only express toll road in the country. These factors combine to ensure that Bogor shares directly in the economic benefits of national modernisation. This of course means that Bogor has a healthy and dynamic cash economy that acts as a magnet, drawing in many rural migrants. In fact, suburbs of migrants (lured by hope of employment and wage labor have overflowed official city boundaries. The city planning office is preparing to enlarge the boundary area to include about 100,000 residents who use Bogor's markets, schools and roads and are Bogor residents

in every sense, except the official census count.

Bogor is also a center of agricultural research and attracts students from all over the archipelago, as well as many foreign agricultural researchers. Approximately 40% of Bogor's population are students ranging from elementary to college. Finally, Bogor is a popular tourist site, well known for its pleasant climate and for the largest botanical garden in Southeast Asia.

These characteristics - wealthy suburb of Jakarta, center for learning, busy transportation node and central location in the industrial belt - make Bogor a thriving market for vending ready-to-eat foods. Students are a reliable group of consumers, with their high metabolisms and ready cash. Drivers and their transported passengers (rail or bus) are a pool of customers with predictable locations and needs ... and there is a large population of well-to-do consumers who can afford to impulsively buy a variety of prepared foods.

#### Functional Areas of Bogor

The Dutch colonial administrators used Bogor as a cool retreat from the port of Jakarta and operated it as an important administrative center for almost 400 years. The Bogor of today is both gifted and limited by the city form bequeathed from the colonial past. A brief description of the city follows as an introduction to the policy debates on the proper place of street vendors in the urban system.

In the center of the town is a huge botanical garden, dedicated by Raffles in his brief tour in Indonesia. The garden is well maintained and is the central attraction for both domestic and foreign tourists. Bordering the garden are virtually all the important buildings in the city, many dating back to the colonial period and now used for city government offices, university buildings and banks. Except for one or two of the new buildings

in this government and business circle, Bogor is a single-story city (see Figure 1.2).

Overall, the residential pattern is divided into two types: One is the densely-packed neighborhoods of small houses with no yards or vegetation. (Their arrangement suggests the houses were just added one after another, with no object other than to fit in as many as possible into a small space.) Paths and alleyways were later added. As a result, huge areas of Bogor west and south of the garden are accessible only by walking through a maze of concrete alleyways (see grey-edged areas of Figure 1.2). The other type is characterised by planned roads and most housing having a road-front address. The oldest of these "planned" neighborhoods predates World War II and is occupied by middle- or upper-class Indonesian families. Even in the latter, there is almost no distance left between houses, thus, although they are less densely populated than the unplanned neighborhoods, their resemblance to Western city suburbs is illusory. Planned areas in the north and southeast are still under construction, as are neighborhoods outside the city boundary.

Partially because the unplanned residential areas were built first, there are very few streets in Bogor. All roads lead to the botanical garden and traffic is forced to circle it in a perpetual traffic jam. In recent years, the original horse-cart transportation has found increasing competition from the uncontrolled proliferation of pedi-cabs, bemos with three wheels and Daihatsu trucks as public transport for people and produce.

The official 23,413 registered motorised vehicles (Kotamadya Bogor, 1981) is no doubt a severe undercount of the traffic burden in Bogor. The mix of traffic ranges from heavy trucks bearing sand or cement to distant construction sites to wirey men peddling vendorwomen home from markets with their baskets of produce.

There is a distinct association of transportation nodes and the major fresh produce markets in Bogor. Figure 1.3 shows that two of these major markets are directly across the street from the botanical garden and the third is only slightly removed. These three supply the ten smaller markets and thousands of neighborhood stores throughout Bogor and have the lowest unit prices. They are major destinations for large numbers of people on any single day, most arriving by one or another mode of public transport. The Chinese shops line two major business strips leading away from the markets and of course all these areas are filled with petty entrepreneurs, waiting to repair your shoes, carve a stamp, patch an inner tube, sell used books, children's clothes and all manner of food and drink. Their tables and equipment crowd the sidewalks and roads. Pedestrians must walk in the streets with the jumble of traffic and can sometimes only with difficulty enter the formal stores.

Because of this congestion and inconvenience, vendors in Indonesia have become the center of public controversy. It has only been in the past two years, however, that attempts have been made in Bogor to regulate or discourage these vendors.

#### Definitions Used in the Study

A streetfood enterprise was defined as an operation that:

1. Sells food or drink that can be and is intended to be consumed on the spot and
2. Consists of an operating establishment of less than four walls.

This definition held constant across the four-country study. In Indonesia, streetfoods establishments were divided again into permanent and nonpermanent. The latter consisted of a large category of very simple establishments, ranging from women who sit with a covered basket of chips and puddings in front of a school house during recess to four-pole bamboo structures covered

with plastic. These latter structures usually are left from day to day at a single location, but they were grouped into semi-permanent on the basis that they could be and have been broken down and moved in about 15 minutes during official "street sweeping" operations. Also included under non-permanent were the truly ambulatory push-carts, shoulder-pole operations and women carrying a basket through neighborhoods or marketplaces. "Permanent" establishments include market stalls, very simple plywood structures and the rice kitchens or salad kitchens operating out of a woman's front room or on a porch.

Each streetfood enterprise was thus counted and noted as being permanent or nonpermanent. The enterprise was then categorized as one of the following:

I. Fruit: These enterprises sell raw fruit and vegetables (some of it cut or even more rarely packaged) that can be, and often is, eaten right on the street. Included were oranges, apples, pineapple slices and yam beat root.

II. Packaged Food Products:

(a) Neighborhood Stores - The simplest store that is still within a building is the neighborhood necessity store found generally in residential areas. It operates out of the front window or the garage of the household, providing dried goods. Usually, there are varieties of freshly prepared snacks and side-dishes, cut and uncut fruit, spiced noodles in a banana leaf, pickles placed there by local housewives who then receive a portion of the proceeds. Factory-produced chips/sweets have just made their appearance in these neighborhood stores, but their high price limits the customer to the wealthy.

(b) Packaged Food Stall - This category included free-standing stalls about the size of a telephone booth, but ranging down a tray. They are found on every corner, at every theater and bus station selling cigarettes, envelopes and a variety of packaged chips, cakes, dried figs and even fresh

bread. These products are not packaged in factories, but by simple household industries. Stalls were only counted if they sold food.

### III. Processed Ready-to-Eat Foods:

(a) Refreshment Parlor - This establishment ranges from an overturned box to a stall. What distinguishes it is the narrow line of foods sold, i.e. only a drink and a snack. It usually has simple bench accommodation for consumption of purchases on the spot.

(b) Simple Rice Meals - These establishments are distinguished by serving rice and one or more side dishes or sauces. In its simplest form, unique to West Java, are the "ketupat" sellers - rice steamed in woven bamboo squares, served with soybean curd and spicy peanut sauce. Often, however, the side dishes range up to 20 in variety to accompany the rice.

(c) Prepared Food Stall - This type of establishment serves one or at most two types of snack. No rice, no plate, no drink and usually no chair is provided for the customer. The stalls were recorded according to the following seven categories:

1. Meat, Eggs, Fish: These are the cooked meat sales, including sate, barbequed and baked chicken, omelettes and crab and shrimp tables.
2. Fried Snacks: Every stand in this category sells a starchy snack that is fried, i.e. fried bananas, fried tubers and fried rolls.
3. Noodle Soups: Virtually all of this category are ambulatory sellers of one or another style of noodle soup. This food is so popular, it was considered worthy of a category.
4. Non-Fried High-Carbohydrate Snacks: This type of establishment sells one or more of a variety of non-fried snack such as fermented rice or cassava, steamed buns and steamed corn.
5. Salads, Pickles and Preserved Fruits
6. Legumes: Peanuts, mung beans and soybean products are widely used

as the basis for snacks, i.e. mung bean porridge, fried tempe, mung bean sprout stew, etc..

7. Drinks - This category includes the traditional drinks of jamu (herbal tonics), sugarcane juice, coconut milk with pudding and mixed fruit with shaved ice, but also the more recent ice-pops and bottled Fanta. Products here are high in liquid, color and sugar.

#### Research Methods

In order to obtain a thorough picture of the streetfood trade in Bogor, the principal investigator combined macro and micro approaches in the research design. The following four different techniques were used to collect data:

1. A census of food vendors within Bogor's city limits,
2. a random survey which included interviews with 235 streetfood vendors and 470 customers,
3. Participant observation case studies of 22 vendors and
4. a household diet survey of 125 families.

The census was conducted from July to August, 1983. Research assistants counted all prepared-food establishments in Bogor's three major markets, ten minor markets and two major business strips. These areas were counted both morning and evening because it was discovered that most nonpermanent vendors worked only one shift, either an early morning to mid-afternoon or an afternoon to late evening shift. If a vendor happened to work the whole time, he was counted only once. Research assistants were also put in stationary positions for several hours to check the circulation of ambulatory vendors and ensure they were not recounted. Because the neighborhoods were too extensive and official permission to count all areas was too difficult to obtain, the research team conducted a count of neighborhood vendors based on a cluster sample. Twenty percent of all neighborhoods were randomly

Sample Research Areas in Bogor

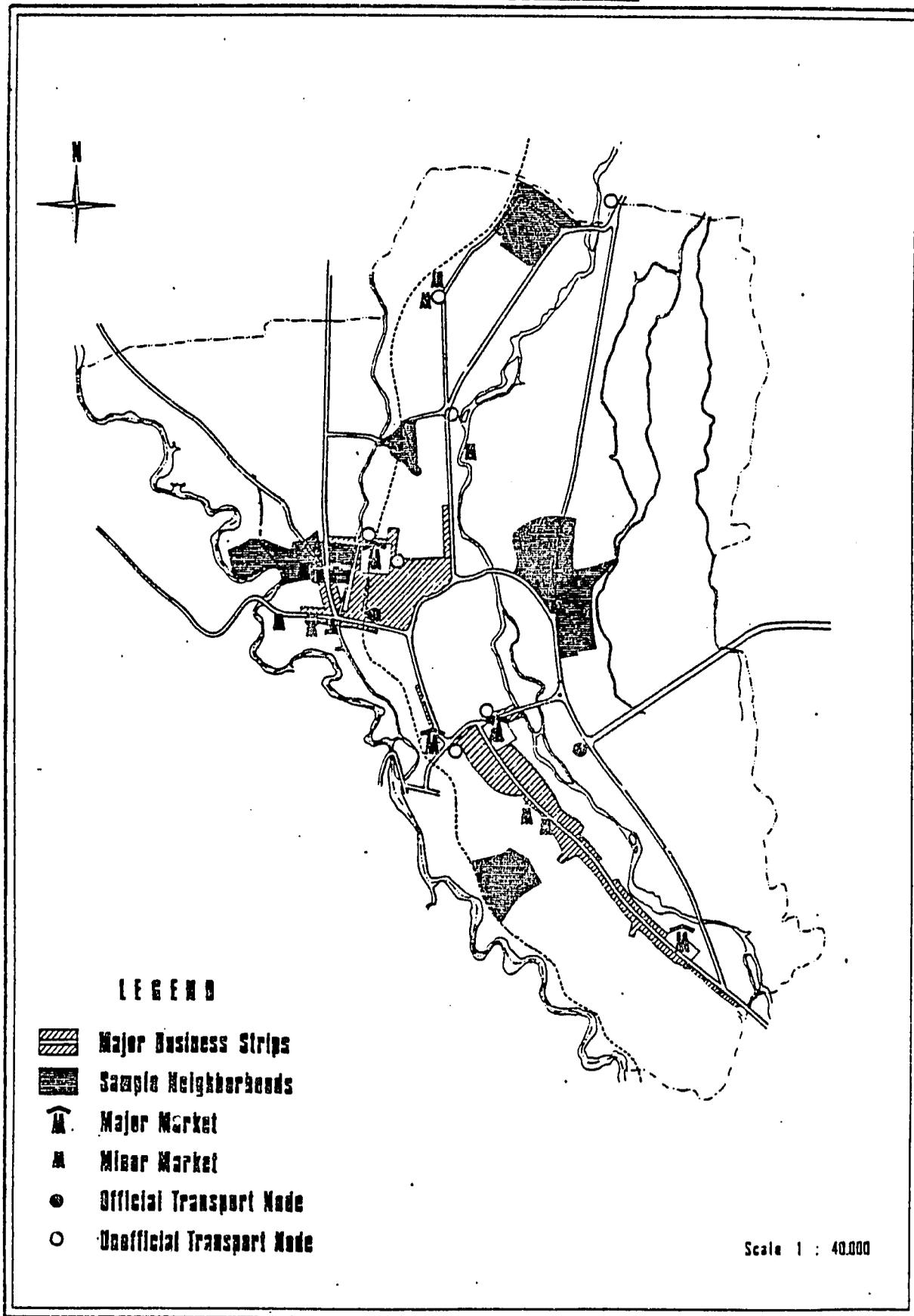


Figure 1.3

chosen. From these neighborhoods, a 20% sample of districts was selected and all streetfood vendors in these districts were enumerated, using the same method as in the markets. Figure 1.3 illustrates the areas of the census.

