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THE URBAN STREET FOOD TRADE

by

Monique Cohen

June 1984

This is the report of the Equity Policy Center's study of street foods, which began in September 1981, with funding from the U.S. Agency for International Development, Office of Women in Development. The project comprises country studies in Senegal, Bangladesh, Indonesia, and the Philippines. Each project has examined the street food trade in order to design interventions that would increase the income of the vendors and improve the nutritional quality of the food sold. In the Philippines and Indonesia, additional attention has been given to the nutritional contribution of street foods to household diet. In Bangladesh, the implementation of recommendations forms an integral part of the project.

The Equity Policy Center is a multi-faceted, non-profit organization, focusing on issues of development and public policy in both developing and industrialized countries, particularly emphasizing the impact of those issues on women. Founded in 1978, EPOC seeks to promote equitable economic and social policies through research, conferences, publications, and consulting on project design.

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PREFACE

The Street Food Project, which breaks new ground in understanding the dynamics of an important component of the informal sector as well as women's participation in that sector, was created and designed by Dr. Irene Tinker, who guided the project from conception to completion. The study grows out of Dr. Tinker's long experience in the area of women and development and her observation that the street foods trade is a major economic activity of poor urban women.

Expanding under Dr. Tinker's guidance from an investigation of women's participation in this trade in two countries, the project eventually encompassed four countries (Indonesia, Bangladesh, the Philippines, and Senegal), and added the issue of nutrition to the basic investigation of income generation. Supplemented by projects funded by the Ford Foundation to local research groups in Nigeria, Thailand, and Egypt, additional information is being developed which will expand our understanding of this trade even further.

The four country studies synthesized in this report were directed by Jill Posner in Senegal, Gerald Barth in the Philippines, Naomi Owens in Bangladesh, and Barbara Chapman in Indonesia. Their work was done over a period of three years, beginning in 1981 with projects starting at different times during that period. Owing to difficulties arising in the field, two projects have experienced delays and, at this writing, the final reports from Bangladesh and Indonesia have not been received. Thus, this report contains information based on interim papers sent from the field at different stages of the research cycle.

ACKNOWLEDGMENTS

The report could not have been completed without the assistance of many people. The EPOC Street Food Project has been funded by the Office of Women in Development, USAID. John Hourihan, of the Office of Women in Development, in his capacity as project manager, has provided continual support and guidance.

At EPOC, the Director, Irene Tinker, has provided immeasurable support and guidance throughout the period of my direction of the project. Coralie Turbitt, Associate Director, offered invaluable comments and editorial assistance in reviewing drafts of the paper. EPOC interns Martha Kellsey Oven and Elaine Emling ably assisted in the preparation of the paper. The preparation of the manuscript for final presentation was very capably managed by Laura von Behren with the assistance of Jacqueline Martin.

The project was created and supervised by Dr. Irene Tinker and is based upon the work of the four country directors. The final report, however, is my analysis of the data. Any errors of interpretation are, therefore, my responsibility.

Monique Cohen
Project Director

INTRODUCTION

Throughout the developing world, in both rural and urban areas, vendors can be observed selling a wide array of processed foodstuffs. Known commonly as street foods, these foodstuffs range from full meals to snacks. The sellers of these prepared foodstuffs are visible everywhere, each seemingly a negligible factor in the economy. However, their sheer numbers would suggest an aggregate importance greater than meets the eye. Thus, EPOC undertook a study of vendors in four provincial towns in Senegal, Bangladesh, the Philippines, and Indonesia to measure the magnitude of the street food trade, the economic dynamics of street food establishments, the potential of the trade as an income-generating activity for women, and the role of street foods in the diet. The results of the study are very revealing. They show that the street foods trade is a vibrant and expanding part of private enterprise in developing countries, fulfilling a persistant need for the provision of cheap food to mushrooming urban populations, and at the same time creating jobs for a vast number uneducated, yet entrepreneurial citizens who are making their own employment opportunities.

The buying and selling of street foods is widespread in cities of all sizes. The annual volume of sales in the towns studied ranged from $2.4 billion in Manikganj (pop. 38,000) to $28 million in Iloilo, Phiippines (pop. 248,00). In Bogor, Indonesia, (pop. 248,00) there is one street food establishment for every 14 people in the population; in Manikganj, one for every 69.

Within towns and cities, street food vendors practice their trade in central city locations: market-places, bus stops, factory gates, schools, cinemas, and along the footpaths of shopping streets. Equally or more numerous are the residential neighborhood vendors who dot street corners or sell "across their doorsteps." In Bogor and Ziguinchor, these neighborhood vendors outnumber their central city counterparts by four to one.

The typical street food firm is a microenterprise. Urban street food sellers may be stationary or ambulatory. Vendors occupying fixed sites may operate out of stalls complete with a stove, a table, and some chairs; others display their precooked foodstuffs on a cloth on the ground. The mobile vendor is visible in much of Southeast Asia with his/her shoulder pole with a brazier slung from one end and the uncooked ingredients from the other end; in West African cities, the vendor with a tray is an equally common sight. In many cultures, itinerants can be seen on bicycles or with their pushcarts displaying samples of street foods, including drinks, cooked foods, or ice cream.

Street foods provide an important source of employment for many of the urban poor, especially women. In Iloilo City, 15% of the urban labor force derive an income from this economic activity, 79% of them are women. Close to 86% of the households involved in the street food trade in Iloilo depended principally on their earnings from this microentrepreneurial activity. In Ziguinchor, Senegal, over half of the street food vendors are women, and of these, 59% are the principal supporters of their households. Unlike the above cities,

women are less visibly active in Bogor and Manikganj: the overt participation role of women was only 20% and 1%, respectively. However, closer observation revealed an invisible female labor force active in the preparation of street foods. Factoring them into the count, a total of 40% of the vending operations in Bogor, and 23% of the street food vending population in Maniganj involved women.

The income earned from street foods in cities is competitive with alternative unskilled labor opportunities. In Iloilo, on the average, daily earnings for a street food entrepreneur equal the minimum legal wage; in Senegal, the daily income of a female street food vendor is nearly 50% greater than the minimum legal wage paid a domestic servant. For rural women who trade in town, street foods are similarly important as a source of off-farm income.

The processing and selling of street foods responds to a well defined demand. Street foods play an important, but not well documented, role in the diet of many segments of the population, especially the urban poor. Estimates from Singapore, urban Peninsular Malaysia, Indonesia, and the Philippines indicate that between 22% and 28% of the food budget of the urban household is spent on street foods. Among frequent consumers, these foodstuffs may comprise up to 35% of an individual's food intake. Within households, there exist noticeable variations in street food consumption. Of particular interest are school children, who have been identified as significant purchasers of street foods throughout the world. For example, in Ile-Ife, Nigeria, 96% of school children buy breakfast from street food vendors each day and often buy a second street food meal as well.

Certainly, within towns and cities, street food vendors appear to be of vital importance. Moreover, the processing and sale of street foods would seem to be an area of expanding activity. Factors, among them increasing female involvement in the urban labor force and growing costs of fuel, indicate that it may be more cost effective in time and money for the household to purchase street foods than to prepare the foods at home (Hollnsteiner, 1978). Furthermore, in view of EPOC'S findings that street foods are nutritionally sound, this trend toward increased street foods consumption cannot be seen to be as detrimental to the health of the population involved as popular wisdom would assert, at least on the nutritional level.

The street food trade has a positive role to play as a source of income, employment, and food. The challenge for policymakers is to plan with and for the street vendors. At the level of city government, the objective would be to reduce the problems associated with street food vending, such as dubious hygenic practices and traffic congestion, while at the same time leaving intact the contribution this sector makes to the urban economy. Yet, translating such policies into action calls for dealing with numerous small and spatially dispersed microenterprises. Among the requirements is a definition of goals that is appropriate both to the capacity of the enterprise and to the sector as a whole. It also requires a grouping of vendors, possibly by product type or spatial location, that will allow for the effective delivery of development assistance.

Many of the issues raised above were among the considerations that led the Equity Policy Center to undertake an inquiry into the dynamics of

the street food trade. Initiated in 1981, with funding from the Office of Women in Development of the Agency for International Development, EPOC began the survey of the street food trade in four countries: Senegal, Bangladesh, Indonesia, and the Philippines. The initial purpose of the project was to identify interventions that could help vendors to increase their earnings from street food preparation and sale and/or improve the nutritional quality of the food they sold. The objectives of the Street Food Project were:

- to identify who makes, sells, and eats street foods;
- to assess the income-earning potential of both women and men in this sector;
- to indicate the role of street foods in the urban food marketing and distribution system;
- to estimate the role of the street foods sector as a source of employment and as a provider of food.

The Street Food Project by its sectoral focus on one segment of the informal sector has shown the clear linkages between an aspect of the informal sector and the development questions of concern to AID. In view of the magnitude of the street food trade and its primary concern for food, it has relevance to many of the food issues confronting developing countries today. These include production, marketing, and distribution. In addition, the street food trade has a direct impact on nutrition, health, and sanitation, particularly among the urban and rural poor. At level of the enterprise, the EPOC projects suggest opportunities for rural

off-farm employment as well as urban income generation that can be expected to expand with continuing urbanization. Because street foods utilize skills possessed by women, it is particularly promising as a source of income generation for women.

In addition, because women are already competitive with men in an activity traditionally open to both, the street foods trade offers an unusual opportunity to design genuine gender integrated development programs to improve the sector. Recent analyses have revealed that women-only projects of all types, but especially income-generation, fail partially as a result of men's resistence to the diversion of development resources to women as an exclusive group. This pitfall does not necessarily exist in the street food sector. Furthermore, improvements in the trade would build upon skills that women already possess making it unnecessary to engage in non-traditional skills training with heavy investment of time required, thus avoiding another typical cause for failure of women's income-generating initiatives.

PART II: RESEARCH METHODOLOGY

A. DEFINITIONS

The definition of street foods is any foodstuff, minimally processed and sold to be consumed on the spot. The street food vendor is an entrepreneur who sells such food items from a non-permanent structure.

1. What Are Street Foods?

Street foods encompass snacks and meals, the notion being that all street foods involve some processing of either raw or partially processed foodstuffs. While the raw inputs need no further explanation, the partially processed ingredients might include rice and noodles which have been manufactured by a home-based informal sector enterprise or industrially by the formal sector.

Working within this broad definition, the number of varieties of street foods enumerated in each country was:

Bangladesh	128
Senegal	129
Philippines	220
Indonesia	245

The classification of a prepared food as a street food in all countries was primarily based on observation. Inclusion of certain foodstuffs was also strongly influenced by local perceptions of what are street foods (1).

The majority of street foods are cooked, either prior to sale or on demand at the time of purchase. Monie is a millet-based porridge widely consumed as a breakfast food in some West African countries. The sellers have large kettles of food at their selling sites ready to be spooned out to the consumer. By contrast, many hawkers of noodle-based dishes in much of Southeast Asia are short order cooks. The food is prepared upon receipt of a customer's order, although the noodles themselves may have been boiled in advance. A small number of street foods call for considerable processing but no cooking. Petit poissons, sold either as a snack or as a constituent of meals, are tiny fish caught in the estuaries of southern Senegal. They are prepared by salting and dehydration. Another example is acar, which is available in Bangladesh. This snack food is a mixture of fruits and spices marinated in oil.

Street foods include both snacks and meals. By measuring popularity in terms of customers' preferences, snacks were found to predominate. In both Senegal and the Philippines the ratio of snacks to meals was 2 to 1. Snacks include a myriad of foods, roasted peanuts being the most common. Puffed rice is popular in the Philippines and Bangladesh. Acaras, fritters made from cow pea flour, are mainly eaten as snacks in Senegal, as are cookies, sweets, and a variety of beignets or donuts. In West African cities a meal of a plate of rice and sauce bought from a street food vendor is a popular lunch for many urban workers; in Southeast Asia, a street meal may mean anything

from a bowl of noodle soup to a dish of rice, vegetables, and perhaps meat.