The research team then interviewed a total of 235 vendors, using an 80 item questionnaire. Because many vendors were ambulatory, a totally random sample was not possible. However, every attempt was made to ensure that all vendors had an equal chance of falling into the sample. A random number was selected to begin the first interview and then an interval of 18 was counted between interviews. Ambulatories were also included in counting the interval. The first two customers of each selected vendor were also interviewed using a 20 item questionnaire.

Twenty-two case studies were completed, using an intensive open-ended technique. Return visits and several hours of observation were spent with each vendor, but it was finally decided to follow only five vendors over the course of six months. These five case studies are described in Appendix 1 and provide an indepth view of a vendor life and give some insight about their role in the urban marketing chain.

The household diet survey employed a novel instrument to improve upon the traditional diet survey questionnaire. Instead of simply using the normal recall method of asking how much was eaten by the family in the past week, the researchers also requested the households to record all prepared food purchases for two days. The researchers then picked up the questionnaire on the evening of the second day. In this way, the project obtained both diet recall data for the entire week and recorded data for two days. A total of 126 households randomly selected participated in the survey. The interviews were conducted in one wealthy Bogor neighborhood and one poor one.

## CHAPTER 2. VENDORS AND THEIR ENTERPRISES

This chapter will attempt to answer basic questions on the extent and variety of streetfoods in Bogor, how food vending fits the occupational structure of Bogor, who the vendors are, where they came from, the informal rules by which they operate their business, the size of their profits and how streetfood enterprises change over the annual round and through time. For in-depth descriptions of firms engaged in selling five of the most important streetfoods, the reader is encouraged to read Appendix I.

### Streetfood Vendors in the Bogor Labor Market

Accurate data on labor markets and income sources is notoriously difficult to obtain in developing countries, and Indonesia is no exception. Of Bogor's population of 250,000, only 59,705 were recorded as "working" by the Village Potential Study of 1982. This most recent data is likely to be an undercount in categories other than civil and military service, but even here, there are discrepancies between the 1982 study and the national census done the year before. A glance at Table 2.1 comparing the two data sets gives an indication of what is known about the opportunities for work in Bogor. The category of simple prepared food vending is not broken out by either study. "Streetside sales" and "ambulatory sales" from the census should include prepared food vendors, but there is reason to believe that many who sell in Bogor have been missed.

Based upon the census in August, 1983, there were 17,800 streetfood enterprises in Bogor or one for every 16 members of the official population. Food sellers may predominate in the informal sector, but based on the admittedly impresionistic result of a 14 month field study of Bogor, fully half of the informal sector enterprises are selling other goods and services. Thus, the official 1981 count of informal sector sellers at 8,700 must be

Table 2.1. Occupational Structure in Bogor From Two Sources

	<u>Census, 1981</u>	<u>Village Potential, 1982</u>
Farming	-	867 ( 1.5%)
Home Industry	-	897 ( 1.5%)
Heavy Industry	-	427 ( .5%)
Sales (Total)	20,453 (28.0%)	16,463 (28.0%)
Stores	11,730	
Streetside Sales	5,032	
Ambulatory Sales	3,641	
Civil Service/ Military	18,941 (26.0%)	17,552 (30.0%)
Unskilled/Semi-Skilled	25,044 (35.0%)	17,878 (30.0%)
Factory Labor	15,000	
Construction	9,125	
Loading, etc.	846	
Transport	4,083 ( 5.6%)	
Retired Civil Service/ Military	3,739 ( 5.1%)	2,740 ( 4.5%)
Other	-	2,881 ( 5.0%)
Totals	<u>72,260 (99.7%)</u>	<u>59,705 (100%)</u>

an undercount by a value of four.

### Diversity of Streetfood Vendors

The popularity of the various types of streetfoods can be seen in Table 2.2, simplified from the census categories. These groupings do not illustrate the true richness and variety of foods sold, as there were over 200 different kinds of foods available for immediate consumption (see Appendix II).

Table 2.2. Order of Popularity of Streetfood Firms from Census

<u>Type of Vendor</u>	<u>% of Census</u>	<u>Number</u>
Drinks	20	3,553
Mixed Rice Meals	17	3,077
Noodle Soups	12	2,105
Rolls, Rice Cake	11	1,895
Fruit, Salad	10	1,936
Packaged Food Stall	8	1,425
Snack and Drink	5	775
Fried Snacks	2	344
Miscellaneous	15	2,644

Both cold and hot drinks make up the most popular type of food vending establishment. These are vital in the public "working" areas of the city, where Daihatsu drivers, other vendors and shoppers are away from home in the heat for hours and badly need to replace liquids in the tropical heat. After drinks, hot noodle soups, somewhat surprisingly, are the single most popular food. Upon reflection, their role in supplying salts, carbohydrates and producing a healthy and cooling sweat makes their popularity understandable. Mixed rice meals at 17% of the enterprises includes the simple ambulatory rice and sauce seller, but ranges up to the complete "Chinese restaurant". The latter fell into our survey because they are temporary structures rebuilt every evening in the parking lot of a small market and disappearing before the next morning market. Wheat rolls, rice cakes and puddings are combined to represent 11%. These are mostly single

man ambulatory carts or baskets, providing a mid-morning snack. Simple edible fruit made up 9% of the total. Packaged food stalls, which seem so predominant because of their locations on corners, comprised only 6%, refreshment parlors 5% and fried snacks only 3%.

Of the over 200 foods sold, five were chosen for special study. These were deemed to be important in terms of number and nutrition and additionally they provided an important source of income for women. These five foods are:

1. Meals. Defined minimally as rice and a side-dish. These enterprises were very popular with both women and men as proprietors.
2. Jamu are traditional herbal tonics sold by women (mostly ambulatory) and men (from stationary tables or stalls in the evening). All vendors of jamu are migrants from Central Java.
3. Fried Snacks. This category consists of a starchy product, wheat-based or tuber-based, spiced and deep fried. Both men and women are proprietors, but women were emphasized in this study.
4. Salads and Pickles. These enterprises are strongly sex-typed, with men selling fruit salads and women selling the blanched vegetable salads. Women were emphasized in this study.
5. Noodle Soup. As the single most popular food in Bogor, this was chosen for study, despite the fact that is rarely sold by women. Noodle soup vendors are all migrants from Central Java.

#### Personal Characteristics of Vendors

Men and Women in Vending. Beyond sheer numbers and apparent industry, it is necessary to understand in a general way who this group of vendors is. Men constitute 80% of streetfood vendors in Bogor, but since one quarter of them indicated that their spouses helped in the shopping and preparation of the food, roughly 40% of total streetfood enterprises involve women. Only 20% of vendors on the street are women. These figures should not be taken

to represent the importance of women in other aspects of food preparation and selling which fell outside the streetfoods definition. Many women have informal contracts to deliver meals to offices and student rooms (a custom called "rantangan" after the characteristic stacked containers).

Alternatively, women bake or cook sweets in their home and market them via other salesmen, either at bakery outlets or itinerant salesmen. This last is referred to as "titipan". Neither of these endeavors put women on the street selling food, thus by definition, they were not included in the streetfoods census.

The streetfood situation in Bogor, West Java does not necessarily represent the importance of women in food vending in other parts of the archipelago. Differences in economy and culture produce a much higher percentage of women in petty food vending in the neighboring province of Central Java, for example.

A substantial number of the vendor homes in Bogor were involved in separate and complimentary vending operations. One quarter of the sample had spouses who worked independently at petty vending, usually of prepared foods. This pattern became more vivid for us as we did the case studies and found the cases described in Appendix I.

Women have a greater tendency to own their equipment than men and to work seven days a week. As a group, women are also less mobile and, consequently, less visible on the street and less often subject to taxes. Table 2.3 shows the breakdown for men and women vendors between permanent and nonpermanent food vending operations. All fell within the definition of a streetfood enterprise, but the nonpermanent were either truly ambulatory or could be broken down and moved in a short time.

Table 2.3. Sex of Food Vendor by Type of Firm

<u>Sex</u>	<u>Permanent</u>	<u>Nonpermanent</u>
Male	9%	91%
Female	28%	72%

Education and Previous Employment. In matters of education and training women and men did not substantially differ. Eighty percent had a sixth grade education or less and between 10 and 13% had vocational training, such as typing, sewing or language training which was not being utilized in their current job. However, men and women differ in the previous work experience they reported. Although 59% of women vendors claimed no experience beyond the normal activities of a housewife, these marketing and processing skills are of course useful background for food vending. Fewer women than men had previous sales experience (see Table 2.4):

Table 2.4. Previous Employment of Food Vendors

<u>Employment</u>	<u>Male</u>	<u>Female</u>
None/Housewife	18%	59%
Farming	25%	9%
Sales	33%	17%
Other	24%	15%

Vendors are rather poorly educated and feel they have few skills or not enough capital for other jobs. When we asked them what they would prefer to be doing, they often wished to be in another line of work. One porridge seller grinned and said he'd like to own a car repair business. One husband and wife would like to be back in selling textiles, but it takes too much investment, so they continue to sell fritters and iced drinks. Although their children inevitably hang around the stalls and help out in certain aspects of the business, they do not want their children to have to vend food. The hours are too long and the status is too low, they complain. Most vendors are making great efforts to educate their children far beyond

themselves. They are counting on the Indonesian economy to provide a different kind of job opportunity for their educated children.

Vendors Areas of Origin. Migration trends in Indonesia are reflected in the "area of origin" stated by the Bogor vendors. Forty-five percent are natives of Bogor or the surrounding county (Kabupaten). Another 33% have moved from other areas of West Java to Bogor. Only the remaining 22% would be considered true "migrants" by any recent census, since the official definition hinges on having changed provinces. These latter are predominantly from East and Central Java, where population pressures of over 750 per square kilometer generate considerable spontaneous and government-sponsored migration. Only 3% of all vendors had originally come from outside Java (see Table 2.3). This is an undercount, as Madura, an island that sends many barbequed meat and soup sellers to Bogor, was categorised (as is the local custom) with East Java.

Table 2.5. Area of Origin of Vendors

Bogor City	23%	Near Bogor	45% Local
Bogor Kabupaten	22%		
West Java Large City	5%	From West Java	55% Migrants
West Java Other	28%		
East and Central Java	19%		
Outside Java	3%	"True Migrants"	

Despite the Indonesian census definition requiring that migrants cross provincial boundaries, clearly up to 55% of streetfood vendors in Bogor could legitimately be considered migrants. Thirty percent of vendors have lived in Bogor five years or less and 12% of the total arrived within the last year. This high percentage probably substantiates the claim that the informal sector of food sales is a relatively easy-entry job for many migrants.

However, behind these bare statistics are stories of individual migrants and families who search for a place where they can successfully earn a living by selling their speciality. Their personal stories are a triumph of stamina and ingenuity over difficult circumstances. For example, Pak Abdul now sells sate (skewered barbequed meat with peanut sauce) from a temporary stall in Bogor. Originally, he was a younger son from a large family on Madura, a little island north of Java. By the time he reached adulthood, the family had spent its wealth on a restaurant for the older siblings, leaving Pak Abdul no real opportunity or job on Madura. So he set off with only the family blessing and skills he learned in the restaurant trade on Madura. He began by working in a small kitchen and doing odd jobs in Surabaya City and, through perseverance and hard work, earned enough to begin a tiny ambulatory sate operation. However, fluctuations in selling were too great and so he moved to Bogor, where reportedly there was considerably more cash. Again he started as an ambulatory sate seller, carrying his small charcoal grill and supplies with him through the neighborhoods. Fortunately for Pak Abdul, Indonesia's economy was expanding rapidly in the early 1970s and middle class workers in key development areas like Bogor could afford to splurge on luxuries such as sate. There, he slowly earned money until he was able to build the temporary plastic-covered bamboo stall from which he operates today. Although his selling spot is on an empty lot which in the near future will become a luxury house, Pak Abdul is resilient and is already looking for a new site.

Attesting to the varied origins of streetfood vendors is the ethnic variety of foods they have introduced to the Bogor diet. Javanese are typically little acquainted with the islands off Java, but they are well acquainted with a number of exotic dishes from there. They have a sort of taste map of the archipelago via its migrant vendors. This sensory map has

been imaginatively depicted on a slight volume of Indonesian recipes purchased in Yogyakarta in 1977 "Resep Masakan Daerah". The map (see Figure 2.1) indicates that breadfruit and egg stew originated in Yogyakarta and spicy beef soup in Banjarmasin, Kalimantan. Padang is a byword for firey hot curried beef and Sulawesi is known for fish baked in a banana leaf. All of these and many more are available in Bogor streetfoods, sold inevitably by someone from the original area.

### Characteristics of Street Food Enterprises

Type and Sale of Enterprises. By definition, streetfood enterprises fell into permanent and nonpermanent categories, based on the physical plant and its duration in time. Additionally, they were typed as selling a rice meal or something else referred to here as a snack. Although this segregation of the rice meal is in line with the respect accorded to rice meals by the local culture, it is fairly clear that some of the snacks substitute for meals. For instance, chicken porridge or mung bean porridge is high in calories and protein and can easily substitute for a meal nutritionally. But an Indonesian, having just finished a large bowl of mung bean porridge, will tell you he has not eaten.

Table 2.6. Streetfoods by Permanence and Food Type

	<u>Permanent</u>	<u>Nonpermanent</u>	<u>Totals</u>
Meal	7	59	66 (28%)
Snack	22	145	167 (72%)
Total	29 (12%)	204 (88%)	233

It is clear from Table 2.6 that the very simple, low-capital entry low-overhead type of operation predominates in both the snack and meal category. Meals alone constitute 28% of the random interviews, with the large variety of snacks (including drinks) constituting the remaining 72%.

There is a slight tendency to more permanency with age, but over 40 years

Origins of Popular Foods in Indonesia

# Resep MASAKAN Daerah



Figure 2.1

of age, still only 20% are permanent. Women are more likely than men to be operating permanent enterprises but, here again, only 28% of women operate a permanent enterprise.

Locations of the Enterprises. For reasons of expediency, McGee and Yeung's three-country 1972 study focused on market areas where vendors appeared to be most concentrated. They concluded that, for the three countries, most vendors appeared to operate in the fresh produce market areas, but added parenthetically that this might be least true for Indonesian cities. Based on the streetfoods study (which takes a more in-depth look at a single city), the distribution of vendors can now be commented upon.

In Bogor too, vendors appear to cluster near markets and business strips and in front of offices and schools. The August census, however, revealed that only 9% of the total are selling in and around market areas defined liberally, since most approach roads and alleys leading to markets are lined with vending operations. Six percent sell along the sidewalks on the two major shopping streets, bringing the total in market and business areas to 15%. Fully 85% of the food vendors either sell from their house lot or windows or carry their wares through residential areas. The 15% in public areas consist of almost 2,700 wheeled carts, baskets, mats, tables or trays on the sidewalks and at formal shop entrances (see Table 2.7).

Table 2.7. Counts and Percentage of Streetfood Firms in Functional Areas of Bogor

<u>Firm Type</u>	<u>Marketplaces</u>	<u>Business Strips</u>	<u>Residential</u>
Edible Fruit	749	95	800
Rice Meal	244	184	2,650
Drinks	249	229	3,075
Snack Stand	426	540	8,525
Total	1,668 (9%)	1,048 (6%)	15,050 (85%)

The vendors in public areas do contribute to the crowding, traffic jams and difficulty of access. They are the only vendors of concern to public authorities and, not surprisingly, it is exactly these operations which pay one or more public fees. But the great preponderance of streetfood vendors can be found in residential neighborhoods where they provide fast convenient food.

Age of the Enterprise. Considering the large numbers of new laborers entering the Indonesian labor market and the suspicion that larger and larger numbers of them may be entering informal sector pursuits, such as food vending, the vendor survey data is arrayed by the decade in which the enterprise was founded. In studies at any one point in time, such as this, rates of attrition are difficult to determine. The data indicates, however, that 14% of the extant enterprises in 1984 dated from before 1970 (a few of them originated before 1960). Fully 4% began in the decade of the 1970s, when new agricultural technology reduced the number of jobs in rural areas and urban centers grew rapidly (see Table 2.8).

Table 2.8. Street Food Enterprises by Decade Founded

<u>Decade</u>	<u>Number</u>	<u>Percentage</u>
1940-1949	3	1%
1950-1959	11	5%
1960-1969	19	8%
1970-1979	103	45%
1980-1983	99	42%

Many of the enterprises begun since 1970 are migrant, whereas those begun in the 1950s and 1960s tend to be long-term residents of Bogor. The migrants had higher hopes than food vending. Often their entry was almost by chance and, like Pak Djoko who began selling curried chicken in 1977, they hoped to move on to a higher status profession. Pak Djoko had been in Bogor only a few weeks after taking the bus from Puwokero, Central Java,

when he heard that a chicken table on Veteran Street was not currently occupied. He took on the work, found that the profits were reasonable and seems mildly surprised to find himself still selling chicken. The table is a franchise outlet supplied by a large chicken farmer-supplier who owns perhaps 15 such tables in Bogor. Each morning, Pak Djoko receives a shipment of chickens. He cleans and processes them, throwing the feathers and refuse directly into the Ciliwung River which serves as both sewer for Bogor and water source for Jakarta, downstream. Many parts, such as intestines, are boiled along with the meat pieces in a curry sauce until tender. About 16.30, he and his younger brother carry the precooked chicken to the vending site and arrange the chicken in an eye-catching manner on plates.

#### Business Practices

Food Processing. Fully three quarters of the vendors interviewed invest considerable time and skill into processing and cooking the food they serve. Of the other one quarter, roughly half do no processing at all. This corresponds almost exactly to the 14% who do not own their rigs and operate as an outlet for a larger firm. It is most often men who are involved in this type of arrangement. An example is the men who pick up a push wagon from a bakery, fill it with bread and rolls and sell them in the neighborhoods. When they return from their rounds, these men can return any unsold bread and pay a set price for each roll and bun sold. They are free to charge any price they can demand from the point of view of the bakery, but of course customer pressure keeps the mark-up within narrow bounds.

Extra Workers. With rare exceptions, the owner of the firm inevitably is the person preparing the food and selling the products. On average, 46% of the firms receive some kind of assistance, usually from unpaid family members who shop at the market, chop vegetables, skewer sate or wait on customers. Only 10% of these helpers are paid any wages.

Pricing. Mark-ups from the cost to the vendor to the sale price are surprisingly high in the streetfood trades. Almost 83% of vendors admitted to mark-ups on single items of over 50% and one quarter admitted to mark-ups of over 100%. Despite the mark-ups, because the overhead costs are low, the customers can still feel that they are getting a bargain.

Unstable market prices for the raw ingredients are a problem that bothers the vendor. The Indonesian Rupiah underwent a 27% devaluation in April, 1983, meaning the vendors had recently experienced a market ripple. Most have been in operation long enough to remember a similar devaluation in 1978 and steady inflation of prices over the late 1970s and early 1980s. When asked in September, 1983 whether prices of their major ingredients had changed over the last year, 40% said they had increased, but 34% said they fluctuated up and down and it was this unpredictability that caused them difficulty. The Indonesian National Food Regulatory Board (BULOG) has, for several years, more or less successfully controlled the price of rice and, more recently, branched out to attempt to control the price of cooking oil, wheat, peanuts, etc.. But the Indonesian food market is an extremely volatile system. The rumor that civil servants' wages would be raised 15% in April, 1984 caused food prices to go up substantially in December, 1983. Every major holiday is accompanied by price hikes amounting to 300% on unregulated items, such as chilli, onions and garlic. One vendor told us she just stopped selling eggs for a few weeks during last Ramadan because the prices went so high. Table 2.9 records the answers of 233 vendors to the question, "What do you do when the cost of your major ingredients go up?"

Table 2.9. Vendor Response to Increasing Price of Ingredients

	<u>Permanent</u>	<u>Nonpermanent</u>	<u>Average</u>
Take a Loss	13%	21%	20%
Raise Price of Product	47%	31%	33%
Reduce Portions	33%	44%	1%
Reduce Overall Production	0	1%	0
Combination and Do Not Know	6%	0	3%

Eat Now/Pay Later. Although very few customers interviewed admitted "hutang" (eating now with the promise to pay later), roughly half the establishments permitted the practice. They specified that it applied only to their "langanan" (habitual customers). More permanent establishments (60%) admitted the practice than nonpermanent (44%) and several of the latter mentioned that success in the early stages of the business is hazarded by having too many debtors.

#### The Economics of Streetfood Enterprises

Income. The appearance of vendor enterprises can be very simple - a shoulder-pole device, an overturned crate in the front yard or a simple push cart. But the average daily sales of street food vendors is surprisingly high in comparison with the simplicity of the operation. The first quartile of vendors sold on an average Rp. 3,440 (\$3.44) worth of food and highest quartile averaged Rp. 26,480 per day (see Table 2.10). It should be borne in mind however that even within the income quartiles there is considerable variation, especially in the highest sales quartile. In this quartile, most entrepreneurs averaged sales of Rp. 15,000 to 20,000 per day, but the most successful vendors in this category had sales from 50,000 all the way up to Rp. 99,000. When one considers the number of vendors in Bogor, the volume of money and the amount that circulates through the hands of vendors every day is quite phenomenal.

Table 2.10. Gross Sales by Quartile

<u>Quartile</u>	<u>Sales Range</u>	<u>Average Sales</u>
First	Rp. 1,500 - 4,500	Rp. 3,440
Second	Rp. 5,000 - 8,500	Rp. 7,110
Third	Rp. 9,000 - 14,000	Rp. 10,990
Fourth	Rp. 15,000 - 99,000	Rp. 26,480

Because of such high sales, streetfood vending can be a viable means of earning a livelihood and can even be lucrative. The lowest quartile of vendors surveyed (n=235) earned net of Rp. 795 per day from vending. Although this amount is sufficient for only a bare subsistence, many of this lowest quartile are very young workers entering the job market for the first time. Since there are few job openings in the factories or in government, streetfood vending provides them an alternative to unemployment. At the other end of the spectrum, the more successful vendors earn quite a decent income. The highest quartile of vendors earned an average net income of Rp. 8,900 per day. This figure, however, is somewhat misleading, as 90% of all vendors earn less than Rp. 6,000 per day, while the top 4% net in excess of Rp. 15,000 per day. The following table (2.11) presents vendors' net income by income quartile:

Table 2.11. Average Net Income from Vending by Income Quartile

<u>Income Quartile</u>	<u>Daily Net Income</u>	<u>Estimated Weekly</u>	<u>Estimated Annual</u>
Lowest	Rp. 790	Rp. 4,740	Rp. 232,000
Second	Rp. 1,660	Rp. 9,960	Rp. 488,000
Third	Rp. 3,110	Rp. 18,660	Rp. 914,000
Fourth	Rp. 8,910	Rp. 53,460	Rp. 2,620,000

A few comments should be made on how net income of the vendors was derived and how weekly and annual income was estimated. No vendor could tell us his annual income, so each vendor was asked his daily gross income from food sales during a slow day, a high sales day and an average day.

He was then asked how many times a week he had these days, and further questioned about variation in these amounts during wet and dry seasons. From this data, we derived daily average gross sales. The same procedure was then used to determine expenses - cost of ingredients, tax, rent, replacement of equipment and hired help (almost no streetfood trader used paid help). Expenses were then subtracted from gross sales for an estimate of daily net income. Weekly and annual income was estimated by multiplying net income by the number of days worked per week and number of weeks per year. Based on these assumptions and data, we extrapolated annual net income from streetfood vending in Bogor. All vendors made a net income on the magnitude of Rp. 18 to 19 billion (U.S. \$19 to 20 million).

The distribution of male and female vendors by income quartiles is strikingly similar, with the exception of the lowest quartile. Almost one third of women vendors fall into the lowest income quartile, making an average of Rp. 795 per day. Thus, more women than men food vendors are working for the very lowest profits. On the other hand, one quarter of the women vendors fall into each of the third and fourth quartiles and, with little exception, a quarter of the vendors of both sexes fall into each income quartile (see Table 2.12).

Table 2.12. Sex of Vendor by Quartile of Net Income

	<u>Men</u>	<u>Women</u>
First Quartile (Average Rp. 795/day)	18%	30%
Second Quartile (Average Rp. 1,663/day)	26%	17%
Third Quartile (Average Rp. 3,115/day)	28%	26%
Fourth Quartile (Average Rp. 8,913/day)	27%	26%

Another way to examine the economics of vending is to look at the net

income made from selling different streetfoods. Five types of food - sate (barbequed meat), jamu (medicinal drinks), bakso (noodle soup), gorengan (fried snacks) and gado-gado (salad) - were so examined. The disparity of income among these foods is not particularly large, except in the case of sate, from which extremely high average incomes were derived (see Table 2.13). This reflects not so much initially high capital costs in starting a sate enterprise, but high risk. Sate is not a staple and is considered a luxury, albeit a luxury which is quite popular. Therefore, there are considerable swings in sales and the business is extremely volatile, even on a day-to-day basis. Since no refrigeration is possible in a streetfood operation, there is a strong possibility that all unsold meat will spoil and an entire day's outlay be lost.