Another distinguishing feature of street foods is that they can be consumed at the point of sale, but included in this definition are prepared foods that the consumer takes home for inclusion in a family meal. Tempe (2), a food widely consumed in Indonesia, is often bought as a snack to be eaten immediately or for inclusion in the household meal later in the day (Peluso, 1981). In Senegal, yoghurt is most often made outside the home and purchased at the market for consumption at home with porridge or for an evening meal with cous-cous. It is also given to babies as a weaning food.

2. The Physical Structure of a Street Food Enterprise

To distinguish street food vendors from their formal sector counterparts and to ensure uniformity of data, the survey excluded establishments selling prepared foods within four permanent walls. Four walls were used as a proxy for the level of capitalization. By this means the survey appears to have encompassed nearly 9 of 10 of the food catering establishments in the cities in the project. In the major commercial sector of Iloilo City, only 122 formal sector prepared food enterprises were identified, compared to at least 1,350 street food vending operations (Barth and Kuo, 1984). In Ziguinchor, there were 13 very small scale restaurants to 748 wet season and 1,534 dry season street food establishments.

Generally speaking, the "structures" that street food entrepreneurs utilize in their trade are modest. They range from items as simple as a piece of cloth or a tray placed on the ground, to baskets, mats and trays, and the more expensive collapsible tables and wheeled carts. In permanent marketplaces, street foods may be sold from stalls or assigned spaces. The establishment may have small tables and chairs. The degree of permanence and thus the amount of capitalization in the individual street food "structure" depends on the extent to which the entrepreneur wants to be mobile.

Utilizing this approach, it is also possible to identify three groups of street food vendors:

a. ambulant vendors using carts, poles, baskets;

b. those who sell at fixed locations outside defined trading sites, on doorsteps or simply sitting on the ground, in small restaurants located on porches or semi-permanent structures that may have three but not four walls and may be provided with tables and chairs;

c. vendors occupying stalls in marketplaces or shop houses where the ground floor trade sells to both in-house consumers and on-the-street food customers.

The relative importance of these different types of structures varies among countries. In Iloilo City, those selling meals operated more often from permanent sites than did those selling snacks, suggesting some parallels between type of products sold and the vending structure utilized by the street food vendor. Eighty-eight percent of the sellers of meals

had permanent structures compared with only 24% of snack vendors. In Senegal "permanent" vendors are a minority. Vendors who sit on the ground outnumber stall operators in the center of the city by a ratio of four to one. In residential neighborhoods in Ziguinchor, 90% of the vendors operate from door steps or sit on the street; the balance of the vendors, 10%, are ambulatory, going from house to house. By contrast, in Manikganj, 50% of the vendors occupied specially built stalls.

3. A Vendor's Product Line

Among the factors that distinguish the street food trade between countries was the number of items that each vendor sold. In Africa the practice suggested by our data, and supported by personal communications with people who have worked with street food vendors elsewhere in West Africa, is that a single product line is the rule rather than the exception. In Ziguinchor, nearly all vendors specialize in a single prepared foodstuff and the majority are involved in processing the foods they sell. By contrast, no more than 29% of the vendors in Manikganj, Bangladesh, specialize in a single product line.

In Iloilo City, the single product line is the exception rather than the rule for carenderias, which comprise 35% of the sample. Carenderias are the traditional Filippino eating establishment that serves cooked portions of meals (viands) from display counters and/or containers. Carenderias usually offer their clients more than a single dish from which to choose. Moreover, many carenderias also provide beverages to accompany such street food meals. Where the vendor

in Iloilo City specializes in a single product line, it would seem to go hand-in-hand with the use of a specialized type of equipment. Barbeque sellers operating from impermanent sites prepare and sell only this one foodstuff. Native cakes which are produced and sold by women, and ice cream, which is exclusively a male area of street food selling, are two foodstuffs that tend to be sold alone.

B. REGIONAL CITIES AND MARKET TOWNS: SITE SELECTION

EPOC chose to carry out the Street Food Project in provincial urban areas because of increasing recognition being given to the role of regional cities and market towns in integrated regional development. Development institutions have found it convenient to retain the dichotomy of rural and urban sectors. This sectoral division, however imperfect, does reflect the main thrust of much development activity over the last decade. The overwhelming economic dominance of primate cities in many developing countries has led to a heavy concentration of resources in these urban areas. As a result, both international and domestic urban development assistance has tended to be concentrated in one or perhaps two cities in each country and only marginal resources have been allocated to the other components of countries' urban systems.

At the opposite end of the scale, rural development has also been a priority. Reflecting the primarily agricultural concerns of the planners, policymakers, and technicians, the object of these interventions was to increase agricultural productivity and to raise small farmers' incomes and living standards. A locational perspective, inherent in most urban

investment programs, was noticeably absent in most of these rural development initiatives. The guiding, but erroneous, assumption was that since rural investments are regionally sited, regional development would inevitably follow (Cohen, 1978).

Recently, there has been a discernible shift in interest and priorities toward the developmental role of regional cities and market towns. Specific plans for the industrial development of selected secondary cities have emerged. Concentrated decentralization is a model that appears to have been implemented in some countries, including Indonesia (MacAndrews and Fisher, 1983; and Cohen, 1981). At the lower end of the urban scale, recognition of the symbiotic relationship between market towns and their rural hinterlands has become the basis for planning new actions. In Upper Volta, Bolivia, and the Philippines, plans for the provision of infrastructure in a range of rural service centers have been implemented. They stress the key linkage role that secondary centers and market towns can play in the development process (Rondinelli, 1970; Rondinelli and Evans, 1983). These centers of population concentration are important in the transfer of goods, services, and information, both among urban places and between towns and their rural hinterlands (Rondinelli, 1983).

The listing below details many of the main functions that can be and are performed by these urban areas:

1. They can provide convenient locations for decentralized public services, thereby creating greater accessibility to services for both urban and rural residents.

2. They can offer the threshold of population concentration needed to offer a variety of basic social services and facilities.

3. They offer a wide range of consumer goods and commercial and personal services, most of which are made available by small-scale enterprises and the extensive "informal sector."

4. Many act as regional and local marketing centers offering a wide variety of distribution, transfer, credit and financial services through both formal and informal sector institutions.

5. Many act as centers of agro-processing and agricultural supply centers for their surrounding rural regions.

6. They can provide sources of both off-farm employment and supplemental income for nearby rural populations.

7. They can serve as major transportation and communication nodes linking their residents and those of rural villages and towns in the hinterlands to larger cities and other regions in the country.

8. They can absorb substantial numbers of people migrating from rural to urban areas.

9. They can be channels for the diffusion of innovations and changes, the spread of the benefits of urban development, the stimulation of rural economies and the integration of urban centers and rural settlements within their regions through social, economic, and adminstrative linkages (Rondinelli, 1983).

There is a growing awareness among development practitioners that improving levels of development in secondary cities and market towns will directly benefit the rural sector while at the same time assist the process of change in the economy as a whole. With this shift has come the growing interest in designing interventions appropriate to this task (Chetwynd, 1980). The data base on which to plan such actions has been limited. Rondinelli (1983) was able to identify studies of no more than 31 cities. Unfortunately, few of the data are compatible, and therefore

this information is of limited utility in making comparisons across city size distributions. Information collected in the Street Food Project provides data that is cross-culturally compatible and can contribute to our understanding of the roles of regional cities and market towns.

The primary criteria for selecting a site for the country research was that street foods be present in the urban economy and the town or city be small enough so that one could cover the universe of the street food trade. This approach reflected the dearth of information on the street food trade. Without basic data about the multiplicity of locations in which such economic activity is practiced as well as the range of products encompassed under the rubric "street foods," it is impossible to define an appropriate sample. Working within these constraints, the project focused its site selection process on regional cities and market towns in each of the four countries. More particularly, the choice of urban places for undertaking the project was limited to populations under 250,000. This corresponds with the largest size center that can be feasibly surveyed in its entirety. The discussion that follows considers this choice of sites.

1. Iloilo City, Philippines

Iloilo City ranks sixth in the Philippine urban system (Pernia, 1982) with a population of 244,827 (1980). One of the country's longer established cities, it was opened for foreign trade in 1865. Early on it became the capital of Iloilo Province. More recently, with the grafting of planning regions onto the established Philippines provincial administrative system, the city has also become the capital of the Western

Visayas, or Region VI (pop. 4.5 million). Its hinterland now includes not only the province of Iloilo, but also extends to the other three provinces on the Island of Panay (Aklan, Caiz, and Antique), as well as the province of Negros Occidental on the Island of Negros.

Region VI exports both sugar and rice to the rest of the Philippines. Corn, coconut, root crops, bananas, vegetables, and fruit are produced primarily for regional demand. In addition, the fishing industry 's important. Extensive hectares of fishpond operations have made this area a major exporter of fish, mussels, oysters, shrimps, and crabs to Manila and Japan.

The potential of Region VI remains to be fully exploited. Levels of productivity of most farms remain very low (USAID, 1982). Despite the city's administrative importance to the rest of the region, Iloilo City lacks the many facilities that should link it functionally to its surrounding smaller cities and settlements. The region has inadequate market facilities and a poor transportation and communications infrastructure. While Region VI's Gross Regional Product (GRP) is average (Gibb, 1974), 65% of the region's population is estimated to be below the poverty level (Barth, 1983).

As a regional city, Iloilo City's functional base is closely tied to its agricultural hinterland rather than any development of a modern industrial base. Certainly, with an estimated average monthly household income of around P2,000, Iloilo City is not significantly wealthier than its surrounding region. Iloilo City lacks major industrial enterprises, except for some food processing and metal fabrication factories.

Employment opportunities within the formal sector in Iloilo City remain largely limited to government and education. Iloilo City now houses the offices of regional government as well as the provincial and municipal government bureaucracies and is a major regional educational center with a secondary and post-secondary student population of 115,000. One consequence is an extensive informal sector, whose primary role is to service local and regional demand.

2. Bogor, Indonesia

Locational factors have been both a cause and consequence of Bogor's dynamic cash economy. Situated in the middle of Jakarta-Bandung industrial belt, Bogor (pop. 248,000: 1980) is a major node through which primary products travel to Jakarta and finished goods are shipped to West Java. Only 50 kilometers from Jakarta, Bogor serves as a residence for many Jakarta factory workers and executives, and is the suburban home for a rapidly growing number of Jakarta employees. This functional importance that Bogor derives from its proximity to Jakarta is reflected in the 25 daily round trips by commuter trains between the capital and Bogor and the presence of convenient road transportation between Jakarta and Bogor provided by the only express toll road in the country. The economic advantages of Bogor have also ensured that this city acts as a magnet, drawing in many migrants. One result is that suburbs of migrants lured by hopes of employment and wage labor have overflowed official city boundaries.

Bogor has long played an important role as a national center of education and research. The city's agricultural research facilities attract students from all over the Indonesian archipelago as well as many foreign agricultural researchers. At present, 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.

3. Ziguinchor, Senegal

Although smaller, Ziguinchor (pop. 86,295 in 1980) plays a functional role in relation to its surrounding region similar to that of Iloilo City, but unlike Iloilo City, it gives the appearance of being no more than a provincial market town located in a backwater of the country. Ziguinchor is typical of those urban places, apart from the "millionaire" capitals, that are found throughout the Sahelian region of West Africa.

Ziguinchor is foremost an agricultural service center with a regional Basse-Casamance hinterland population of 291,737 in 1976 (PADCO, 1984). While it houses a third of the region's population, suggesting that the regional level of urbanization is high, this figure is deceptive. Over 31% (1981) of the town's economically active population officially derives an income from agriculture and fishing (Posner, 1983), a figure that may even be low, since both women and men periodically return to rural areas to cultivate rice and other subsistence food crops. It is estimated that close to 15% (1973) of the entire population of the Basse-Casamance migrate to Ziguinchor during the dry season.