Table 2.13. Daily Net Income from Important Street Foods

<u>Food Type</u>	<u>Net Income</u>
Jamu	Rp. 3,600
Bakso	Rp. 2,581
Sate/Meat	Rp. 12,400
Gorengan	Rp. 2,712
Gado-gado	Rp. 3,200

There is a final question of how the income from vending is used. Vendors simply could not answer this question with any specificity and 99% said they used the money to take care of family livelihood. This is not at all a surprising answer, since vending is not a sideline or a secondary source of income. It is a full-time occupation. Fully 77% of the permanent vendors and 88% of the nonpermanent vendors said streetfood selling was their primary source of income. Moreover, when one considers that 88% of the vendors have families to support (and even those who are single have family obligations), it is clear that, from the perspective of the vendors, the beneficiaries of the streetfood trade are their families.

Regulation and Taxation. Laws governing vendors in Bogor stipulate that they cannot sell along the roadside or along green strips. This law is used to occasionally sweep the vendors away from the streets. In reality, however, Bogor is one of the few medium-sized cities in Indonesia that is tolerant of the informal sector and allows them to sell their wares. The crackdown on vendors occurs only when there is national pressure on Bogor authorities to beautify the city. In fact, many streetfood vendors comment that they have come to Bogor because here they are allowed to practice their trade. Ibu Sidik, for example, once sold fried goods in Jakarta, but was forced to leave when the police raided her informal market. She then moved to Bandung, but was once again forced to flee when the police physically dragged vendors off the street. Now she sells her goods in Bogor, right in front of an elementary school.

Bogor authorities, however, do extract taxes from the vendors, in part for leaving them alone. There are also fees for other official services, such as cleaning up the markets, guarding their wares at night and renting a place to operate. Most streetfood vendors in Bogor pay some official fee, even though they may be ambulatory, to be located in neighborhoods or occupy a small part of the sidewalk along a market. Fully 58% of the sample paid some form of tax. The amounts were generally small and over 40% of the vendors paid no tax, but still, considering the sheer number of vendors, their daily contribution is not insubstantial. Table 2.14 shows the average amount and the estimated total of taxes paid by streetfood vendors in Bogor:

Table 2.14. Taxes and Fees Paid by Streetfood Vendors in Bogor

<u>Percent of Vendors</u>	<u>Daily Average</u>	<u>Weekly Average</u>	<u>Estimated Total Weekly Taxes by All Streetfood Vendors</u>
Lowest 40%	Rp. 0	Rp. 0	Rp. 0
Next 40%	Rp. 95	Rp. 570	Rp. 3,830,000
Next 10%	Rp. 220	Rp. 1,320	Rp. 2,330,000
Top 10%	Rp. 760	Rp. 4,560	Rp. 3,510,000

Seasonality in the Streetfood Trade and Changing Patterns Over Time

Seasonality. Recent depiction of the dynamics of labor between urban and rural areas of Java is that, during peak agricultural activity (November through May), rural populations are busy, but may seek temporary or seasonal employment in urban areas during periods of low agricultural activity (June through September) (Strout, 1982). This thesis is compatible with Hugo's hypothesis that rural Javanese have substituted circular for permanent migration. Yet Prabowo reports (1980) that, of recent migrants to Bandung interviewed in the early 1970s, 26% arrived in January and February. Clearly, there is a lot to be learned about the dynamics of rural-urban labor flow.

The first (total) census of Bogor's streetfood vendors took place in July and August, 1983. Of the random sample of vendors interviewed in September, 26% admitted they were commuters whose home address was in the county surrounding Bogor, rather than in the city proper. This again would seem to confirm Hugo's hypothesis. There was no time for a second round of interviews, but, to establish some seasonal patterns, we recensed the longest major business strip that runs past two major and two minor market places and contains most of the formal storefronts in town in March, 1984. The overall vendor count was down by 5% from the previous August, perhaps because this is peak agricultural season. However, by specific food categories, the situation is much more volatile, with iced drinks down almost 5% and simple rice meals down 10%. On the other hand, fruit sales were up 49% and fried snacks up 59%. Some of this variation is understandable in a functional context. Drinks do not sell as well in Bogor's cool rainy season, whereas the March count found several more fruits in season than the August dry season count. Much of the findings simply cannot be simply explained. Another mystery is the high "loss rate" we had in relocating vendors at

their home addresses between September and January and again between January and May. In the case of three herbal drink sellers, the neighborhood monitor was clearly miffed that they had simply packed and left, neither asking permission or registering their departure. He feels that migrant vendors are an unstable neighborhood element.

Changing Patterns. It is difficult, with research such as this that represents a point in time, to understand changing food habits, as Indonesia was transformed technologically, politically and demographically. Several case study vendors had been selling for over 30 years. Ibu Enik represents three generations of an old family that sold and sells rice meals with 15 side dishes near the market and transport hub of the city. She sells less variety now than she used to and controls much less of the market now that rice stands such as hers have proliferated over the 30 years. However, the transport sector has grown too. Ibu Enik's entrees are slightly higher priced than at other stalls, but the drivers have ready cash. Pak Wawan began in 1940, selling peripatetically the uniquely Bogor dish - bean sprouts boiled in soy sauce over noodles and bean curd. He prospered so that presently he has a thriving kiosk at Bogor's major market, staffed by nephews and nieces from poorer branches of the family.

A nutrition thesis written in 1961 (Soerjanto) tells us that the Bogor Agricultural University students then snacked on streetfoods an average of three times a day, in addition to three rice meals. Their favorites, in order here, are still available in Bogor, but, in some cases, the predominance has shifted. Their preferences were: 1. sweet drinks, 2. fruit, 3. peanut and soy products, 4. indigenous cakes, 5. blanched vegetable salads, 6. noodle soup, barbequed meat, other soups and eggs, 7. mung bean gruel, and 8. milk and soybean milk.

Sweet drinks are still very popular, but milk and soy milk have all but

disappeared, except in "kopi susu". Fruit and blanched salad have declined in importance, while noodle soup, barbequed meat and cakes have increased in popularity.

Attitudes toward eating streetfoods are in constant flux too over the last 20 years. Formerly, only people in transit, e.g. drivers, passengers and students ate streetfoods. It was considered slightly improper to eat in public, but allowable if you were travelling or not esconsced in your own home (students). A small number of people still feel that way, but as they have maintained their values, the society has been changing around them. The transport system has developed exponentially over 20 years. More money is coursing through the system and more and more Javanese find they participate to a degree in a transient life - commuters who live in Bogor and work in Jakarta, students who may spend ten years in Bogor away from their home villages and even the 30% of food vendors who admitted addresses outside of Bogor.

### CHAPTER 3. THE ROLE OF STREETFOODS IN THE CITY FOOD SYSTEM

Relatively little is known about the role of prepared food in the Indonesian diet. There is only impressionistic evidence that Indonesians, especially students and young families, rely heavily on such foods for day-to-day sustenance. This impression, however, is supported by the absolute numbers of streetfood vendors found in Bogor and by the variety of ready-to-eat foods available in any Indonesian city. Further indirect evidence of the importance of ready-to-eat foods can be found in the recent growth of large commercial fast-food chains in Indonesian cities. Central Javanese fried chicken establishments, such as Sri Candi and Ayam Goreng Kalasan, which were once available only locally, have now become standard snack fare in cities ranging from Jakarta to Bandung to Bogor. Most recently, there has been an almost overnight introduction of Western competitors, primarily Kentucky Fried Chicken, which seems to build an outlet a month in major cities.

These new commercial chains are not considered a threat to streetfood vendors, since they are much more expensive and it is claimed by vendors that the new foods are not as tasty or nutritious as the traditional streetfoods. These assumptions, however, raise basic questions about the role of prepared foods in the Bogor diet. What is the functional role of streetfoods in Bogor's diet and how do they fit into the rhythm of city eating patterns? Are streetfoods a good nutritional value for the rupiah? What contribution do streetfoods make to household nutrition and consumption? Finally, how safe are these foods? In this chapter, I will begin addressing these questions.

#### The Functional Role of Streetfoods

Link in Customer Food Chain. Little is known about food marketing to

urban areas in Indonesia. From the slim evidence available (FAO, 1975: Layton, n.d. Anderson, 1980), we can conclude that the chain of middle men between producers and consumers is long. Despite the growth of a commercial food industry in recent years, most food processing is done by household industries employing less than 15 people (Sudarmadji, 1978). Households lack refrigeration and homemakers appear to shop daily for fresh produce at urban markets that are conspicuous centers of commercial activity. Like Jackson (1972), in assessing one of the more prosperous cities of Malaysia, we could conclude that urban Indonesians prefer fresh produce and are unlikely to change their allegiance to packaged and canned goods, even with economic prosperity.

Clearly, we need to explore the importance of the 17,760 prepared food vendors in food distribution in Bogor. We will first examine where, in the chain of supply, the vendors themselves secure their raw materials. Then, we will examine who their customers are, where and when customers eat streetfoods and their motives for doing so. In this way, we can begin to understand the segment of the urban food supply system that involves prepared foods.

As expected, the great majority (66%) of streetfood vendors shop for their ingredients at a large market. Only 2% buy directly from the producer. Small markets and bakeries supply a small but significant portion of the vendors. Somewhat surprisingly, over 6% of permanent vendors shop at their neighborhood store. An example of this last is a fried bean-curd salesman who has added cassava fritters to his selections. He is convinced that, if transport is considered, he could not shop at the central market any cheaper than his neighborhood store supplies him.

Of course, the spectrum of raw materials these venter operations require is broad and their solutions often unique. Proprietors of the

lucrative nightly seafood tables bypass the expensive seafood available in Bogor's markets and instead shop every morning at the wholesale markets in Jakarta. Noodle soup vendors have customary supplier kiosks in the major markets, which supply them with ready-made "meat"balls, noodles and their sauces, all the products of local home industries. The blanched salad vendors, on the other hand, buy their peanuts raw from one market vendor and their fresh vegetables from several others, but even in this latter case, the fried chips they crumble on top of the salad as a finishing touch are the product of a home industry, sold through a pasar kiosk. Table 3.1 illustrates the vendors' shopping patterns.

Customer Motives and Lifestyle. Now we turn to the customers' habits and motivations. Two customers for each of the randomly selected vendors was in turn interviewed, making a total of 470 customer interviews. Almost 80% of the purchases were for their own immediate consumption. Only 15% of the customers intended to take the food home for family consumption. The customers' incomes spanned the full range of Bogor households, from the pedicab driver who sleeps in his rig to the families making Rp. 1,000,000 per month. In hopes of discovering from the customers' point of view what constituted an attractive street vending operation, we asked their motive for picking this particular vendor enterprise. However (see Table 3.2), only about 38% of them could point out some attribute of the enterprise that had attracted them, such as better taste, sanitation, etc.. About 14% of the customers were "langanan" or regulars and always shop at this vendor. Surprisingly important from the customers' point of view was position and timing of the vendor just where and when he, the customer, felt hungry or thirsty. Fully 34% of the customers could give no reason for picking the vendor other than that they were hungry.

Table 3.1. Sources of Ingredients for Vendors

<u>Vendor Type</u>	<u>Large Market</u>	<u>Small Market</u>	<u>Grocery</u>	<u>Neighborhood Store</u>	<u>Large Bakery</u>	<u>Small Bakery</u>	<u>The Producer</u>	<u>Other</u>
Permanent	70%	10%	6.7%	0.0%	3.3%	3.3%	0.0%	6.7%
Nonpermanent	66%	11%	0.0%	6.3%	2.9%	8.3%	2.0%	3.4%
Average	66%	11%	0.9%	5.5%	3.0%	7.7%	1.7%	4.0%

Table 3.2. Motive for Picking This Vendor Enterprise

<u>Motive</u>	<u>Permanent</u>		<u>Nonpermanent</u>	
	<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>
Passing By	17	28%	158	38.5%
Vendor Attribute	22	37%	158	38.5%
"Regular"	8	13%	58	14.0%
Combination	13	22%	36	9.0%

This being the case, it becomes even more important to discover just why the customer happened to be in the area of the purchase. Most (67%) were eating near their place of work, school or shopping. Only 16% were buying food near their residence. Clearly, eating streetfoods fits into the public lives of Bogor residents. Carrying one's lunch to work or school is practically unheard of. Eating a bowl of soup at the market with friends breaks up the trip and is probably the high point of the day. Buying from a vendor is enjoyable and convenient, but is it a genuine contribution to the shopper's diet and just how much value does he or she get for her/his rupiah?

Table 3.3. Customer Reasons for Being in the Area of Purchase

<u>Reason</u>	<u>Number</u>	<u>Percentage</u>
Working	154	33%
Shopping	94	20%
School	64	14%
Residence	76	16%
Other	81	17%

The Value of Streetfoods

Since meals are the most common type of streetfood enterprise after drinks, let us examine the nutrition value available for meals in the most typical price range. Of course, in ordering a meal, the customer is free to choose from a selection ranging to 20 different side-dishes. After studying the prices paid for meals in the customer survey, we chose Rp. 300 and

Rp. 500 as typical modest and 'expensive' street meals. Five of each were purchased, weighed and evaluated according to locally recommended nutrient requirements (Muhilal and Enoch, 1977). It is apparent from Table 3.4 that the Rp. 300 meal supplies almost half the day's need for calories and protein and more than half the iron and Vitamin A and C. The customer does not get much additional nutrition for another Rp. 200. Only the grams of protein rise appreciably, but the Rp. 300 meal is an unsung bargain that the urban poor must make use of and the better off can use to occasionally economise. Two well-chosen Rp. 300 meals can supply virtually all of the nutrients needed for a day for a cost of only Rp. 600 and no investment of time, cooking skill, cooking equipment, etc.. These considerations are especially important for several groups of customer who eat almost all their foods from vendors. In Bogor, two important such groups are students and itinerant unskilled laborers.