It is inevitable in a town so closely tied to its rural hinterland that its level of economic prosperity would be closely linked to the agricultural sector. The laggard features of the region are all the more striking in view of the region's apparent agroclimatic advantage over the rest of the country. It suggests a potential ready to be tapped. Relative to the rest of Senegal, the Casamance has a comparatively high average annual rainfall (1,232 mm. between 1965-80 (ISRA, 1980)), and a climate that permits the region to grow paddy rice, vegetables, and fruits such as mangoes, lemons, and oranges not produced elsewhere in the country. An extensive river and estuary system provide a fish and shrimp resource that is still not fully exploited.

The slow growth of the Casamance would seem further exacerbated by the physical separation of the region from the rest of the country. Extra-regional and intra-regional transportation links are weak. Within the region, an inadequate marketing infrastructure makes it difficult for rural producers to gain access to markets for their output. Furthermore, the high rate of agricultural employment in Ziguinchor limits urban demand for food. Current agricultural projections estimate that the Ziguinchor market is close to the saturation point with respect to demand for and supply of local agricultural produce (Posner, 1983).

As the departmental capital, Ziguinchor houses the regional offices of the ministries. More recently, it has also become the headquarters of a Casamance Regional Development Authority. Its regional importance is further emphasized by the presence of the only surgical hospital and complete secondary school in the province. The shrimp factories and an

oil depot aside, there are few other formal sector employment opportunities. Those without agricultural resources must depend on the informal sector for earning a living. Available estimates suggest that this non-structured form of employment absorbs close to 24% of the city's labor force (Posner, 1983).

4. Manikganj, Bangladesh

In a highly populated country with a well-developed urban system, Manikganj (pop. 37,966 in 1981) is typical of the many rural market towns that dot Bangladesh's urban system. Unlike Ziguinchor and Iloilo City, Manikganj is not a regional capital. It exists primarily as a rural service center supporting a range of urban functions which primarily meet the needs of its immediate subdistrict hinterland, one of the poorest in Bangladesh. These functions are reflected in the presence of both the twice-weekly periodic market -- separate from the town's daily market -- and the offices of the subdivisional and thana headquarters.

Because of its very local role, Manikganj falls within that grouping of towns where the distinction between urban and rural is largely administrative. When applied to the town of Manikganj, factors of population density and distance ensure that this difference is blurred. Many of those employed "in town," particularly in the informal sector, also live in the rural sector. The boundary divisions that serve administrative purposes ensure that many of those working in town live outside its limits.

With an annual population growth rate of 6.3%, Manikganj's rate of increase has not differed from the country's annual rate of urbanization of 6.3% over the 1970-1975 period (World Bank, 1979). However, given that in most countries small towns in the class of Manikganj tend to be among the fastest growing urban places (Rondinelli, 1983), this would also seem to suggest that it is a stagnant rather than expanding urban place. At 40 miles from Dhaka, Manikganj is located outside the sphere of influence of the country's principal urban area. Yet, it would seem to be also close enough to be a last stop in a "stepwise" process of migration.

However, this relatively slow rate of expansion of Manikganj in large part reflects its changing function as a transportation center. Prior to the completion of the Farakka Bartage, Manikganj was a ferry stop along the river, the major transportation route from Dhaka to Aricha in the northwest. Since 1967 this transportation artery has been displaced by a major highway which passes around the town. Long-distrance traffic no longer stops as much in Manikganj; rather, it passes around the town. The declining significance of Manikganj as a regional if not national transportation center, in turn, would seem to reinforce the intra-regional rather than extra-regional functions of this very local service center.

C. METHODOLOGICAL APPROACH

One of the primary goals in designing the street foods projects was to develop a model that would provide comparable cross-cultural data.

Thus, all the country projects share a common methodology composed of four parts:

-- a mapping and census of the universe of street food vendors in each city,

-- surveys of street foods enterprises,

-- surveys of street foods customers and

-- in-depth studies of five foods.

In ensuring the compatibility of the data obtained through the application of this approach, the Street Food Project also benefits from combining two methodological approaches to collecting primary data: "top-down" surveys and "bottom-up" anthropological participant-observation. Such a combination is regarded by many as an ideal requirement in developing policy-relevant information about the informal sector (Moser, 1983), one of the objectives of the Street Food Project.

1. Mapping and Census

The census and mapping of the universe of street food enterprises in each city required an enumeration of all enterprises involved in the processing and sales of street foods. Only those evident on the street were counted. No express attempt was made to map and count the invisible trade in food processing and sale that is known to exist in many Muslim countries (3). This counting and mapping of firms is not to be confused with a census of the number of individuals, either full-time or part-time, deriving an income from this economic activity. The economically active population involved in the street food trade is inevitably much higher

since many enterprises employ more than one person, the majority of whom are unpaid family help (4). Since food supply is subject to seasonality, the census was repeated throughout the year, at least during each of the dry and rainy seasons. As Table 1 indicates, there was considerable annual variation in the number of vendor establishments in all cities but Iloilo.

Table 1: Census of Street Food Vendors by Season

City	Rainy Season	Dry Season
Iloilo City	1,350	1,350
Bogor	16,872	17,760
Ziguinchor	748	1,534
Manikganj	367	516

Urban market-places, which operated on a daily basis, and along transportation arteries, were the main areas of concentration of central city street food selling. Other nodes included bus, train, taxi, or ferry terminals and sites outside office buildings and public institutions, especially schools and hospitals. At the inception of the Street Food Project, the view was held that the preparation and sale of street foods was primarily a central city activity. The census soon proved this assumption to be incorrect. A greater percentage of street food establishments were identified in residential areas servicing the needs of their immediate neighbors than in the central areas of most of the cities.

In Bogor and Ziguinchor, vendors in residential neighborhoods outnumber their central city counterparts by 4 to 1.

2. Street Food Establishment Surveys

The samples for the street food enterprise survey were drawn from the censuses. The purpose of this survey was to assess the economics of the street food enterprise and to understand the socio-economic background and skills that the entrepreneur brings to her/his trade. To ensure compatibility of data, comparable questionnaires were adminstered in the four countries. The main variation was that in Senegal the economic and sociological questions were administered in separate interviews.

While methods of sample stratification were compatible among countries, it was necessary in Manikganj to adjust the sample selection process to ensure that all women street foods sellers would be included in the study. This reflected the limited number of women vendors in evidence on the street: 6 out of 550 vendors.

3. Customer Surveys

The primary objective of the customer survey was to determine characteristics of the street food consumer and his/her buying habits. This should not be interpreted as a street food consumption survey since it only encompassed people observed buying street foods, not the population at large, which obviously includes non-consumers. In each city, customers were interviewed at the place at which they purchased a street food after completion of the transaction.

There were some differences among countries in the selection of their customer samples, but this does not appear to affect the compatibility of the country results. In Iloilo City, two customers per sample vendor were surveyed. In both Manikganj and Ziguinchor, the universe of vendors was the basis for selecting the vendors whose customers were to be surveyed. In each case, three clients were surveyed per vendor, with randomization ensured by questionning every third customer. In Ziguinchor the survey was undertaken twice, in October 1982 and March 1983, each time with a little different focus. The October sample was based on the distribution of vendors, by location and product; the March survey involved consumers of monie, yoghurt, acaras, petit poissons, and roasted peanuts only, five foods looked at in detail in the participation-observation phase of the project.

4. In-depth Study of Five Foods

The fourth component of the research was the anthropological approach of participant-observation studies of vendors of selected foods. In all countries, the researchers spent three to four days at the street food firms and at the homes of the vendors learning about the day-to-day operation of the street food enterprise. This approach was intended to provide considerably more detail than can be obtained through the shorter technique of administering questionnaires as well as to build a basis for verifying the information obtained from the street food enterprise surveys.

Among the initial assumptions at the inception of the project was the belief that the street food business was a family enterprise with members

of the household contributing their labor and pooling the earnings communally. Thus, the participant-observation section of the project was also designed to assess the role of household members in the operation of the enterprise in regard to production and sales. In fact, the evidence has found this assumption to be invalid in many instances. A substantial portion of vendor households were involved in separate but complementary vending operations. For example, in the same household in Bogor, a man would sell noodle soup and his wife would sell herbal drinks. In another, a woman sold fritters and her husband sold ice drinks.

In each country, five food categories were identified and three vendors in each food category were surveyed in depth (see Table 2). Certain broad parameters were set, within which sample selections were made and which ensured comparability among the country studies.

a. A priority was given to foods that had high levels of female participation in their preparation, distribution, and sale.

b. Preference was given to foods which had a good potential for improvement in either their profitability or their nutritive value.

In addition, considerable flexibility was called for in the choice of the five foods to ensure that the households included in the participant-observation phase also reflected the specific cultural features of this trade in each country. In Ziguinchor, all four major ethnic groups were

Table 2: FIVE FOOD CATEGORIES, BY CITY

A. Iloilo

Food Category	Percent of Vendors in Food Group
Meals (Viands)	35
Fried Snacks	13
Soups	9
Native Cakes	5
Barbeque	4

B. Ziguinchor

Food Category	Percent of Vendors in Food Group
Cowpea fritters	18
Peanuts	14
Seafood snacks	5
Millet Porridge	4
Yoghurt	2

C. Manikganj

Food Category	Percent of Vendors in Food Group
Canacur (a)	25
Muri (b)	20
Acar (c)	12
Ruti and Bhaji (d)	12
Matha (e)	2

a. Chickpeas with puffed rice and spices
b. Puffed Rice
c. Pickles
d. Combination of flat bread and fried vegetables
e. Yoghurt drink

Sources: Barth, 1983: Posner 1983: Owens and Hussain, 1984.

represented; in Iloilo City, among the criteria used was the assessment of the most popular and widely consumed street foods, including both meals and snacks.

The criteria for selecting the five foods reflected another initial hypothesis concerning the organization and structure of the street food trade. The sequential process of purchasing the raw ingredients, their processing and sale to the final consumer were assumed to be integrated activities, all undertaken within the entrepreneur's household. In fact, the reality is far more complex. The production, distribution, and retailing activities for a single street food are frequently fragmented among different enterprises. In Bangladesh, where this pattern is particularly pronounced and where women play a relatively less important role in selling than in the other countries studied, this observation resulted in an adaptation in the method of selecting the sellers to be included within each of the five food categories. Four seller households per food were observed:

a. that of a woman seller;

b. a household in which the woman prepares the food which the other family members sell;

c. a household that sells, rather than prepares street foods;

d. a household that is involved only in food preparation.

5. Household Surveys

In the Philippines and Indonesia, separate household surveys were undertaken to collect data on the importance of street foods in the household diet. Since it was assumed that this would vary by income level, income was used as the independent variable in the drawing of the sample. Accordingly, areas in each of the cities were selected, and within each area the same number of households were surveyed. Six neighborhoods were chosen in Iloilo City. They were selected to ensure that different income levels at various distances from the city center were represented in the survey.

PART III: FINDINGS

A. THE ROLE OF STREET FOODS IN THE URBAN ECONOMY

1. The Street Food Trade

Bromley (1978) has argued that the street trade is one of the most visible and important occupations in most African, Asian, and Latin American cities. The data for Manikganj, Ziguinchor, Bogor, and Iloilo City clearly show the urban street food trade to be no exception (see Table 3): it is a flourishing area of informal sector activity in all these cultures and is a phenomenon of cities and towns of all sizes.

The all-important finding emerging from these basic data is the proof of the ubiquity and extensiveness of this economic activity in all the cities surveyed. Observation suggests that the street food trade may be numerically among the most important of all the subsectors of the informal sector in all these towns. Certainly, data gathered for a study of small towns in Malaysia (Cohen, English, and Brookfield, 1977) found street food establishments to be among the most prevalent of these urban places' informal sector activities. The same study also indicated that these street foods establishments, known locally as coffee shops (5), were among the first retail outlets to flourish as surrounding rural, as well as urban, populations expanded.

2. Food Catering Establishments

Street food establishments are but one in a wide range of food catering establishments in all urban areas. Drawing on the list prepared

Table 3: STREET FOOD ESTABLISHMENTS BY CITY

City	Urban Population	Number of Street Food Enterprises	Population per Establishment
Manikganj (1981)	37,996	550	69
Ziguinchor (1980)	86,295	1,534a/	56
Iloilo (1980)	244,827	5,000b/	49
Bogor (1980)	248,000	17,760	14

a. This is the dry season figure; the number of street food establishments identified during the wet season was 748.

b. The first survey of Iloilo City excluded neighborhoods and identified only 1350 establishments. A recounting at the end of the research, which included neighborhood vendors, provided an estimate of 5,000 establishments. These neighborhood vendors are encompassed in all the other country totals of street food enterprises.

Sources: Barth, 1983; Posner, 1983; Chapman, 1984; Owens and Hussein, 1983.

by Cheng (1982), the gamut of prepared food enterprises other than street food establishments in all the countries surveyed also includes restaurants, cafes, bakeries, fast food chains, canteens in public buildings such as government offices, schools, and factories, and a diversity of catering arrangements by which vendors are contracted to prepare and deliver meals to a consumer on a daily basis (6). The contractual arrangements aside, most of these other food catering services play a role that primarily complements the service provided by the street food vendor. Restaurants, fast-food chains, and bakeries all cater to a different level or different type of demand. In a comparative survey of restaurants and fast-food establishments in Iloilo City, Barth and Kuo (1984) found that these establishments primarily supplied the needs of the relatively few upper income consumers who could afford the expense. Bakeries in the same city concentrated on wheat flour products, especially bread, items not widely produced by street food vendors. The only institution identified in Iloilo City which would seem to compete functionally with street food vendors was the canteen. The objective of the canteen management appears to be to improve on the quality of services provided by street food vendors by ensuring that the food is either nutritionally superior or prepared under superior conditions of health and hygiene. This goal, which underlies many school feeding programs, does not alter the likelihood that the impact of this institution on the street food trade is probably one of adjacent competitors splitting up the pie.

While other types of food catering establishments were identifiable in all the cities surveyed, in none did they appear to play a role nearing

the significance of the street food vendor. Preliminary estimates suggest that street food establishments comprise over 90% of the prepared food establishments in most of the cities. In the major commercial sector of Iloilo City, only 122 of these other prepared food enterprises were identified, compared to at least 1,350 street food vending operations. In Ziguinchor, the difference in number is 13 informal sector restaurants to 748 street food establishments in the wet season and 1,534 in the dry season.

3. Employment in the Street Food Trade

The importance of the street food trade in the urban economy derives from the absolute number of enterprises and the number of individuals who are actively involved in this trade. The sale and preparation of street foods in all four countries studied by EPOC are in the hands of the self-employed. Most of these street food vendors operate their businesses on a family basis, utilizing unpaid family labor; only a significant minority in each country depend on hired help who work both full-time and part-time (7).

The population that derives an income from this economic activity is far in excess of the number of establishments (see Table 4) (8). If one assumes that 40% of the urban population in each city comprises the working age population, one can derive an approximation that between 5% and 15% of the labor force depend on street foods in part or in whole for their household income. The percentage would also seem to rise with increases in city size.

Table 4: POFULATION INVOLVED IN STREET FOOD TRADE, BY CITY

City	Number of Street Food Enterprises	Population Active in Street Food Trade a/
Manikganj	550	950
Ziguinchor	1,534	1,534b/
Iloilo	5,000	14,500
Bogor	17,760	n.a.

a. Estimates only

b. Only 4% of the sample enterprises were more than one person operations. They belonged to ice vendors who hired young boys to hawk their product. While estimates for the numbers involved are known to be small, the actual numbers are not available.

Sources: Barth, 1983; Posner, 1983; Owens, 1983; Chapman, 1984.

These figures should be viewed only as indicators of the general magnitude of urban labor force participation in street foods. Moreover, at the lower end of the urban scale they appear to underrepresent the significance of this trade as a source of off-farm as well as urban employment. In larger urban areas, such as regional cities in excess of 200,000, only a small percentage of the population is directly engaged in agriculture. By contrast, as one descends the city size distribution, this proportion tends to rise noticeably (Rondinelli, 1983). Thus, a more realistic base for assessing the employment importance of the street foods sector might be their proportion of the non-agricultural labor force. Seen from this perspective, the role of the street foods trade as a source of non-farm employment in smaller urban places assumes a greater significance. In Ziguinchor, where 24% of the labor force are active in the primary sector, this is indeed the case.

4. Street Foods: A Service or Productive Enterprise?

Within the broader category of the street food trade, a distinction can be drawn between productive, distributive, and service enterprises (Moser, 1983). Cooked food sellers are usually classified as distributive and service enterprises (McGee and Yeung, 1977; Forbes, 1981; Bromley, 1982). Yet, the street food firm is no less important as a productive enterprise, involved in food processing as well as sale. These establishments undertake an integrated process extending from the purchase of the raw ingredients, their processing, through to their marketing and distribution. For example, monie sellers are involved on a daily basis

in milling as well as the manufacture and sale of their millet-based porridge. The production process is not unlike that which takes place, albeit on a different scale, in the large-scale manufacture of breakfast cereal such as Weetabix or Rice Krispies. Seen from this perspective, the street food enterprise would seem to belong more appropriately to the category of productive enterprises.

The transformation of the raw ingredients is a key variable distinguishing street food vendors' operations from the more numerous, if not more visible, market and street sellers of unprocessed foods. In Iloilo City and Ziguinchor most street food establishments both processed as well as retailed many of their products -- 75% and 96%, respectively (Barth, 1983; Posner, 1983). Only in Bangladesh was a significant number of vendors identified who specialized in buying products ready-made and reselling them. There they comprised 62% of the sample.

Overlooking the value-added contribution of the street food trade to the urban economy is among the factors which has led to street food being grouped with services, many of which are dismissed in the literature as parasitic (Bromley, 1982). Yet, outside of Bangladesh, the producer-seller role of the street food vendor is a key aspect of the economics of the street food enterprise, even where the firm has a multiple product line consisting of some ready-processed items. This omission is all the more striking in view of the findings from the country studies. The ratios of value-added to sales average 25% for the Philippines and were in the ranges of 32% to 49% for Senegal (9).

In the absence of data on total output for the four urban areas encompassed by the project, it is difficult to measure the contribution of this sub-sector to the city economy. Furthermore, no official statistics on any aspect of the street foods trade in any of the cities exist. Yet our calculation of the value of sales generated by this sector in each of the cities -- $2.4 million to $28 million -- tentatively suggests that street food vendors contribute productively to the urban economy and should no longer be ignored (see Table 5).

B. THE STREET FOOD ENTERPRISE

1. Female Participation in the Street Food Trade

In many countries women are readily identifiable on the streets preparing and selling snacks and meals, many times on request and in a manner not dissimilar to the short-order cook. Just about everywhere, women can be seen squatting on footpaths with their kettles of rice and sauce which have been prepared away from their selling sites. One of the hypotheses this project was designed to test was that the street foods trade was largely the domain of the urban poor, especially women.

Censuses in each of the cities suggest that women are highly involved in street foods sales, although the degree of female involvement is strongly influenced by cultural variables (see Table 6). The identification of 62% of street food enterprises as women-owned in Iloilo came as no surprise. The long-standing economic importance of women in this country is well known (Infante, 1965). Similarly, given the West

Table 5: VALUE OF SALES FOR THE STREET FOOD TRADE BY CITY

City	Number of Street Food Establish-ments	Average Value of Daily Sales Per Enterprise		Aggregate Daily Sales per City	Aggregate Yearly Sales per City a/
			(US$)b/	(US$)	(US$)
Iloilo	5,000	236 pesos	18	90,854	28,437,254
Ziguinchor c/	1,534	5,520 fr	14	14,901	4,664,013
Manikganj	550	2,017 tk d/	84d/	46,223d/	2,403,592

a. The annual turnover figures were estimated by calculating daily sales by 313, the number of yearly working days assuming a six-day working week.

b. Exchange rates used for calculating these figures were:

Philippines	13 pesos:	US$1
Senegal	400 cfa francs:	US$1
Bangladesh	24 tk:	US$1.

c. The number of establishments are those identified in the dry season; the turnover figures are based on averages for wet and dry season sales.

d. Sales figures are given on a weekly basis.

Sources: Barth, 1983; Posner, 1983; Owens and Hussain, 1984.

Table 6: OWNER OF STREET FOODS ESTABLISHMENTS, BY SEX

City	Male Percent	Female Percent	Other Percent	Total
Iloilo a/	10	62	27 b/	100
Ziguinchor	47	53	--	100
Manikganj	99	1	--	100
Bogor	80	20	--	100

a. Survey data only.

b. Husband and wife together.

Sources: Barth, 1983; Posner, 1983; Owens, 1983; Chapman, 1983.

African phenomenon of heavy female involvement in petty as well as long-distance trading (Marshall, 1964), the numbers in Ziguinchor -- 53% -- were also to be expected. The lower figures for Bangladesh would seem to reflect cultural factors, among them the restrictions imposed by Islam on the open participation of women in the urban economy.

However, even this gender data can be misleading. The food seller surveys in all the cities found women to be a great deal more involved in the street food trade than the above figures indicate. In Iloilo, even where about 27% of the firms were operated by husband and wife together, women were found to dominate the control of business income. However, this preeminence of women is not an exclusively Filipino phenomenon. Urban Thai women are equally active as producers, sellers and producer-sellers of street food in urban areas. A Ford Foundation-funded street food project now in progress in Chonburi, Thailand, population 46,861, indicates that 78% of the owners of these micro-enterprises are women (Szanton, 1984). Nelson (1979) working in Kenya in 1974, found that beer making and retailing, a dominant, although illegal, street food throughout much of East Africa, was a female-dominated business.

The data for both Bangladesh and Indonesia also underestimate both the involvement and power of women in the street food trade. If both paid and unpaid workers are included in the total, women comprise 23% of the street food vendor population in Bangladesh (Owens, 1983). In Bogor only 20% of the identifiable vendors were women. However, since one-quarter of the men indicated that their spouses helped in the preparation of the food,

roughly 40% of vending operations in Indonesia involved women (Chapman, 1983).

The hidden participation of women in Bangladesh reflects on economic involvement of women living under strict purdah which is more commonplace in many Islamic countries than is often realized. Although secluded in their compounds, women prepare food for sale. Many women cook at home, and members of their families, both children and husbands, act as their agents in selling their output. Simmons (1975) working in Northern Nigeria, identified this as a thriving area of female enterprise. In a survey of 465 women in three Zaria villages, Simmons found that 85% of the women were involved in at least one commercial food-processing activity. While the purchasing of inputs and selling may be done by other family members, control of the earnings remains in the hands of the women.

The commanding commercial role of the Ghanean, Nigerian, or Togolese woman has been well documented (Marshall, 1964). In Dakar, women are important in all aspects and levels of trading, but elsewhere in the country where Islamic law influences their overt participation, women play a lesser role. However, as Posner (1983) points out, the sale of prepared and snack foods is one area of the informal sector that women clearly dominate in Ziguinchor, Senegal. Moreover, it seems that the conduct of this trade is very much in keeping with the widespread West African trading practice of young women apprenticing with their mothers (Robertson, 1974). In Ziguinchor 25% of the women vendors were aided by unpaid family members, usually daughters and other female relatives (Posner, 1983).

These participation rates for women in the cooked food trade raise the question of the affinity between women and the street food trade. Many have argued that there is a general compatibility of domestic duties, such as childcare and cooking, with market work (Greenstreet, 1981; Heyzer, 1981a, 1981b; Bunster and Chaney, forthcoming). Da Vanzo and Lee (1978), in a detailed study of Malaysian time-budget data for market women, found that nearly half of the women with children under 10 have their children with them while they sell cooked foods. In Accra, Ghana, Pellow (1978) also found that market women combined trade with childcare and, in addition, cooked for their families as they worked.

In Jamaica, higglering or market trading, unlike other forms of labor, was observed to permit women to adjust their economic roles to the varying stages in their life cycle (Durant-Gonzales, 1983). In the countries encompassed by the EPOC Street Food Project, this same coexistence of the cooked food trade and household demands was evident. Vendors tend to enter this economic activity at the end of their child-bearing years, usually when their youngest children are nearing school age (see Table 7). Even though 66% of the women involved in the street food business in Zinguinchor are over 35, women of all ages are active in this trade. Those with small children sell from their homes or close to their homes in their residential neighborhoods. They move to more central market-place locations and the lucrative sites, as these demands ease. Not surprisingly, the street food trade in the central part of Ziguinchor is largely devoid of children during daytime trading hours (Posner, 1983).