Table 3.4. Nutrient Content of Streetfood Meals

<u>Cost</u>	<u>Nutrients</u>									
	<u>Calories</u>		<u>Protein</u>		<u>Iron (Fe)</u>		<u>Vitamin A</u>		<u>Vitamin C</u>	
	<u>Cal</u>	<u>% RDA</u>	<u>Gram</u>	<u>% RDA</u>	<u>mg</u>	<u>% RDA</u>	<u>IU</u>	<u>% RDA</u>	<u>mg</u>	<u>% RDA</u>
Rp. 300*	988	48	16.4	56	10.9	64	4,327	108	17	57
Rp. 500+	990	48	33.2	70	11.8	69	454	11	20	67
Total	1,978	96	59.6	126	22.7	133	4,781	119	37	124

\* n=5, + n=5

Streetfoods Contribution to the Household Diet

Dietary Pattern. Some idea of the general diet pattern in Bogor can be gleaned from Table 3.5, where the most frequently consumed foods are listed by modal frequency over the entire household sample. Rice and fresh cooked vegetables supplemented with dried fish and chicken eggs constitute the outline of the diet. The eggs are an important protein supplement. Bread

and tubers add necessary calories. It would be difficult to claim that the Bogor diets are deficient on the basis of the diet survey, but there is a monotonous sameness to the household spicing regimes and the inevitable rice and side-dishes meal plan. Indonesians do not come out and say food at home is boring. They say life would not be interesting without streetfood snacks.

Table 3.5. Primary Items of Household Food Consumption

<u>Food Item</u>	<u>Frequency</u>	<u>Code</u>
Rice	7	7 - every day
Fresh Vegetables	7	6 - four to six
Fresh Fruit	5	times a week
Dried/Salt Fish	5	5 - two to three
Eggs	5	times a week
Bread/rolls	4	4 - once a week
Tubers	4	3 - twice a month
Beef	3	
Chicken	3	
Fresh Fish	3	

Prepared Food. The 1979 National Consumption Survey Data (SUSENAS, 1979) found that rural Java spent only 7% of its food budget on snacks and rural outer islands spent only 5%. By contrast, the same survey found that Jakarta residents spent 16% of the food budget on purchased snacks and Yogyakarta residents 18%. These figures strike the investigator as too small, probably the result of the week-long memory data SUSENAS is based upon. The Bogor household survey, which did not depend on recall methods, but got actual consumption data for two days, recorded an average 25% of the food budget spent on prepared food. The figure does not vary much by income quartiles, increasing only slightly with increasing income. This trend is similar to the SUSENAS, 1980 data. Clearly, expenditure on prepared foods, most of them vended at the street corners, is much higher than previously believed.

Again, based on the household diet survey, Table 3.6 shows average per

capita nutrient contributions of the snacks purchased within the context of the household diet. The average household member received 14% of his calories, 20% of his protein and 4% of his Vitamin A from prepared food purchases. Percentage of intake and percentage of recommended allowances differ, because Bogor residents on average are taking in slightly less than the recommended levels. Since the recommendations are based on a reference adult male of 55 kg (a rarity in Indonesia), they are probably too high.

Table 3.6. Per Capita Nutrient Contribution of Streetfoods

	<u>Amount Purchased</u>	<u>% of Total Estimated Intake</u>	<u>% of Recommended Allowance</u>
Calories (Cal.)	209	14	10
Protein (Gram)	8.9	20	19
Vitamin A (IU)	307	4	8

Streetfoods in Children's Diets. Since the average age of the street-food customers in the household was consistently younger than the average age of the household, it appears that the younger members of the household consume the most streetfoods. This is especially important in the case of children under the age of six, who are in early developmental stages with important nutritional needs. For purposes of assessing the nutritional importance of streetfoods to this group, we categorised their streetfood consumption by the major nutritional content: 1. Raw fruits and vegetables, 2. Foods supplying mainly protein, 3. foods supplying mainly carbohydrates, 4. Cooked vegetables and 5. Fried Snacks (high fat contribution). Categories 1, 2, 3 and 5 are very popular with the whole under-age-six group. It was interesting to note how much raw fruit purchased from street enterprises is consumed by this group. I witnessed episodes during the diet survey when they begged for a fruit, were given money and ran out to buy from the vendor. Most of the protein snacks were of soybean products, such

as tempe or tahu. Our diet survey was household and not individually based and thus can only figure average intakes from the family stock of food, a method which would probably miscalculate the under-six group's intakes. It appears however that purchased streetfoods are very important in preschool children's diets.

Indonesia does not have a national school lunch program, but many of the 25 to 30 million elementary school children are given money each day to buy snacks and small meals from food vendors on or near the school grounds. Our household diet survey shows that children have between Rp. 150 and 250 to spend each day on a series of streetfood purchases, beginning at 6.45, again during various recesses and finally at 13.00 on their way home from school. Vendors sell in special small school-sized portions, most of which cost no more than Rp. 25 or 50. This "meal" is many children's only food resource for the first half of the day.

#### Food Safety Aspects of Streetfoods

Despite the convenience and popularity of prepared foods, we must inquire into their relative healthiness. Food is an excellent vehicle for disease transmission. A short list of diseases that can be contracted through food reads as follows: diptheria, salmonellosis, infectious hepatitis, typhoid fever, aflatoxicosis, botulism and various intestinal upsets believed to be virus related (Board, 1983). Food handlers may pass on their diseases to the consumer through poor food handling habits or, alternatively, cooked foods may be allowed to cool slowly and sit unheated for long periods of time, fostering the growth of organisms and the production of toxins.

The conditions of life in Bogor are certainly no worse than anywhere else in the archipelago and yet public services have not kept pace with the dramatic growth of the city population. The public health is hazarded, for

example, by the informality of garbage and waste disposal. Perhaps 80% of the city population sluices or dumps directly into the rivers coursing through Bogor towards Jakarta. Household scraps, factory effluents and personal waste all flow into these channels. An unknown proportion of the population also uses these same streams as their source of water for bathing and washing. It is no rarity to see one man defacating in a river and, downstream 100 yards, another brushing his teeth!

The 86% of the food vendors who process the food they sell do so in the most simple of kitchens. Typically, their kitchen would have: 1. a dirt floor, 2. no inside water source, 3. no counter space, 4. one chopping board, 5. chipped rusty and very limited equipment and 6. one wood or kerosene burner. Vendors' kitchens are not unusual in Bogor. In addition, they share with their customers a set of attitudes toward food handling and storage. Hand washing is rare. There is little or no fear of spoilage or mold. Spice baskets are a marvel of mold cultivation. In the typical Bogor household, food is cooked in the morning, allowed to come slowly to room temperature and stored at room temperature for 12 hours or even overnight until it is eaten. Most people do not have refrigerators, but, even those who do, think of them more as a place to cool drinks, rather than to retard food spoilage.

Vendors do make some health-related concessions to their customers. They (and their customers) are especially aware of the undesirability of dirt and exhaust ("Debu") getting on their food, thus, there is considerable use of towels over food baskets, glassed aquariums for viewing food and curtains partially surrounding eating spaces. Throughout Indonesia, water is boiled before making it into coffee or tea. This is of course an extremely useful disease preventative. Water sources are inevitably polluted and boiling water for consumption no doubt breaks the route of disease

transmission frequently. Unfortunately, other uses of water in the food handling environment are not so satisfactory. Only 8% of the vending operations had a water source at the selling site. Other vendors must buy or carry long distances and this militates against the use of adequate amounts of water for cleansing of dishes, utensils and hands. Polluted water is used for dishwashing and there may be no time between one customer and another for the dish or glass to dry.

Extremely low public health standards are operating in Bogor in an environment which is full of health hazards. Water quality is low for ambulant vendors and unavailable in amounts necessary to maintain cleanliness. In addition to the problems discussed above, technological innovations may be easy and cheap to adopt, but difficult for the vendors and customers to evaluate in terms of health risk. Artificial sweeteners and monosodium glutamate are in common use in Bogor streetfoods, as are dyes of suspicious vibrance and origin.

The vendor's need to economise may lead him to use recycled packaging. Used newspapers commonly serve to wrap a streetfood purchase, for example. Vendors' ability to evaluate when that packaging may be hazardous is very limited. The Jakarta Post of May, 1984 carried a story about a child's death from eating dehydrated bananas that had been packaged with a piece of cardboard from a DDT canister.

Well-publicised stories like this one will serve to make at least the literate public wary of streetfoods. Better documented for Indonesia and much more common is the danger of aflatoxin. Aspergillus flavus is an organism that grows particularly on grains and peanuts damaged in harvest and then stored under warm moist conditions. The toxin it produces is a potent liver carcinogen. According to a series of articles based on research at the National Nutrition Laboratories in Bogor (Muhilal, Karjadi and

Prawirnegara, 1972), peanut products are mishandled from harvest to consumption and typically contain dangerous amounts of aflatoxin. Of course, ground peanuts and peanut sauces are common in Bogor's streetfoods.

#### CHAPTER 4. CONCLUSION

As streetfood vendors continue to ply their trade, a debate rages about their value to Indonesian urban society. At one polar extreme, critics of the informal sector argue that vendors create congestion in the streets and along sidewalks and that they are a hinderance to an efficient orderly city. The critics further point out that the vendors retard the nation's modernisation and development, because they use scarce capital inefficiently. They are not the dynamic entrepreneurs who accumulate wealth and benefit larger society by re-investing their money into expanded operations. Rather, they have limited visions and are content to remain small inefficient producers. The critics hold that the informal sector will slowly be replaced by modern enterprises that can benefit the nation. In the meantime, policies towards the vendors should be as restrictive and punitive as possible.

Proponents of the informal sector argue that food vendors contribute to the nutrition of the population by making food conveniently available. They also point out that the informal sector enables many individuals to earn a living when they have nowhere else to turn. They further point out that the critics far underestimate the extent and the contribution of the informal sector.

Unfortunately, this debate often takes place in an empirical vacuum and so policies are enacted without a real understanding of the situation. In this chapter, the empirical evidence from Bogor will first be used to discuss three issues which have relevance to policies directed at streetfood vendors. There will then be a brief discussion of potential intervention projects.

##### Issues Relating to Policies Towards Streetfood Vendors

Income Generation. At the heart of most debates about streetfood vending is the question of whether it provides employment opportunities and

income. Based on the Bogor data, the streetfood trade directly generates nearly 18,000 jobs. This employment, moreover, is the primary source of support for 75% of the vendors' families. The sheer number of jobs in vending is surprising; if one accepts the 1981 census count for Bogor, streetfood vendors represent 25% of those employed.

Beyond sheer numbers of vendors, the amount of money that passes through their hands is large. According to the survey, streetfood vendors in Bogor make gross sales in the order of \$60 million per year. Even if this is an overestimate by two times, it is still a far greater volume of money than ever suspected. Because of this surprisingly large sum, the streetfood trade provides employment to related industries. Vendors spend about two-thirds of their gross sales on food and other supplies and this must generate spin-off jobs in the various food supply kiosks and food markets. Even beyond this, the vendors also pay taxes and, while the amount per vendor is small, when it is multiplied by 10,000 vendors, the total is not insubstantial. These taxes probably pay a significant portion of the wages for market police, market officials and other personnel. Finally, the net income of the sample of vendors was \$1,000 per year. This is a fairly good income in Indonesia, when compared to the per capita gross domestic product of \$500 a year and the \$900 in wages earned annually by both manual laborers and new university faculty.

Perhaps the most significant aspect of the streetfood trade is not that it provides a living wage for so many, but that it offers employment opportunities to the entire range of individuals in the job market. Youths forced to drop out of school can sell bakso for a relative or push a bakery cart. Although it is a subsistence wage, it is an opportunity and a job. For the sate seller, the martabak vendor or the owner of a small fried chicken table, streetfood vending is a career. For the elderly widow or the

recently divorced woman, selling gado-gado or operating a tiny warung (cafe) can be one of the few means of support for herself and her family.

Two aspects of income generation and streetfood vending have particular relevance in formulating policy. First, streetfood vendors are largely invisible. Although they are certainly obvious in the markets when they force pedestrians off the sidewalks, the great predominance of streetfood activity occurs in the neighborhoods. The number of vendors is thus greatly underestimated, if one relies only on visual impressions. Similarly, the employment and economic significance of the streetfood trade is undervalued. It is particularly important to recognize the mistake in designing policies that assume there are a limited number of vendors who play a limited role in the economy.