Table 7: VENDORS' AGE AND LENGTH OF YEARS IN BUSINESS

City	Average Age	Average Number of Years in Business (range 1 month - 15 years)
Ziguinchor	35	2.75
Iloilo	41	12
Bogor	35	n.a.
Manikganj	32a/	n.a.

(a) Mean age of paid female helpers at selling sites. Mean age of unpaid female helpers at home is 31 years.

n.a. not available

Sources: Barth, 1983; Posner, 1983; Chapman, 1984; Owens, 1983.

Entry into street food trading for many women is an extension of their household roles. Street foods, whether sold in regional cities or market towns, are but one step removed from the work of many rural women who market the household surplus in both an unprocessed and processed form in the urban market-place or in the periodic rural market-place. For the rural-urban migrant, street food trading is a very direct adaptation of their rural lifestyles (Cohen, 1984). Furthermore, as Nelson (1979) found in Kenya, but which has validity elsewhere, the preparation and sale of street food is an economic activity that uses skills that require no special formal education and training. Rather, this form of trading uses skills which women normally practice at home: cooking and, what many learn within the family, the art of trading.

One of the major differences between the participation of men and women in the street foods industry in certain countries is the amount of time they devote to the preparation and sale of their products. In Ziguinchor, men typically sell products, such as grilled meat, that require little or no advance preparation. By contrast, women sell millet porridge and cow pea fritters which are time-consuming operations requring two and three hours respectively of preparation and cooking prior to sale. Certain cassava-based snacks such as tape and kerupuk (10) require considerable pre-sale preparation time. In Bogor the sale of these products the domain of women; noodle-based foodstuffs are in the hands of men.

2. Entry into the Street Foods Trade

(a) Migrant Participation

A commonly held view is that hawkers are recent urban migrants who are forced into this type of economic enterprise (Cohen, 1984). Few of the street food traders in any of the four cities fit this stereotype. As Table 8 indicates, between 40% and 50% of the vendors had been born in the city where they practice their trade. In Bogor, where this figure is disaggregated by gender, a greater proportion of female than male vendors is found to have been Bogor-born, 61% compared to 42% (Chapman, 1984). This would seem to parallel the male selectivity of Indonesian rural-urban migration (Findley, 1977). In addition, the majority of migrants were not recent arrivals but long-standing residents. For example, in Iloilo City the vendors born outside the city had lived in Iloilo an average of 21 years. The findings for Ziguinchor are little different: over 50% of the migrants had been settled in the town for a period in excess of five years.

(b) Skill Levels

Since hawking requires little skill or capital, one would assume that there are few barriers to entry. The data from the four country studies appear to support such an assumption. In some of the countries, the level of "formal" education of the vendors was indeed low. In Ziguinchor, 80% of the vendors sample had never been to school; in Bangladesh, the comparable figure is 31.5%. The majority of vendors in Bogor -- 80% -- had received no more than a sixth grade level of education. While such low educational levels may be obstacles to obtaining formal sector employment, in the area of street and market-place trade it has not been a deterrent either to entry or to success.

Table 8: BIRTHPLACE OF STREET FOOD VENDORS, BY CITY

	City (Percentage Distribution)			
Birthplace	Iloilo	Ziguinchor	Bogor	Manikganj (a)
City	46	40	45b/	39
Region	n.a.	34c/	n.a.	16d/
Rest of Country	n.a.	11	n.a.	14e/
Outside Country	n.a.	15	n.a.	n.a.
Total	n.a.	100	n.a.	n.a.

a. Indicates place of current residence.

b. City and nearby villages.

c. Casamance.

d. In municipality of Manikganj.

e. Outside municipality of Manikganj.

Source: Barth, 1983; Posner, 1983; Chapman, 1984.

At the same time, among those with education, this factor does not appear to correlate closely with success in the street food trade. While many vendors in Iloilo exhibited a comparatively high level of education, the average level of education amounted to slightly less than 8 years. A third of the vendors had completed high school and 20% had some university education. Barth's model of the street food enterprise found that formal education measured in this way was not a significant independent variable explaining an entrepreneur's value of sales (Barth, 1983).

Yet, to say that they had no formal skills is not the same as arguing that the vendors brought to this work no skills. Indeed, many of the traders in Senegal and the Philippines had picked up indirectly a wealth of knowledge about selling prior to entering this business. In most instances this had been acquired by helping their parents.

Many vendors entered this trade with little previous direct work experience. In both the Philippines and Senegal, many vendors stated that they had never worked prior to entering this trade -- 52% and 60% respectively. A lower figure for Indonesia -- 26% -- masks significant gender differences. In Bogor, 18% of men compared to 59% of women had never worked prior to setting themselves up as street food vendors. Many of the street food vendors with previous work experience had gained it in the traditional or formal sector. In the Philippines 25% of the vendors had earlier sales occupations that provided them with basic skills for street food trading; in Bogor, 33% of the men and 17% of the women had previous work experience in other sales-related activities. By contrast,

75% of the men and 25% of the women in Senegal had moved directly from agriculture into street food trading.

A minority of vendors in the Philippines moved into street food trading from formal sector employment. A woman, a college graduate, worked as a secretary before setting up her own business as a seller of a variety of cakes; one man was a government clerk before finally operating a carenderia; another had worked as a salesman for a Manila based firm before taking over the family soup stall. Similarly, Teilhet-Waldorf and Waldorf (1983) working in Bangkok found that of those operating as shopkeepers, bricksellers, and vendors in the informal sector, 34% had moved into these business from formal sector jobs. Mazumdar (1981) in his study of the urban informal sector in Malaysia also identified this cross-over trend. Noting the more advanced age structure of this self-employed sector, he has suggested that there maybe some cross-over from the wage earning class to hawking, particularly in the later stages of an individual's career. A more appropriate explanation is that informal sector earnings are higher and not as rapidly eroded as formal sector fixed incomes. Employees in formal sector food catering establishments in Iloilo City earned 54% less per day than owners of informal sector street food enterprises (Barth and Kuo, 1984).

The different sexes may bring both different work experiences to street food trading in Senegal and different perceptions of their roles in practicing this trade. Men, unlike women, see street food trading as only a transitory occupation in Senegal. For example, brochette and tangana selling, street foods in which men have a monopoly, were

intimately tied to their ethnic origins and for Peuhl men were seen as a first step in a process of upward mobility.

(c) Start-Up Capital

Low start-up costs make entry easy into street food preparation and sales. One can start small. Basic equipment is present in most households: a few pots, some cutlery and crockery, a charcoal brazier and maybe a table. In addition, many women enter this trade by adding to the family cook pot and selling from the family home. This, in large part, explains the organization of the street food trade in many Iloilo neighborhoods. More often than not, these foodstuffs are sold from housefront or "doorstep" carenderias. In Bogor, this close match of domestic and commercial roles would seem to be a gender difference associated with the street food trade. Women vendors indicated a greater tendency to own their own equipment than men. Men predominate as renters of equipment, suggesting a possible difference is mode of operation (Chapman, 1984).

Start-up figures are both hard to come by and notably unreliable. Barth (1983) provides an average start-up cost figure of 1,074 pesos in the Philippines but argues that it has little meaning since it has not been adjusted to a price index covering the various years in which firms ere founded. In the four countries, owners' savings were the primary source of capital used to start up business: 64% of the vendors in Bogor, 58% in Iloilo, and more than 80% in Ziguinchor used their own money.

Information on sources of start-up capital was more available. The use of credit was obviously less popular than the use of a vendor's savings

for this purpose. In Iloilo only 36% of the street food vendors surveyed used credit for this purpose, while a remaining 6% depended on a combination of both savings and credit. However, among those in Iloilo who used credit for their initial capital needs, moneylenders were their primary suppliers (see Table 9).

3. Mode of Operation

(a) Ownership and Labor Input

The street food establishment can be classified as a productive enterprise. By nature of its value-added component it can also be distinguished from Bromley's (1982) listing of "street occupations." This listing includes retail distribution, small-scale public transport, personal services such as shoe shine, security services, gambling services, scavenging, prostitution, begging, and theft. Unlike the above, the street food trade is more than simply a service, it involves more than just the sale of cooked foods. The majority of street food establishments are involved in an integrated process extending from the purchase of the raw ingredients through their processing to their marketing either to final demand, the consumer, or to resellers who then retail them. As a result, the productivity of the enterprise depends noticeably on its labor inputs.

Reflecting the transformation aspect of the street food trade is the dominance of the producer-seller in this trade. In Iloilo producer-sellers comprised 75% of the vendors; in Ziguinchor, 96% of the vendors prepared the food they sold. By contrast, in Manikganj the percentage was much lower; no more than 38% of the vendors surveyed retailed the product they prepared; the balance were retailers who simply resold ready-to-eat

Table 9: SOURCES OF CREDIT TO START THE ENTERPRISE

Source	Iloilo Vendors (%)	Bogor Vendors (%)
Relatives	16	10
Friends	2	20
Moneylenders	42	10
Employers	2	-
Government Agencies	2	-
Producers	20	-
Wholesale/Retail Firms	16	45a/
Other	-	15b/
TOTAL	100	100

a. These vendors do not own their equipment; they work for a larger firm that places the equipment at their disposal.

b. A combination of the above.

Source: Barth, 1983; Chapman, 1984.

foodstuffs to the consumer. One of the explanations may be that overpopulation has led to a situation of involution and an intense division of labor.

The type and role of labor input varies by product. Some foodstuffs, such as fried peanuts or grilled meat, call for little advance preparation. Most can be done at the point of sale. Other street food products require the vendor to spend considerable time in preparing the product prior to sale, usually away from the trading site: millet porridge and acaras (cow pea fritters) take two to three hours respectively from start to finish; Filipino native cakes involve between four and five hours work at home before they can be sold; matha, a milk-based drink consumed in Bangladesh, is boiled for three hours prior to being left to ferment overnight.

In view of the considerable amount of time many street food vendors spend selling, anywhere between 8 and 16 hours, preparation of street food often cannot be undertaken by the vendor alone. Not surprisingly, fewer than 50% of the enterprises in the Philippines, Bangladesh, and Indonesia are one-person establishments. In Iloilo there is an average number of three workers per enterprise including the proprietor. Among the producer-sellers of the nine most widely sold products in Manikganj, the majority of owners are assisted in their work, usually by their wives. In nearly all the cases the wife is responsible for the processing and the husband for the marketing. Excluding tea and ruti, the average number of persons per enterprise is 1.7; by contrast, only a few of the enterprises that only resell ready-made food were more than one-person

establishments (Owens and Hussain, 1984). Only in Ziguinchor did the one person producer-seller enterprise predominate; 71% of the vendors indicated they worked alone. Since the street foods in Senegal are no less demanding in their preparation time requirements and thus labor inputs, it is suggested that cultural variables may explain the differences.

With labor inputs key to the productivity and profitability of the street food enterprise, the type of labor used is also important. Most street food enterprises are family-run establishments, i.e., they do not hire wage labor but depend on unpaid family members to provide assistance when needed.

In all countries the numbers of non-family operations, that is, those hiring wage labor, were in the minority (see Table 10). The use of wage labor is associated with a larger scale of production and greater capitalization and profits than the average. In Ziguinchor this practice was limited principally to sellers of ices -- all women -- and bakers. Both of these commodities are street foods which require costly equipment (Posner, 1983). Yet, the proportion of street food establishments hiring wage labor in the four EPOC cities was higher than identified by McGee and Yeung (1977). In their Southeast Asian hawker study, McGee and Yeung estimated that the proportion of non-family operations for Baguio and Bandung was 1.9% and 4.5% respectively.

Table 10: STREET FOOD ESTABLISHMENTS BY MODE OF OPERATION

	Percentage			
	Iloilo	Bogor	Ziguinchor	Manikganj
Family Operations	74	-	94	90
Nonfamily Operations	26	-	6	10

Sources: Barth, 1983; Posner, 1983; Owens, 1983.

(b) Sources of Supplies

The street food trade is primarily a regional and local economic activity. Its workforce, the owner, the family and the wage labor, come from the immediate area. The regional aspect of the trade extends to its supply of other inputs, particularly the raw produce that is processed into street foods. In Iloilo City 85% of the vendors sampled indicated that their raw ingredients -- vegetables, fruits, meat and fish -- are produced in surrounding areas. However, only some of these backward links move directly from the producer to vendor. The perishability of these inputs and the end products, together with the micro-scale level of the operation ensure that most vendors purchase their inputs frequently and in small quantitites, from retailers close to the site of operation. The small size of these purchases also means that few of the vendors are able to benefit from the price advantages of bulk purchasing, but discounts are possible. Many vendors develop relationships with suppliers that lead to a lowering of the prevailing retail price. Otherwise, the cost of raw inputs are comparable to those of most householders.

For non-perishable food inputs, which appear to be most numerous in Iloilo and largely absent from the Ziguinchor street food trade, a different linkage structure obtains. Most of these items (12) are manufactured extra-regionally. Nearly all were made and packaged in Luzon. Two significant exceptions are Coca Cola and Pepsi Cola, both of which are bottled in Iloilo Province. In all instances, vendors' purchases are made locally, from a diversity of outlets including supermarkets, sari-sari stores, bakeries, and groceries. Unlike the vendors' links with suppliers of perishable raw ingredients, who are also

microentrepreneurs, these linkages take place within a different distributive system and occur with both formal and informal sector establishments.

Processed and packaged foods, most of which are manufactured by formal sector firms, generally comprise a small part of any vendor's inventory. While it is difficult to assess the weight of these transactions in value terms relative to the unprocessed ingredients used in the bulk of the street food trade, it is important to note that in Iloilo 78% of the vendors sell some non-perishable items. With the increasing penetration of the Western fast food trade and the packaged snack industry into these economies, this finding may be a signficant indicator for the future of the street food trade.

(c) Access to Working Capital

Credit-in-kind from suppliers was used extensively by vendors in all four countries surveyed. Purchases are frequently obtained on credit with payment due either the same or next day. Questionnaire responses indicated that 48% of the vendors in Manikganj did not pay interest on this form of credit. In Iloilo nearly all the vendors stated that they did not pay any interest when using credit-in-kind from their suppliers. Closer observation suggested that while this may be true, at the same time many of the vendors pay cash which enables them to purchase at discounted retail prices (Barth, 1983).

When interest is charged the rates extend over a wide range. In Bangladesh where 25% of the vendor population admitted to paying interest, the rates varied between 1% per day and over 25% per month (Owens and

Hussain, 1984). In Ziguinchor the use of credit, either in kind or in cash, to obtain supplies is less extensive. Where credit is used there is evidence that this practice may be both gender- and ethnic-specific. Such financial arrangements are primarily used by Peuhl men. Grilled meat sellers, all of whom are Peuhl men, obtain their meat from butchers who belong to the same ethnic group and who may have begun their own commercial careers as brochettes vendors (Posner, 1983).

Credit-in-kind in the form of a consignment or commission system is widely used in Indonesia when vendors do not own their equipment. A larger firm owns the means of production and arranges the supply of the pushcart in return for the vendor selling the company product. The company receives a fixed commission per unit of output sold, while the street vendor gets to keep all earnings in excess of this amount. In the Philippines many carenderia owners received their start up capital from the soft drink and beer manufacturers with similar strings attached. Loans were for a short period, sometimes without interest. The terms of the contract are that the vendor must deal exclusively with a particular beverage supplier. The commission system, known as borongano in the Philippines, is only used by Iloilo ice cream vendors, all of whom are men.

These types of credit-in-kind form part of a wider non-institutional system of credit which includes moneylenders and families. Where loans are in cash, the usual source is the moneylender whose rates of interest can run anywhere between 5% and 40% per month. Alternatively, the street food vendors can often borrow small amounts of working capital from their

families. This is the system preferred by women vendors in Ziguinchor since repayment terms are more favorable than moneylenders. However, this source of capital can only be generated on occasion.

By depending primarily on informal credit channels for working capital, the street food vendor differs little from other practitioners of street occupations. Banks have seldom been a source of working capital for this street vending population. In Manikganj, the absence of any mortgageable assets or any guarantee from a well-known individual eliminates most street food vendors from eligibility for formal sector institutional loans. For similar reasons, in Ziguinchor, bank loans were not available to the vast majority of the street sellers. However, in Iloilo as many as 6% of the street food sellers used banks as a source of credit for working capital. Several of the vendors had obtained these loans under bank- and government-sponsored programs specially developed for stall owners and for which no security was required. A few others had obtained their loans from a bank but had been able to bypass certain of the requirements, such as securing of the loans, because they had known people working in the bank.

For 61% of the street food vendors in Bogor, 65% in Iloilo, and many in Bangladesh and Ziguinchor, lack of access to capital resources was seen by vendors as a primary constraint in the operation or expansion of their businesses. While many operate on credit with their suppliers, often according to a "buy now and pay later" system, most argue they would prefer access to credit in the form of cash. Access to cash permits bulk purchases at either wholesale or discounted retail rates which, in turn,

can affect the profitability of the enterprise. Yet, at a level of economic behavior where the fortunes of the enterprises and the household are inseparable, access to cash is not simply needed for operating and expansionary needs, but also to ensure against loss when unexpected household demands and emergencies, e.g., school fees or hospitalization, force the entrepreneur to draw down the firm's operating capital.

The history of credit assistance programs for microenterprises has shown that loans are frequently used for non-business purposes (13). The recipients are primarily concerned with meeting the household's basic needs and these loans can make the difference for the enterprise and the household between bankruptcy or survival. In addition, the evidence from the Philippines argues that when it is possible to accumulate a surplus not immediately required by the household, the priority need not necessarily be enterprise expansion. Rarely is it used to move from the informal to the formal food catering sector, but for investment in alternative endeavors, thus spreading the risk. Of the 122 canteens, bakeries, and restuarants in Iloilo, none of the entrepreneurs had entered this trade by crossing the bridge from the informal to the formal sector (Barth and Kuo, 1984).

C. ECONOMIC VIABILITY AND THE STREET FOOD TRADE

1. Costs

Most street food vendors measure their success or failure by what is left over at the end of the day to meet their household's basic needs. Since few keep accounts, only a minority can specify with any degree of accuracy exact amounts of profits and losses. The project methodology led to the collection of data that permit estimates of the economic viability of this activity across a range of foods and several cultures.

For the majority of street food vendors, purchases of inputs, both processed and unprocessed, comprise their main operating costs (see Table 11). Since these costs are rarely less than 85% of the street food vendor's total expenses, minimizing them would seem to be key to the profitability of the enterprise. This is an important assumption underlying most credit assistance programs. In view of the widespread problems vendors experience in obtaining working capital, access to resources that would enable them to lower inputs would indeed appear a primary area for intervention. Possible actions that meet this need will be considered more fully in the discussion of the recommendations.

Negligible in relation to total costs, rarely more than 1%, market taxes and license fees are a cost that is paid with any regularity by only those vendors that occupy demarcated spaces within urban market-places or elsewhere in the city. These fees are generally collected on a daily basis either in accordance with the vendor's volume of sales and type of produce -- the practice in Manikganj -- or the area that a vendor occupies, the method used

Table 11: COSTS FOR AN AVERAGE STREET FOOD ENTERPRISE

(A)

Costs:	Iloilo	Bogor
	(Percentage Distribution)	
Ingredients a/	91	93
Cooking Fuel	3	4
Wages	3	2
Rental Payments	2	1
Other	1b/	-
Total	100	100

a. This includes both unprocessed and processed goods purchased from other enterprises.

b. Spoilage losses.

(B)

Ziguinchor

Costs:	Millet Porridge	Yoghurt a/	Acaras	Peanuts	Seafood Snacks
Ingredients	66	99d/	91	85	85
Cooking Fuel	18f/	-	-	15f/	-
Other	16b/	1c/	9e/	-	15e/
Total	100	100	100	100	100

a. Refers to whole-milk yoghurt, a product made exclusively by women.

b. Includes the cost of milling the millet grain.

c. This figure includes a market tax but does not include any fuel costs since yoghurt in Senegal is made without heating the milk.

d. Of the cost of the ingredients, and 56% can be attributed to whole milk, the balance of the cost is for sugar. Sugar is always sold as a sideline with whole-milk yoghurt. It is added to whole-milk yoghurt which is often eaten on the spot.

e. Includes market taxes, fuel and other non-food costs.

f. Includes market taxes.

Sources: Barth, 1983; Chapman, 1984; Posner, 1983.

in Ziguinchor. Such municipal taxes are relatively easy to collect and revenue so generated can make a significant contribution to the capital needed for market-place maintenance and construction (FAO, 1983).

The controversy centers on the sidewalk, ambulatory, and "door step" vendors who are a more elusive population. For this group of street vendors in the Philippines as well as Manikganj, the non-payment rather than payment of market taxes and/or licences fees is an invisible cost which is representative of some of the problems of legitimacy they confront. While some governments collect fees from this population with some success, as in Indonesia (Chapman, 1984), many find the costs of collection greatly outweighing the revenue generated. Yet, it is a tax and thus a cost that most such vendors would willingly incur. Since payment of this fee is seen by these vendors as bringing with it legitimacy from the government, the lack of de facto if not de jure recognition is seen by many vendors as the greatest underlying cost that he/she must bear. Many sidewalk vendors in the center of Iloilo City belong to a vendors' association. From voluntary contributions, the association pays people to watch for pick-pockets, to prevent sidewalk obstructions, to ask vendors to keep the sidewalk clean, to maintain order, and to preserve the selling places for vendors. What the association has failed to do in its 10-year existence is to prevent periodic crackdowns by police during which vendors have been arrested and their carts confiscated.

2. Earnings

Reflecting the importance of the transformation process in the producer-seller's street food operation, value-added as a percent of turnover

was found to average 25% for the street food trade in Iloilo and 29% in Bogor (14). Detailed data are available only from Senegal but show that not only is value-added as a percentage of the total volume of sales considerably higher than for the Asian samples, but that such value-added varies greatly among foods (see Table 12).

Table 12: VALUE-ADDED AS PERCENT OF SALES, IN ZIGUINCHOR

	Value-Added/ Sales (%)
Seafood Snacks	49
Millet Porridge	48
Peanuts	48
Whole-Milk Yoghurt	36
Cow pea Fritters	32

Source: Posner, 1983.

Value-added for a street food enterprise is composed of the remuneration of the capital and labor provided by the owner and his family plus the cost of hired labor, if any. In Iloilo the proportion attributable to family labor is 91% while in Bogor it is 95%. In Senegal, where the majority of enterprises are one-person firms, the figure is closer to 100%.

In calculating the gross profit accruing to the owner -- gross profit -- we found that street food entrepreneurs in all countries earn incomes in excess of the minimum legal wage. However, any interpretation of such figures must be placed in the context of the labor market. Firstly, few unskilled workers in developing countries earn the minimum wage or above. Secondly,

Table 13: STREET FOOD ESTABLISHMENT DAILY EARNINGS

(A)

	Iloilo (pesos)
Expenses	182.38
Sales	236.22
Gross Profits	53.84
Net Profit per firm	0
Minimum Wage	33

(B)

	Ziguinchor (cfa francs)				
	Millet Porridge	Whole Milk Yoghurt	Cow Pea Fritters	Peanuts	Seafood Snacks
Expenses	372	1,774	741	420	294
Sales	720	2,726	1,094	682	582
Gross Profits	348	952	353	262	288
Net Profit per Firm	98	702	103	12	38
Minimum Wage a/	250	250	250	250	250

a. In Senegal, the minimum legal daily rate of 250 cfa for a maid was used.

n.a. not available

Sources: Barth, 1983; Posner, 1983.

since many street food entrepreneurs also provide their families with meals from the commercial cook pot, the gross profit should be lowered to take account of this food as revenue-in-kind.