Second, it is important to recognize that streetfood vending has become a viable institution. It is fully imbedded in urban life, is a significant employer, generates and circulates large amounts of money daily and is thoroughly integrated into the urban food supply and distribution system. In devising policies to deal with vendors, planners should be aware of how strongly the streetfood trade is connected to the rest of the economy. They should also realize that institutions thrive because they perform vital functions better than any other alternative.

Streetfoods in the City Food System. Streetfood vendors provide an important link in the system that supplies food to Bogor and makes it available to residents. It is this role that must be carefully considered in formulating vendor policy. Vendors initially obtain raw food products at the open market, but because they purchase regularly and in quantity, the market sellers rely heavily on their business. There are also special kiosks, such as the bakso supply shops that cater exclusively to these vendors, but the important function of streetfoods in Bogor is making

prepared foods widely available. Vendors can be found not only in market places, but in every neighborhood, on every street and next to every school. If a person wants a snack, a meal or just something to put in his mouth, a vendor is readily available. Customers take advantage of this convenience. In the household diet survey, nearly 25% of all food expenditure was spent on prepared foods. The streetfood vendor clearly plays an important part in Bogor's food consumption.

Beyond a direct role in making food widely available, vendors perform two other services in the food distribution system. First, they provide the poor with access to food. The poorest seldom have enough money to buy the raw materials for full meals. The vendors, however, prepare food in bulk and therefore can offer a complete meal for the small amount the customer may have. Second, vendors help diversify the diet by selling items such as corn, wheat-based products and salads, which are seldom eaten at home. This service is quite crucial because the Indonesian Government is trying to reduce rice consumption and promote the consumption of secondary crops. It is perhaps in these latter two roles that streetfood vendors perform the most useful services.

Sanitation and Health. The sanitation and safety problems of the streetfoods trade present no easy solutions. Vendors are part of the total cultural system, very much in agreement with their customers on matters of cleanliness and nutrient values. Verification of the dangers should be fairly straightforward. Streetfood samples from case studies are currently under analysis and the data forthcoming. Passing more laws which place vendors and their customers outside the law would not seem to be the solution.

#### Intervention Projects

The author has admittedly taken a sympathetic view towards streetfood

vending. In particular, the contribution of vendors and their importance to the urban economy have been highlighted. Based on this, I generally conclude that policies towards vendors should try less to eliminate them and try more to maximize their usefulness. There is a temptation to conclude with some general recommendations along these lines, but this approach is always somewhat dissatisfying. Such discussions sound fine, but lack any practical content. In this section, I will therefore discuss three specific interventions which were either carried out as a result of this project or are being proposed as follow-ups:

Utilizing Streetfoods to Serve Elementary Schools. Indonesia does not have a national school lunch program, but many of Indonesia's 25 to 30 million elementary school children are given money each day to buy snacks and small meals from food vendors on or near the school grounds. Principals have considerable power in choosing the vendors serving his school. They could substantially improve the sanitation and nutrition of the school's informal "lunch program" by carefully selecting vendors and insisting on careful food handling. Principals, however, often do not know they have the power to intervene nor do they have the background to implement simple positive interventions. Given the unlikelihood of any formal school food program being developed, it is increasingly important for schools to use the already existing system of streetfood vendors to improve the sanitation and nutrition of food served to school children. A demonstration project was proposed to carry out these goals. Principals and the Parents and Teachers Associations at 20 model schools would receive external assistance to select a group of vendors to serve their schools. The vendors would be given a course on food handling practices and nutrition and would be monitored in adhering to health standards by the PTA.

Organising Vendors. A constant complaint of vendors is that laws

restrict them and limit their activity, but no laws give them any rights. They further complain that no-one listens to them and they have no power to change the situation. The real issue is that streetfood vendors are disorganised and have no association that can speak for them as a united group or represent their common interests. Many common interest groups have been formed in Indonesia - farmers' co-operatives, brick-makers' co-operatives and garbage pickers' co-operatives. These organisations provide services for their members and represent their interests when local and national policies affecting them are being made. Trial co-operatives of streetfood vendors have been organised in Yogyakarta, Bandung and Jakarta with the assistance of a local social action institute.

Improving the Nutritional Content of Streetfoods. Two pilot interventions into the nutritional quality of streetfoods were conducted, along with the Streetfood Project, by members of the IPB-GMSK Faculty, Dr. Kusharto, MSc. and Ir. Megawangi. In closely interrelated projects, they succeeded in developing improved protein recipes for four separate streetfood items (a cassava chip, a fritter and two baked-wheat products) often sold on schoolyards. They approached the project from a total marketing prospective, investigating the business practices of each of the firm types, including supply problems and marketing practices. They found producers willing to produce and market and customers enthusiastic about the new products. These are important attributes of small and traditional firms in a rapidly changing food situation. Remaining problems, such as the non-existence of a market supply of soybean flour, were solved imaginatively. They encouraged village women near Bogor to use their old rice pounders (discarded since the introduction of kerosene-driven rice hullers) to produce the small amounts required. Although considerable management and supply problems remain, overall, these pilots are a positive indication that

improved recipes, using local products, can be targeted to selected consumers via petty vendors.

### Epilogue

At the end of 1983, the corrugated iron fence around the main bus terminal in Jakarta bore a scrawled message in red paint - "Hidup Kaki-Lima Susah!" (The life of a street vendor is tough!). This is not the typical Jakarta graffiti which runs to pronouncements of gang territoriality. Instead, it is the venting of the frustration resulting from the city administration's increasingly repressive policies toward what might loosely be termed the 'informal sector'. It was February, 1983 when the long-rumored operation against the pedicabs (becak) began in earnest. Some 40,000 "illegal" becaks were confiscated, stored in a becak graveyard in Jakarta and slated for disposal on an unoccupied island off the coast. During the same year, thousands of roadside vendors without kiosks or formal rights to their selling spots were forcibly evicted or relocated to new empty planned market sites where they complained they could not make a living. Much of this activity, evictions and protests, was carried in the local press. The newspapers often appeared to take the side of the vendors. There are disagreements within the city government, between those whose top priority is city beautification, modernisation and an efficient transportation system and those in government and outside advisors who stress the welfare and livelihood of the millions in Jakarta who make their living by just such informal ventures. The outcome of these debates is uncertain. At this time, however, effective policy is for limiting the potential of low capital streetside enterprises in the capital city. The example set has spread to at least Bandung and Yogyakarta, with other large cities in Indonesia probably not far behind.

A P P E N D I C E S

I. FIVE CASE STUDIES

II. POPULAR STREETFOODS IN BOGOR

APPENDIX I - FIVE CASE STUDIES1. Noodle Soup: The Case of Pak Kampto

Noodle soup was chosen for a case-study focus because it is the single most popular streetfood. This was not the case 15 years ago. The increasing popularity of wheat-based products in Indonesia is the direct result of changing snack preferences and national and even international forces. Wheat has never been grown successfully in Indonesia, thus the availability of wheat-based noodle snacks has depended primarily on foreign food aid such as the U.S. PL480 Program. In the last ten years, however, wheat-based products have become so popular that, by 1974, Indonesia was commercially importing more wheat than it was receiving in donations (Magiera, 1981). Since then, donations have decreased annually in importance. In the third Five-Year Plan (Repelita III) beginning in 1979, the Government of Indonesia voiced its goal to diversify the Indonesian diet away from the paramount staple - rice - by encouraging the consumption of other staples including corn, wheat and indigenous starches such as sago. Wheat-based noodle-makers thus received indirect government support for their sales.

Pak Kampto's life-story is caught up in these larger events. In 1972, he was a Junior in High School in a small city in East Java. His family did not have enough funds to allow him to continue, so he set off to seek his fortune in Bogor, where a cousin was selling fried noodles in a simple vending operation. He worked alongside his cousin, renting a rig and equipment until 1975. At that time, he recognised that the future was noodle soup and invested in a noodle soup rig. The rig is, in reality, a mobile pushcart which houses his soup, noodles, condiments, serving bowls and spoons.

He prospered in other ways too. He met a woman vendor from the east (Central Java) who sold herbal medicinal drinks ("jamu") on the streets of Bogor and they married. She continued to sell "jamu" after their marriage.

They could live from day to day on her profits alone, almost Rupiah 2,000 per day (\$2 in 1984), so from then on, they put all his profits into buying a house lot in Bogor and building a house on it. They estimate the house and lot cost them Rupiah 750,000. In 1977 equivalents, that is over \$1,800. They are glad not to have to worry about renting a house. In fact, they rent out part of the house to another family for Rupiah 200,000 (\$200) per year.

Both still own small amounts of land back in their area of origin. Relatives work their land, but they go back three times a year on an average to visit and so that Ibu Kampto can pick up a load of the dried herbs she cooks into her jamu. Some of these come from her own land. Their ties back to Central and East Java are strong and they dream of retiring in their home village.

#### Economics of Noodle Soup Vending

In 1975 when Pak Kampto bought a noodle soup rig, it cost Rupiah 8,500 (\$20.50). At that time, he used money he had saved by selling fried noodles. Recently, he made himself a new rig, composed of a 1 meter by 1/3 meter wooden unit with two wheels and two short legs for stopping. The new rig cost him \$55. Thus, the cost of starting up a streetfood operation such as his is not very expensive in our terms. However, it would be wrong to dismiss this as an "easy-entry" occupation because many young males drop out from high school and find it impossible to accumulate the necessary capital. Virtually every one of the noodle soup sellers in Bogor is from Central or East Java. Most have a story like Kampto's. They know of the opportunity through relatives already here selling noodle soup. When they first arrive, they undergo a simple apprenticeship, utilizing the rigs and supply chains of their relatives. Initially, their profits are low - in 1983, this meant under \$1 a day, since they must relinquish a portion of proceeds to mentors.

Pak Kampto himself earns a good living by Indonesian standards. After all expenses are deducted, he estimates his average daily income to be Rupiah 6,500 (\$6.50) during the busy season and Rupiah 5,500 (\$5.50) during the slow season. He takes six weeks of vacation a year and works six days a week. Assuming he is sick one week of the year, he then works 52 - (1+6) weeks or 45 weeks x 6 days per week for a total of 270 days a year. The length of the slow season varies, depending on the rainy season, and, strangely enough, it is during the heaviest rains that the noodle soup sellers earn the least and during the dry hot months that they earn the most. However, considering the difficulties of selling in tropical downpours and the nutritional replacement value of hot salty soup during perspiration-filled days, this is not a surprising trend. If the wet season lasts about one-half of his selling time and the dry season one-half (this is normal for Bogor), then Pak Kampto's annual income is (135 x Rupiah 6,500 + 135 x Rupiah 5,500) Rupiah 1,620,000 (\$1,620).

This estimate is conservative and Pak Kampto probably earns considerably more. It is doubtful that he is really off work two full months, as the typical Indonesian vendor normally takes only two weeks of vacation or less. Moreover, during the time of our investigation, during the slow season, actual calculations of his net income were as follows:

<u>Daily Cost (Rupiah)</u>	<u>Gross Income</u>	<u>Net Income</u>
Beef and Chicken (2½ kg) 3,200		
Wheat Noodles (2½ kg) 350		
Rice Noodles (1 kg) 700		
Vegetables 300		
Flavoring Powder 200	Sales 45-50	
Condiments 200	@ Rp. 250	
Supplies 200		
Replacement Capital		
5 Year Life, 10%		
Appreciation/Annum 165		
<u>Rp. 5,315</u>	<u>Rp. 11,250 - 12,500</u>	<u>Rp. 5,935 - 7,185</u>

### Activities and Schedule of a Noodle Soup Vendor

Although Pak Kampto earns a good living, his income must be balanced against his effort which, by Western standards, would be equivalent to holding two full time jobs. To fully appreciate his labor, one must examine his daily work schedule:

- 6.30 - 7.30: Shopping in the local market for the day's business.
- 7.30 - 11.00: Preparing the noodle soup and various condiments.
- 11.00 - 14.00: Selling noodle soup to customers who come to his home.
- 14.00 - 20.00: Pushing his rig to a selling area and servicing the general public.

Fourteen hours of virtually continuous work are put into his business daily, although he is visibly selling on the streets for only six.

At the beginning of his workday, Pak Kampto arrives at the local market and purchases chicken feet and heads to make his savory broth. He then purchases onions, mustard greens and other condiments. Then come the staples - wheat noodles, rice noodles and beef and sago for his bakso balls. Each of these products is sold by hundreds of competitors in the market and each seller buys from a farmers' co-operative or a small scale labor-intensive industry which makes the products from raw materials. Probably, there are several middle-men between the farmer, the market and Pak Kampto. He actually frequents a noodle soup supply kiosk of which there are several at the central market. Some of them can virtually outfit the vendor for the day, but frequently, they specialise. Some sell an assortment of the meat balls of different quality and price. Others - just a selection of noodles. Pak Kampto makes his own "meat"balls of a mixture of beef and cassava flour.