While earnings may seem competitive they still appear to leave little for capital accumulation. Using an imputed wage for family labor based on the legal minimum wage, the daily income or net profit per street food enterprise was found to be close to zero in the Philippines (15), and just above it in Senegal (see Table 13).

3. The Viability of the Street Food Enterprise

The street food trade, so often perceived as undesirable, would seem to provide its practitioners with an income competitive with other sectors (see Table 13). A comparison with the levels of cash incomes earned in other sectors in Ziguinchor indicated that gross income for craftsmen in 1980 was 111,000 cfa francs per year or, assuming 313 working days a year, approximately 355 cfa francs per day (PADCO, 1984). The data for Ziguinchor illustrate wide variation along product lines. Whole-milk yoghurt, which is exclusively in the hands of women vendors, was the most profitable street food trade in this city. Net profit was more than two times the average labor wage. This, in part, reflects the forces of supply and demand that are peculiar to this trade. Whole-milk yoghurt is in great demand and its supply is limited by the low level of production per cow and the problem of spoilage. Only one day's supply of inputs can be bought at a time.

All these estimates point to low returns to capital for street food establishments. However, the calculations may be misleading since much of the fixed equipment used for street foods is normal household equipment and may

not be used exclusively for this trading activity. Simmons (1975), in her work on the small-scale rural food processing industry in North Nigeria, recognized this problem. Since the value of fixed capital is difficult to determine, she measured returns to investment using working capital. Using the ratio of profits to expenses as a measure of the productivity of capital, we find that street food trading is least productive in Iloilo (30%) and most productive in Senegal (49%-88%), with Bogor (37%) lying between the two (see Table 14).

The data on profit margins should be treated with caution. Many times sales figures are underestimates (16). By the same token, total costs for many vendors exclude widespread invisible charges. As already pointed out, many vendors feed their families the products they sell. Rarely is this cost included in their estimates of their expenses.

Among street vendors the primary objective is frequently not the maximization of profit margins but sales maximization. In the words of one Ga trader in Accra:

> "...the best strategy is to minimise your profit (margins) and outsell other competitors. You aim at the least profit possible per unit and thereby get most customers to buy more, so you get big profits" (Robertson, 1974)

The figures for Ziguinchor also indicate seasonal and gender differences associated with earnings. The difference in the average profits made by men and women is considerable and appears to be a function of the time devoted to selling street foods. Generally, men spend more hours on the street selling than women -- 8 compared to 4 hours. The result, reflecting the prevailing

Table 14: RETURNS TO INVESTMENT FOR STREET FOODS

(A)

	Iloilo	Bogor
Returns to Investment (%)	29.6	37.1

(B)

	Ziguinchor			
	Women		Men	
Season	Dry	Wet	Dry	Wet
Returns to Investment (%)	48.8	87.8	53.1	58.4

Sources: Barth, 1983; Chapman, 1984; Posner, 1983.

market wisdom indicated above, was a greater rate of turnover and higher profits. During the dry season, men's profits are more than six times greater that women's. The ratio drops to three to one during the wet season. By contrast, men's returns to investment, the ratio of profits to expenses, are relatively constant throughout the year while women's show considerable variation (see Table 14). This reflects men's greater fixed costs which must be spread over a lower volume of sales during the wet season (17).

Low levels of net profit per street food establishment are indicative of the difficulties of accumulating capital in this trade. Certainly, for many vendors, particularly those without access to starting or working capital, it is difficult to consider the possibility of expansion or leaving the trade. On the other hand, the data lead to speculation on how access to credit can make possible bulk purchases of supplies and produce, thus lowering costs. The effect on the street food enterprise could be increased profits either by a widening of profit margins or by lowering prices and raising the volume of turnover.

Street foods provide a viable opportunity for employment and income generation. Not only are earnings per worker competitive with comparable incomes for other unskilled occupations in each of the cities surveyed, but these results conform to trends identifed elsewhere. Nelson (1979) working in Kenya in 1974, found that women working in beer making and its sale could earn 250-400 shillings which compared very favorably with the minimum formal sector wage of 200 Kenyan shillings a month. Teilhet-Waldorf and Waldorf (1983), working in Bangkok, have estimated that food vendors made three times the minimum wage rate (18).

In view of these findings, the question of the value of the contribution of this street food income to the economic welfare of the household arises. Our studies show that it is of primary importance. For 86% of all vendors in Iloilo and 59% of all female vendors in Ziguinchor, street food earnings were the primary source of the household income.

D. THE CONSUMPTION OF STREET FOODS

1. Household Demand for Street Foods

One of our earliest assumptions was that street foods were the food of the urban poor. In an endeavour to come to grips with the significance of prepared foods in diet household consumption surveys were included in the Philippines and Indonesia Street Food Projects. The findings from both studies and data obtained from secondary sources for urban Peninsular Malaysia and Singapore not only reject this hypothesis but indicate conclusively that street foods are integral to the diets of all segments of the urban population.

While street foods are widely consumed across income levels, the poor comprise the bulk of the clientele. Everywhere, about a quarter of household food expenditure went on street foods. Within this average there are marked variations. An average expenditure of 23% of the household food budget was spent on street foods in Iloilo City. With increases in household income the share of the food budget allocated to street foods declined steadily (Barth, 1983). By contrast, in Indonesia this share remained constant for all but the

upper quartile where the proportion of urban household food expenditure allocated to street foods jumped from 25% to 29% (see Table 15). At this stage it is difficult to draw many conclusions from these results, except to reinforce the widespread consumption of street foods across all income levels. At the upper end of the scale, regardless of whether the budget share percentage allocated to street foods is higher or lower than that expended by the poor, the absolute amount each household spends on street foods is consistently greater.

For many of the poor, not only is a significant proportion of their food budget allocated to street foods, but also an important part of their total income is spent on street foods. Among the population occupying the lowest quartile in Iloilo, 77% of their income goes on food (Barth, 1983). Presented in terms of street foods this translates into 19% of their disposable monthly income. The significance of this finding is emphasized by a poverty benchmark now in use by AID. Those living in absolute poverty are defined as those segments of the population that spend over 80% of their income, both in cash and in kind, on food.

Although the Senegal project did not include a household consumption survey, a rough guess by the project director for this country, suggests that between 15 and 20% of the household food budget in Ziguinchor probably is spent on street foods. This estimate conforms roughly to the figures obtained by Reuse (1974) in Accra, Ghana. In a 1965 study of urban market-places in this city he found that between 12 and 14 percent of food expenditures by African households in that city went on prepared foods other than bread.

Table 15: PROPORTION OF HOUSEHOLD MONTHLY FOOD EXPENDITURES ON STREET FOODS

Expenditure Quartile	Iloilo Class	Iloilo Percent	Bogor Class	Bogor Percent
	(pesos)		(rupiah)	
First	260 - 750	28	n.a.	25
Second	751 - 1,100	24	n.a.	26
Third	1,100 - 2,5000	25	n.a.	24
Fourth	2,501 - 13,000	21	n.a.	29

n.a. not available

Sources: Barth, 1983; Chapman 1984.

2. The Street Foods Customer

The consumers of street foods are by no means a homgeneous group. By interviewing buyers of street foods at the point of purchase it was possible to distinguish among the principal consumers of street foods whose purchases of street foods reflect different needs (see Table 16).

In all countries the informal sector household is the most important consumer of street foods (19). The needs satisifed by this pattern of expenditure are many. For a growing number of the poor it is more expedient to consume street food meals rather than cook at home. Many basic dishes consumed in the countries where EPOC has worked require long hours of cooking prior to consumption. It is often more expedient for housewives to purchase them ready made. Indeed, many do. A food consumption survey carried out in Dakar (CILSS, 1980), showed that while 32% of the family eat cous-cous daily, only 12% of urban women prepare it themselves. The substitution of food prepration time for time spent in income-generating activities is, in fact, economically rational. The cost effectiveness of such a decision was well stated by a laundry woman in the Philippines. She finds that time spent marketing and cooking is put to more productive use in working for extra clients. She no longer cooks but feeds herself and her family street foods. She also sees street foods as a better way to control the food consumption habits of her children.

Among the features of third world urbanization is population overcrowding in substandard housing (Linn, 1979). In many cities this overcrowding is accompanied by shortages of cooking space, making it necessary for many

Table 16: THE STREET FOOD CUSTOMER, BY OCCUPATION

	Iloilo	Bogor	Manikganj	Ziguinchor
	(Percentage Distribution)			
Children	16a/	33a/	8	21
Students b/	n.a.	n.a.	4	14
White-Collar Workers	21	14	19	24
Informal Sector	47	37	43	10
Housewives	16c/	16c/	1	17
Unemployed	n.a.	n.a.	1	7
Other	0	0	24d/	7
Total	100	100	100	100
(Number)	(246)	(464)	(436)	(240)

a. Includes students.
b. High school and college students.
c. Includes the unemployed.
d. Includes 22% farmers.

n.a. not available

Sources: Barth, 1983; Posner, 1983; Chapman, 1984; Owens and Hussain, 1984.

residents to purchase prepared snacks and meals. Yet even where cooking space in available, the continually rising cost of fuel has meant that for many poor households, daily cooking has become expensive. In fuel-scarce countries, many may find it cheaper to purchase street food meals where economies of scale bring the price of a serving below the cost of home preparation (Cohen, 1984). Similarly, the absence of cold storage facilities among the poor makes it expedient to purchase already processed those foods that require extensive preparation time and are highly perishable. Both cous-cous and yoghurt, street foods popular in Senegal, respond to these household constraints.

Our findings confirm the very visible practice of street food vendors congregating outside school buildings to sell lunches to children of all ages. In some countries this source of food comprises an important part of the student's daily diet. Kujore (1983) has estimated that in selected primary schools in Ile-ife Nigeria, 96% of school children brought breakfast from vendors before school began. Among the children who bought street foods, 8% purchased at least one street foods meal a day, 76% bought two such meals, and 16% purchased three. It is interesting to note that despite the ubiquity of this practice, few nutition development projects are targeted on school children using the institution of the street food vendor as the mechanism for diffusing either new foodstuffs or for training in nutrition and child health.

While in the early grades children live at home, attendance at secondary school, vocational institutes, and university requires that they live away from home. Many students depend on street food meals and snacks as their main form of nourishment. Thus, the high percentage of students among respondants was not surprising, particularly since all the cities encompassed by the

project, except Manikganj, are important as regional centers of higher learning.

The assertion that street foods are foodstuffs consumed by people of all income levels is reinforced by the significant percentages of white-collar workers who eat street foods. The speed with which street food meals can be purchased and eaten explains in part why many city office workers frequently consume street foods, especially for lunch. At the same time, the cost advantage of street foods over restaurant food is well recognized among middle-class consumers as a means of stretching one's discretionary income.

In Manikganj, farmers stood out as signficant consumers of street foods. As a rural service center, Manikganj attracts many farmers on market days. Many travel long distances and obtained their refreshments from the market-place vendor. Furthermore, attendance on period market days is as much a social as an economic occasion with the street food vendor playing a role in this process (20). Catering to transient but regular rural demand, less in evidence in Iloilo and Bogor, is another facet of the street food trade that has escaped detailed consideration by the project in view of the EPOC projects' urban orientation (21).

3. The Role of Street Foods in Diet

The findings of the EPOC Street Food Project showed that not only are street foods widely consumed by all segments of the population but that they play an integral role within the diet. Barth (1983) has shown that among street food customers in Iloilo, total prepared food purchases amounted to 28%

of the average monthly income of respondents (22). Translated into food intake, this level of expenditure corresponded to approximately 35% of their daily diet. Earlier it was argued that consumers of street foods come from all segments of the population. If the data from Iloilo are an indication, we find that street foods play a larger role in diet as one ascends the income scale. While the only available quantitative data are from Philippines (see Table 17), it is important to note that the same qualitative conclusion emerged from the customer profile information obtained in Senegal (see Table 16). Those with regular incomes, e.g., salaried government employees and other white-collar workers, are the most likely consumers of street foods in Ziguinchor (Posner, 1983).