From 7.30 to 11.00, he busily prepares the broth, makes the tiny meat-balls, bundles the noodles into tiny serving portions and loads everything

onto his rig. From 11.00 to 14.00, he sells to anyone coming to the house. But the real selling activity is yet to come.

Pak Kampto makes the rounds from 14.00 to 20.00 hours in a middle-class area built in the 1930s and planned in a Western fashion with separate cottages and private yards, all with a streetfront. The area today is inhabited by middle and upper-middle class Indonesian professionals. Many of the houses rent out their extra rooms to university students. Noodle soup is popular with all ages and classes at all times of the day. It is considered a snack, not a meal replacement, but the distinction may be mute, since the time between morning meal and midday meal is seven hours and from midday meal to evening meal six hours. Most people need several snacks between each meal just to keep working. Bakso is probably available every hour of the day or night, but the vendors seem to have divided the selling periods from 10.00 to 15.00, 15.00 to 20.00 and 20.00 on. Thus they distribute themselves in space and time, maximising their chances for a sale.

Returning home at 20.30, Pak Kampto has made a total of 50 sales and has pushed his cart perhaps three miles in addition to working 14 hours. He has made a net income of Rp. 7,185 (\$7.18), which is more than twice the Rp. 3,000 that a construction worker earns. In Indonesia, where there is very little unemployment but a great deal of underemployment, the general rule is that a laborer works very long hours for very low pay. In this instance, Pak Kampto works very long hours for good wages. He smiles, feeling successful and content.

## 2. Jamu: Ibu Sukiyem's Herbal Tonics

Herbal tonics, originating in Central Java and inevitably sold by migrants from there, are one of the more traditional of the streetfood offerings. Although by local logic, this is neither a food or a drink but a preventative or health promotive, it is included here because of the suspicion that, as a dietary supplement to the high carbohydrate diet, it is vital. Each jamu is composed of a concoction of 15 or more roots, leaves and seeds. There are over 30 distinct recipes, each for a different problem. Many jamus are sex-linked, that is they are for consumption and related to the problems of either men or women, but not both. Several recipes promise sexual attractiveness or prowess.

Ibu Sukiyem is only 24, but she has been selling jamu in Bogor neighborhoods for seven years. The training for jamu vending is very informal. As a 13 year old, she trailed along after an "older sister" who showed her how to pound, boil and sieve the herbs. Since there was already an oversupply of jamu sellers in her home area of Wonogiri, she decided to move to Bogor where the price of a jamu drink was reputed to be twice what it is in Central Java. At first, she lived in a kampong (dense low income neighborhood) where many noodle soup and jamu sellers (all from Central Java) lived. From them, she learned the business end of selling jamu in the city by attaching herself to a successful jamu lady who made two batches every morning. She sold one of them on commission, receiving a percentage of every glass she sold.

Her apprenticeship came to an end five years ago when she began buying herbs and processing them herself in an independent business venture. She had initial costs of about Rp. 25,000 for buying her basic equipment - six empty Markissa syrup bottles, a plastic funnel, spoons, a plastic bucket for carrying water, a basket, a long scarf for carrying the bottles and a very

large mortar and 2.5 foot pestle of the size used to pound groundnuts or, in this case, herbs.

Since then, she has married another migrant from Central Java who has a successful noodle soup vending operation. They have a 2½ year old son and another child on the way, so that Sukiyem will have to reduce her route in the near future. In fact, her regular customers have increased in number over the years, so that she has added two more bottles of jamu to her basket. With the bucket of water and three glasses she must carry, the total load is not less than 13 kg (29 pounds), as she begins the 10 km (6.2 mile) route up and down the concrete stairs between middle class Sempur Valley neighborhood and the upperclass neighborhood of Dutch colonial vintage on the cliffs above. Her route also includes much of her own lower income neighborhood, which is connected to Sempur Valley by a swinging bridge. The route she serves is frequented by other jamu sellers, but she does not consider them competitors. Instead, she answered that each person is either naturally lucky or not in business. There seems to be little sense of "crowding" or territoriality toward one's selling area.

Most of her customers are women and children she can expect to find at home between 6.00 and 10.00. If men buy, it is usually the drivers of the small public conveyances - either pedicabs or the three wheel motor trucks. The public taste for jamu does not change, thus she uses the old traditional recipes. Jamu business was down when we interviewed Sukiyem during the cooler rainy season, suggesting that some of the demand for jamu is just as a thirst quencher during the hot months. During the Islamic fasting month, of course, she does not sell at all, as most people abstain from food and drink between sun-up and sundown.

Every three months, she makes a shopping trip back to Wonogiri in Central Java. Part of her herbs and roots, she harvests from the garden

she still owns there. The rest she buys fresh in the market there and dries for use over the next quarter year. On each of these trips, she spends about Rp. 50,000 on fresh herbs. Of course, the sense of co-operation among jamu sellers is strong and most in Bogor are making these quarterly trips, so occasionally, she has someone else do the shopping for her. By this method, she circumvents any possible middlemen and keeps her costs down. The moulds and smut that grow on her stored roots and leaves are no concern to her. She just washes them thoroughly, peels and pounds and begins the processing.

Her daily schedule is as follows:

- 4.00 - 5.00: Wake up, boil the coconut sugar syrup
- 5.00 - 6.00: Mix boiled water with coconut syrup and herb concoction prepared the previous evening
- 6.00 - 10.00: Sell jamu around the neighborhood
- 10.00 - 13.00: To the market and cook
- 13.00 - 15.00: Rest and chat
- 15.00 - 16.30: Roast rice and soak for jamu base
- 16.30 - 18.00: Peel, wash, boil and strain herbs and roots for jamu

Ibu Sukiyem's net income per day is about Rp. 2,000 on an investment in raw materials of Rp. 1,000. Her profits go within minutes of her selling into purchases in the pasar for running the household - the day's food, soap, etc.. Her husband's profit of Rp. 6,000 per day have gone into savings for lifetime investments, such as the small lot and the house they have built in a low-income dense neighborhood. According to them, not only are profits larger in Bogor, but they can stick to a savings program, since they are far away from extended family obligations in Central Java. They have a small television in the living room where the whole family posed in their best clothes for a photograph during our visit.

They seem to be spacing their children deliberately. Although their first is only 2½, their neighbors have long been asking when the next one was due. Thus Pak Kampto is ready with an explanation. Before sexual relations, he drinks several traditional jamu drinks, which contain a lot of pepper. This recipe is guaranteed to "space" your children and has worked for them.

### 3. Ibu Nemah: Blanched Salad (Gado-Gado)

Ibu Nemah began selling blanched salads when her husband retired in 1980. She had never, in her 40 years, been associated with business, as her husband's low level position in the local department of Public Works (road maintenance) provided a stable income for them and their four children. His retirement, however, brought a reduction in monthly income (down to Rp. 27,000 per month) and in fact a lengthy period of transition before the pension funds came out. Since his death last year, she has become the major supporter of herself and two children still at home.

Making gado-gado is not something she had any special skills for. Every woman knows how, she insists. She did cleverly assess her own and the market situation for prepared food before she ventured into gado-gado sales, though. Ibu Nemah noticed there were not too many gado-gado sellers in the market area and figured that, if she began to sell there, customers would be certain.

Her initial costs were just about equal to Rp. 9,000 (U.S. \$9) for a special narrow table, the large flat mortar and pestle, old bottles for vinegar, boiled water and storage cans for crisps and ground peanuts. For this outlay, she simply used family savings. It was a good investment. On an average day, her net income after expenses is Rp. 2,500 or Rp. 60,000 per month. Of course, she does not sell at all during the month of Islamic fasting, because she is a strong believer, unlike some other sellers, she notes. They simply drape opaque plastic sheeting around their tables to disguise their trade. She takes every Friday off from selling too, plus assorted days for illness.

On a normal day, she rises at 4 a.m.. Her 26 year old married daughter helps her chop and blanch the carrots, swamp cabbage, potatoes, chamote squash and mung bean sprouts and arrange them on a large flat basket for

carrying to market. There is no thought of pay for the daughter's aid and company. It is customary and expected. Together, they walk the ten minutes to the market carrying the vegetables, 2 kg of roasted peanuts, bottles of vinegar, boiled water, soy sauce and large cans of fried crisps.

Their selling table is not officially within the market, but in a narrow alleyway leading from the busy street between houses to the back of the market. The houses facing this alleyway have accommodated to the continual traffic of men carrying heavy sacks of rice and poles of bananas. They graciously allow Ibu Nemah to operate in front of their houses every day and store her table and single chair overnight too. There is a verbal understanding. Thus, Ibu Nemah's rights to her selling site are very informal. She thanks them with a plate of gado-gado every few days. Since she is outside the market square proper, her relationship with the market authorities is equally informal, but she buys a ticket for Rp. 150 every day she sells from the market official who makes the rounds.

In the extremely crowded alley conditions, there is really no space for a customer to eat the gado-gado. Even waiting for it to be prepared requires flattening oneself against the opposite wall when one hears the warning call of the porters who are muscling through under their loads. When a customer orders, Ibu Nemah asks their taste preference - Sweet? More chillis or less? Then she quickly grinds up a spoon of seasalt, green and red chillis, roasted peanuts and coconut sugar on the mortar and pestle, adding boiled water and a little vinegar to make the dressing smooth. Then a spoon of each of the vegetables is gently mixed into the dressing and the whole lot scraped off onto a banana leaf and wrapped into an old newspaper with a rubber band for easy carrying. Most of the customers are market shoppers on their way home from the morning's raw food purchases. Unlike many other street foods, gado-gado is usually carried away. Ibu Nemah has

a few plates ready in case a fellow vendor should order. She is flanked on either side by a raw noodle outlet and a noodle soup vendor. The neighboring houses sometimes send a child with a plate to order salad for lunch.

Since there is no shelter over Ibu Nemah's table, she simply packs up and goes home if it rains. The rainy season is long in Bogor, but usually there is sunshine at least until noon. I usually visited at midday and found her selling her last few plates of gado-gado. If there is extra gado-gado that cannot be sold, she divides it among her neighbors who respond by occasionally sending her a plate of food. Thus her income in Rupiah is slightly less in the rainy season, but her diet must be adequate and varied.

Ibu Nemah's financial situation is adequate. She is the major income earner making Rp. 60,000 each month. One son still at home has been taken on as an apprentice teacher in an elementary school and is given Rp. 25,000 for his efforts. They do not know when he might achieve the full salary and position. Her husband's pension payment is Rp. 27,000. Although it is hard to specify which funds are used for which household needs, generally, Ibu Nemah's earnings are used to supply the house with food and other necessities and anything left over toward schooling her last child in high school. The apprentice teacher uses his salary on himself and the husband's pension money all goes for the schooling of the last child. Since they live with a family of her husband's relatives, they do not need to pay any rent. Thus, for about 8½ hours of work a day and some assistance from her daughter, she provides over half the support for her three person family. She intends to continue selling after her last child graduates from high school and indeed as long as she has the strength.

#### 4. Rice Meals: Ibu Enik's Warung (Temporary Restaurant)

Ibu Enik has lived in Bogor all of her 55 years and remembers with fondness living in the large botanical garden for which Bogor is famous. Her father was an employee of the garden and they could rent a house right on the grounds. Today, she operates a tiny mobile restaurant right outside the gates of the garden where she used to play.

Ibu Enik has been in the warung business for 35 years. In 1949, she began selling rice meals at a market/transport center that was located in the heart of Bogor. She was quite successful and was able to help support her family of eight children, but, in 1972, the market was torn down to build what is today the bus terminal and she, along with all the other vendors, was forced to move. That year was a traumatic one for Ibu Enik. In addition to being forced to relocate her husband died, leaving her as sole supporter for all the children. Fortunately, four of the children were already working and were able to help with the expense and effort of moving. She looks back at the time and comments, "Thank God for many children."

Ibu Enik rebuilt a temporary stall just inside the new market. After one police raid, however, she decided to move to a location 5 minutes away and right next to the garden. She also invested in a mobile stall. The stall is about 6 feet long and 3 feet wide and is sheltered by a roof made of light gauge plastic. Every morning, a son-in-law wheels the stall from their home 200 yards away to the selling location. Every evening at about 16:00, he moves the cart back home. If there is a police raid, he is available for an emergency evacuation. This is a great convenience for Ibu Enik, as she prepares all the food at home and uses the cart only to transport and display plates of food. Her customers normally sit on the garden wall or on two benches which she has stored near her selling spot.

Ibu Enik begins her day at 4:00 when she begins cooking the vegetables

and other broth for the warung. At 7.00, she goes to the pasar to shop, while her son-in-law transports the cart and food to the selling spot. Most of the food, including the rice and meat specialities have been cooked the night before. Ibu Enik returns to her staff by 9.00, where she presides over activities until about 16.00. By this time, everything has been sold and her son-in-law comes to pick up the cart. From 16.30 to 19.00, she cooks the special dishes, chicken, spiced eggs and fish that will be sold the next day.

Since moving to the new spot, she has become very successful. By selling rice meals ranging in price from Rp. 300 to Rp. 800, she makes about Rp. 15,000 per day. After subtracting her daily expenses of Rp. 10,000, she has a net income of Rp. 5,000 per day. On this income, she provides the primary support for 18 family and extended family members, but, as she points out, they all help in making the warung successful. A nephew may help lift heavy loads, a niece may help cook, a daughter may help sell food during the day and, of course, the men push the heavy cart from home to selling spot and back. She also points out that they have helped her in the past and she is content because they will support her in her old age.

##### 5. Fried Snacks: Ibu Sidik's Gorengan Stand

Pak and Ibu Sidik are examples of the extreme mobility some vendors must use to make a living. They are originally from a small town in the middle of West Java (Sukabumi), but moved to Jakarta in 1975 where Pak Sidik sold ready-made clothes as a streetside vendor. In the late 1970s, his enterprise was closed down when Jakarta authorities decided to re-organize the market places. He moved to Bandung where he tried to raise chickens, but failed at this and so moved back to Sukabumi to sell ice drinks. The trade in Sukabumi proved unprofitable, so they moved to Bogor, where they first tried to sell large sweet pancakes. Soon they realized that they could not make a living doing this so, in 1980, Ibu Sidik started to sell four varieties of fried snacks on the corner entrance path to their kampung (village).

Their location is near many elementary schools and, consequently, many transport vehicles flock to the area when schools open and close. The school closest to Ibu Sidik is the only one in Bogor for the mentally handicapped, thus she has learned to understand their orders over the years. Two years ago, they added an ice drink wagon to the corner of the gorengan stall so Ibu and her husband spend most of the day together on the same corner. His cold drinks sell best in the hot season, while her sales are fairly consistent, but best during the rainy season.

The goods that Ibu sells include banana and beancake slices which are dredged in wheat flour, spices and food coloring. These she fries on the spot. Two other offerings are buras, a steamed rice roll placed in a banana leaf with a bit of peanut sauce and a kroket, a spiced dumpling. These are prepared at home the night before with the help of her two children aged 15 and 17. These two usually come to help at the stand at 12.00 so that Ibu can go home to cook the family meals.

Although I have not yet calculated her net income, I estimate it to be

about Rp. 1,500 per day. In addition to supplies such as cooking oil and flour, she must pay the market authority Rp. 300 per week. This allows her to sell near the school and also guarantees that she can leave her small bamboo and plastic stall overnight without fear of theft or damage.

Food preparation and handling are another interesting aspect of this case. The fried items are sold on a second or third day by refrying, but the buras spoil before the second day, so she gives the leftovers to her children or to the neighbors. Like other gorengan salesmen we asked, she uses the cooking oil again and again, just adding more to her frying pan to raise the level. This does not detract from the taste of her food. The fried items are stored in an old aquarium which is covered with loose plastic. A typical transaction occurs when a school child comes up to the stall, gives her Rp. 25, then sticks his hand into the aquarium, touching every item before choosing the fried banana he wants.

Appendix II. Popular Street Foods in BogorMeal/Rice Side-Dishes

Ayam Goreng	Fried Chicken
Ayam Panggang	Roast Chicken
Empal	Fried Spiced Beef
Opor Ayam	Yellow Chicken Curry
Rendang Daging	Red Beef Curry
Sate	Barbequed Chicken / Lamb Skewers
Balado Teri	Fried Spiced Small Sea Fish
Ikan Bumbu Acar	Sweet and sour Fish
Ikan Goreng	Fried Fish
Kepiting Rebus	Boiled Crabs
Kerang Rebus	Boiled Clams
Pepes Ikan	Fish roasted in a banana leaf
Telur Asin	Salty Boiled Egg
Telur Dadar	Fried Egg
Udang Goreng	Fried Shrimp
Martabak Telur	Omelette
Bacem Tahu	Spicy Boiled Bean Curd
Bacem Tempe	Spicy Boiled Soybean Cake
Gado-gado	Blanched Vegetable Salad
Gudeg	Bread Fruit Stew
Karadok	Curried Vegetable
Ketupat Sayur	Squash, steamed Rice and Curry
Ketupat Tahu	Steamed Rice with Dressing and Curried Bean
Laksa	Soft Noodles
Mie Goreng	Fried Noodle
Nasi Goreng	Fried Rice
Nasi Uduk	Spices, Coconut Milk, Rice
Perkedel Kentang	Potato Fritter
Sambal Goreng Kentang	Potato Curry
Sayur Asam	Tamarind-mixed Vegetable
Sayur Lodeh	Vegetable Curry
Sayur Sop	Vegetable Soup
Semur Jengkol	Curried <u>Phitecolobium Lobatum</u> Bean
Sop	Clear Meat Soup
Soto	Coconut Milk Soup
Tahu Goreng	Fried Bean Curd
Tauge Goreng	Bean Sprouts in Fermented Bean Sauce
Tempe Goreng	Fried Soybean Cake
Tumis Sayuran	Vegetables in Soy Sauce
Urab	Steamed Salad with Grated Coconut
<u>Fried Snacks</u>	
Cakwe	Wheat Chips
Comro	Fried Filled Cassava
Donat	Doughnut
Ganas Turi	Wheat Fritter filled with Mung Bean
Gugulung/Gemblong	Fried Pounded Sweet Glutinous Rice

Fried Snacks (Cont'd.)

Karoket	Vegetable-filled Wheat Fritter
Karoket Kentang	Potato Patty
Ketan Goreng	Fried Pounded Glutinous Rice
Kue Bala-bala	Vegetable-filled Wheat Fritter
Kue Bola	Fried Sweet Potato Fritter
Kue Cucur	Fried Sweet Rice Flour
Misro	Fried Sweet-filled Cassava
Oncom Goreng	Fried Peanut Press Cake
Onde-onde	Sticky Rice Ball
Opak	Roasted Glutinous Rice Flour
Pastel	Meat-filled Wheat Fritter
Pisang Goreng	Fried Banana
Rarawuan	Wheat Fritter with Kidney Bean
Rempeyek Kacang	Rice Chip with Peanuts
Roti Bakar	Fried Bread
Singlong Goreng	Fried Cassava
Sukun Goreng	Fried Breadfruit
Tahu Goreng	Fried Soybean Curd
Talas Goreng	Fried Taro
Tape Goreng	Fried Fermented Cassava
Tempe Goreng	Fried Fermented Soybean Cake
Ubi Goreng	Fried Sweet Potato Slices

Indigenous Cakes (Varied category of sweet or salty, starchy, moist snacks, mainly steamed or boiled and eaten between meals.)

Agar-agar	Jello
Bacang	Steamed Salty Rice
Bandros	Roasted Salty Rice Flour
Bika Ambon	Roasted Yellow Cakes
Bolu Kukus	Steamed Cakes
Bubur Sumsum	Marrow Porridge
Buras	Steamed Filled Salty Rice
Corot	Steamed Sweet Rice Flour with Coconut Milk
Dadar Gulung	Steamed Filled Sweet Wheat Flour
Dodongkal/Awuk	Steamed Sweet Rice Flour
Getuk	Steamed Filled Sweet Cassava
Jenang Grendul	Boiled Sweet Glutinous Rice Flour
Kelepon	Boiled Filled Sweet Glutinous Rice Flour
Ketan Bakar	Roasted Steamed Glutinous Rice
Kopyor	Steamed Sweet Rice Flour with Grated Coconut
Kue Ape	Wheat Flour Cookie
Kue Apem	Rice Flour Cup-Cakes
Kue Bapel	Roasted Wheat Flour with Egg
Kue Bolu	Steamed Cup-cakes
Kue Bugis	Steamed Filled Glutinous Rice Flour
Kue Ku	Steamed Sweet Glutinous Rice with Mung Bean
Kue Lapis	Sweet Layer Cake
Kue Mangkok	Cup-Cakes
Kue Pancong	Fried Egg Cake
Kue Pia	Fried Wheat Flour with Mung Bean
Kue Pisang	Banana-filled Cake
Kue Putu	Steamed Filled Sweet Rice Flour

Indigenous Cakes (Cont'd.)

Kue Putu Mayang	Boiled Sweet Rice Flour with Grated Coconut
Kue Sente Manis	Roasted Sweet Maizena
Kue Srikaya	Steamed Mixed Sanwich Bread
Kue Talam	Sweet Rice Flour Patty
Kue Tamhang	Chocolate Cookie
Kue Tape	Steamed Fermented Cassava
Lalampa	Roasted Lemper
Lemper	Croquette
Lopis	Steamed Glutinous Rice with Sugar-syrup
Martabak Manis	Filled Pancakes
Onggol-onggol	Boiled Sweet Tapioca with Grated Coconut
Papais Asin	Steamed Salty Rice Flour
Papais Manis	Steamed Sweet Rice Flour
Tape Uli	Fermented Glutinous Rice
Wingko Babat	Coconut Rice Pancakes

Soups and Porridges

Bubur Kacang Hijau	Mung Bean Porridge
Bubur Ketan Hitam	Black Glutinous Rice Porridge
Bakso )	
Bakean Malang)	
Soto Mie )	Noodle Soup

Beverages

Bajigur	Boiled Coconut Milk Drink
Bandrek	Boiled Ginger Drink
Es Campur	Shaved Ice and Jellow and Fruit
Es Cendol	Boiled Sweet Rice Flour Ice
Es Cincau	<u>Cycles Barbata ice</u>
Es Doger	Black Glutinous Rice Ice
Es Jerak	Shaved Ice and Orange Syrup
Es Kelapa Muda	Young Coconut and Shaved Ice
Es Mambo	Fruit Essence and Shaved Ice
Es Sirop	Sweet Syrup and Shaved Ice
Es Sirop Pala	Nutmeg Syrup and Shaved Ice
Es Tebu	Sugar-Cane
Es Teler	Mixed Fruit and Shaved Ice
Jamu	Herbal Drink
Kolak Pisang	Boiled Sweet Banana
Kolak Tape	Boiled Sweet Fermented Cassava
Kopi	Coffee
Kopi Susu	Coffee and Milk
Legen/Lahang	Palm Wine
Loder	Sweet Green Pudding
Sakoteng	Ginger Tea with Rice Dumplings and Peanuts
Teh Manis	Sweet Tea

Fruit

Adpokat  
 Anggur  
 Apel  
 Arbei  
 Bangkuang  
 Belimbing  
 Buni  
 Delima  
 Dukuh  
 Durian  
 Jambu Air  
 Jambu Biji  
 Jambu Bol  
 Jambu Mete  
 Jeruk Besar  
 Jeruk Manis  
 Kecapi  
 Kedondong  
 Kemang  
 Kesemek  
 Lengkong  
 Mangga  
 Manggis  
 Nanas  
 Nangka  
 Pepaya  
 Pisang  
 Rambutan  
 Salak  
 Sawo

Avocado  
 Grapes  
 Apple  
 Raspberry  
 Yam Bean Root  
 Star Fruit  
Antidesma Bunius  
Punica Granaticum  
Lamsium Domesticum  
 Durian  
 Mountain Apple  
 Guava  
Eugenia Malaccensis  
Anacardium Occidentale  
 Pomello  
 Tangerine  
Sandoricum Koetjape  
Spondias Jyntherea  
Mangifera Caesia  
 Persimmon  
Euphoria Longana  
 Mango  
 Mangosteen  
 Pineapple  
 Breadfruit  
 Papaya  
 Banana  
 Rambutan  
Salacca Edulis  
Achras Zapota

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position. Her husband's pension payment is Rp. 27,000. Although it is hard to specify which funds are used for which household needs, generally, Ibu Nemah's earnings are used to supply the house with food and other necessities and anything left over toward schooling her last child in high school. The apprentice teacher uses his salary on himself and the husband's pension money all goes for the schooling of the last child. Since they live with a family of her husband's relatives, they do not need to pay any rent. Thus, for about 8½ hours of work a day and some assistance from her daughter, she provides over half the support for her three person family. She intends to continue selling after her last child graduates from high school and indeed as long as she has the strength.

and were able to help with the expense and effort of moving. She looks back at the time and comments, "Thank God for many children."

Ibu Enik rebuilt a temporary stall just inside the new market. After one police raid, however, she decided to move to a location 5 minutes away and right next to the garden. She also invested in a mobile stall. The stall is about 6 feet long and 3 feet wide and is sheltered by a roof made of light gauge plastic. Every morning, a son-in-law wheels the stall from their home 200 yards away to the selling location. Every evening at about 16:00, he moves the cart back home. If there is a police raid, he is available for an emergency evacuation. This is a great convenience for Ibu Enik, as she prepares all the food at home and uses the cart only to transport and display plates of food. Her customers normally sit on the garden wall or on two benches which she has stored near her selling spot.

Ibu Enik begins her day at 4:00 when she begins cooking the vegetables