To understand the role of street foods in diet one must briefly consider their consumption in the context of the basic dietary habits of their consumers. In both the Philippines and Senegal, snacks are an integral part of diet, an importance well reflected in the preferences expressed by the street food customers for ready-to-eat foodstuffs. Purchases of snacks outnumbered street foods meals by a ratio of two to one in both countries. In the Philippines, it is very common to eat three meals a day, plus a morning and afternoon snack, called a merienda. Street foods fit very naturally into such a dietary pattern. While in Senegal the division between snacks and meals is less clearly demarcated, Posner (1983) has argued that street foods are an integral part of the diet of many Ziguinchor residents, often providing at least one of their daily meals. She further points out that in Ziguinchor there are a small number of universally popular foods which are primarily

Table 17: PREPARED FOOD EXPENDITURES AND CONSUMPTION, BY INCOME LEVEL OF CUSTOMERS IN ILOILO

Quartile	Average Monthly Income (Pesos)	Monthly Expenditures on Street Foods (Pesos)	(%)	Percentage Food Intake From Street Foods (%)
First	195	101	52	28
Second	492	151	31	35
Third	827	176	21	40
Fourth	2,341	48	11	38

Source: Barth, 1983.

snacks (mangoes, peanuts, and roasted corn) but also includes one everyday meal item, yoghurt.

The street foods encompassed by the Philippines, Indonesia, and Senegal study were found to be nutritious and contribute valuable fats, calories, proteins, and vitamins to the diet. Chapman (1984) points out that blanched vegetables salads plus pickled vegetables and fruits make Indonesian street foods a better source of minerals and vitamin A than typical American "fast foods." In light of the effects of Vitamen A on blindness, this takes on more significance. The four most popular foods eaten every day by 70% of the Ziguinchor buyers sampled, are highly nutritious and add needed vitamin and protein supplements to the basic diet in addition to calories. Only one in four (yoghurt) is consumed with sugar (Posner, 1983). Confirming these findings, the results of the Philippines street foods project also indicated that the fats and oils provided by street were made an important contribution to household diet. A 1978 survey undertaken by the Food and Nutrition Institute indicated that in the Visayas, the region of Iloilo, the amount of fats and oils consumed met only 28% of recommended amounts (Barth, 1983). Street food establishments in Iloilo City use cooking oil and fats in preparation of many meal and snack items. Thus, the consumption of these items may contribute to a more adequate diet (23). Together with other street foods they also lend more variety to the diet (Barth, 1983).

While street foods make a positive contribution to diet they also provide a means for either introducing new foods or improving the the nutritional quality of available foods. With the street food vendor as the vehicle for diffusion, innovation in the form of nutritionally improved foods could be

readily introduced. A pilot project was undertaken in the course of the Indonesian project that involved the substitution of 20% cassava flour for soy-flour in the manufacture of kerupuk (Kusharto, 1984). This new flour was made available to kerupuk factories and the resulting consumer snack food was found to be highly acceptable by consumers.

4. Street Foods and Health

Among the reasons given by government offficials for banning street food vendors from the streets is the health hazards posed by the prepared foods that they sell. Diseases such as cholera, other enteric diseases and tuberculosis can be transmitted by food. In the course of the project, microbiological counts were undertaken on selected street foods. The results indicated that not all street foods are carriers of the germs that cause many of the gastro-intestinal infestions that are rampant among the poor in the cities of developing countries (Posner, 1983; Barth, 1983). At the same time, the fact that some street foods are free of contamination and others pose a health hazard does not detract from the fact that generally the consumption of street foods should be viewed as posing a health hazard. This is not a new problem but one for which solutions are most difficult to find.

Often, both vendors and consumers are oblivious to the dangers that such foods pose because individuals fail to make the connection between their established eating habits and persistent gastro-intestinal problems. Yet, when standards are adhered to, the benefits are recognized by both vendor and client. A woman tea shop owner in Manikganj assiduously cleans her cups with boiling water. Her clients, when questioned, indicated that in spite of her

slightly higher prices they preferred her tea for reasons of cleanliness and the availability of fresh milk. A first step in improved food safety should be in increasing public awareness over sanitary conditions and health. Health education should be provided in school and at the level of the community to create an awareness of proper food preparation and handling procedures.

Among the issues that should be included in vendor and consumer training on the sanitary control of food is the issue of food packaging. Until recently in most developing countries, food bought on the street was wrapped in banana leaves or other nautral fibers. With the general availability of plastic bags world wide, street food vendors in countries such as Philippines are increasingly packaging their food prior to sale. A plastic bag with food inside acts as an incubator with the dangerous consequences of high levels of contamination as well as changes in the taste of the food.

While health education is certainly a necessary step in improving food safety, alone it is insufficent. Many of the problems are caused by the housing conditions in which many of the street food vendors live and in which the processes of food preparation and sale take place. In addition, instruction in food hygiene will have only a limited impact when the recipients lack access to water, to sewage disposal and adequate garbage collection. The significance of this issue is emphasized by two project findings. Chapman (1984) found that only 8% of vendors have a water source of any kind at their selling locations. The microbiological testing of random smaples of street foods in Iloilo pointed to a direct correlation between access to clean water and the safety of the food sold.

Providing an environment that is conducive to the hygienic preparation and sale of food is obviously a priority. Removing vendors from the streets has never been a solution and housing them in a fixed structure is neither practical nor cost effective. Among the solutions that are feasible, assuming there is a political will, is the grouping of street food vendors in special places which are provided with basic sanitary services.

PART IV: CONCLUSIONS AND RECOMMENDATIONS

A. STREET FOODS: A DYNAMIC DEVELOPMENT ISSUE

The conceptual underpinnings of the EPOC Street Food Project date from the late 1970's. Informal sector activities, as originally defined by the ILO in 1972, were enjoying a high degree of popularity. A strong emphasis on equity had brought the issue of women in development to the fore. The informal sector, encompassing activities characterized by ease of entry, reliance on indigenous resources, family ownership of enterprises, small-scale operation, labor-intensive and adapted technology, skills acquired outside the formal school system, unregulated and competitive markets clearly applies to street foods.

The design of the EPOC project adopted a sectoral approach from the beginning. This perspective meant examining the role of the street foods sector within its larger microeconomic framework. This has led EPOC to identify several of the policy issues of concern to the street food trade. and confirms street food as a promising target for project assistance. This includes the areas of private enterpise development, urban development, child nutrition, agricultural production and marketing, and food policy.

Looking back over the four-year period from when the project was first conceived and designed to now when it is completed, it is increasingly evident that by focusing on a single productive sector within the informal sector, the Street Food Project has been able to move forward from the more static and general approaches to the informal sector that had preceded it.

Just as this sectoral focus has distinguished the Street Food Project from the beginning from many other informal sector projects, so too has this feature distinguished it from many of the women in development activities that prevailed at that time. The tendency was to design and to implement womens' projects apart from the rest of the economy (Buvinic, 1984). In the EPOC Street Food Project the role of women is treated as an integral factor. Moreover, gender relationships as well as gender differences are given equal importance in both analysis and prescription. While the objective of the Street Food Project is to raise all incomes, men's and women's, the sectoral focus of the project has produced in-depth knowledge of the trade, making possible a project design that recognizes the differential role of the sexes in achieving this end.

The contribution of the project to our understanding of the role of regional cities and market towns in integrated regional development stems also from the focus on a single productive sector. The project has shown the degree of labor absorption and turnover generated by the street foods sector to be considerable within these urban places and suggests significant linkages for the generation of regional development: backward flows to the rural productive sector and suppliers of equipment and transportation services and forward links as intermediate suppliers to non-local sources of demand. The dynamics of these interrelationships, so important to self-sustaining regional development, will form an area of future inquiry.

B. CONCLUSIONS

Street foods are a complex economic activity. The project revealed high levels of value-added reflecting the transformation aspects of the

trade. As a consequence, street food enterprises are normally more than one-person firms. Undertaking an integrated process of purchasing the raw ingredients, processing them into prepared foods and selling them to consumers, the producer-seller firm dominates this trade. Where demand is expanding, this pattern of operation leads to increasing product specialization along vertical lines. When demand is static or declining, the experience in Bangladesh suggests the emergence of an involutionary process characterized by functional specialization along horizontal lines, among producers, sellers, and producer-sellers.

Street foods as a basis for income generation for urban women have been likened in importance to subsistence agriculture for rural women. The significance of this trade for women goes beyond simply its easy entry requirements demanding low levels of formal skill and capitalization. Equally important to most women, already burdened by heavy domestic responsiblities or confined to the home by cultural mores such as purdah, is that the street foods trade allows them to mesh both familial and economic needs. Moreover, this extension of household management practices into the economic arena can be varied over a woman's life stage. Thus, young women with small children can add a few extra meals to the family pot and trade across their doorsteps; older women past child-bearing age often choose to sell a specialized product line in more lucrative central city sites.

The average income earned from processing and selling street foods is competitive with other alternative sources of employment. In all countries, earnings per worker were equal to or above the minimum formal

sector wage. The data also indicate little difference in the earnings potential of men and women. This is not to argue that gender differences do not arise, but rather to suggest that male- and female-run enterprises are equally productive, when measured in terms of returns on investment. Differences, which were only identified in Senegal, would seem to be a direct function of the time spent selling. In Senegal, not only did the women spend less time in trading their output than men, but their incomes for the same product were invariably less. This is a difference that might have been expected given the time budgets of women in developing countries and the tendency in street food vending for levels of profits to be determined primarily by the volume of turnover not cost minimization.

The competitive level of the incomes earned from street foods does not lessen the reality that the majority of street food vendors find the possibilities of captial accumulation very limited. This is due as much to low levels of net profit as to the fact that most street food enterprises are family-run operations. One consequence is that the economy of the household and the economics of the enterprise are frequently inseparable. Dipping into operating and investment capital when family emergencies arise goes far in explaining the limited ability of street food establishments to expand.

The practice of the street food trade is marked by considerable insecurity. The analysis of the economic viability of the enterprise suggests few firms have reached the business level where they are able to plow back capital into the firm or other investment activities. Most operate at the level of the survival economy where the fortunes of the

enterprise are as much a function of volume of turnover as the demands of the household. The environment in which many vendors, particularly the sidewalk, ambulatory, and the "doorstep" sellers, conduct their trade is often hostile to food sellers. They lack legitimacy in the eyes of city government with the consequence that these street food vendors can be, and sometimes are, removed from the streets, without explanation. For most vendors, such trader-clearing operations inevitably mean bankruptcy.

In spite of the insecurity associated with the conduct of a street foods business, there is demonstrable stability in the trade. While there is a continual inflow and outflow of street food vendors, the data have shown that the majority of vendors are well established in their businesses. It is hypothesized that time permits vendors to establish client-seller relationships with customers as well as suppliers, which, by leading to a regular income, introduce a degree of stability to this activity. In view of the frequent lack of alternative employment and income-generation opportunities for many street food vendors, this economic activity would seem to provide a reward sufficient to offset the insecurities associated with the practice of this trade.

Moving from the level of the enterprise to the level of city, the project has demonstrated that the street food sector plays a productive role in the urban economy. The sheer number of enterprises per city, possibly more than any other single informal sector activity, ensure street foods an important place. Project estimates have suggested that this economic activity's labor absorptive capacity can run to between 5% and 15% of the labor force of regional cities and market towns. Increasing with

city size, turnover figures have indicated an annual contribution to total output of between $2.4 and $28 million.

The results of the project show the street food trade to be a persistent phenomenon of cities in developing countries that can be expected to expand with increasing urbanization. A primary factor explaining this growth is that the street food trade is a demand-led economic activity. Dominant among the consuming population are the urban poor for whom street foods are not only a nutritious food, but their purchase is often a cost effective choice.

This positive role of street food vendors has too often gone unrecognized at the level of city government. The costs of regulating and licensing of street foods vendors located outside market-places are largely perceived as greater than the municipal revenue that can be generated. Furthermore, most of these vendors located outside city market-places continue to be designated as illegal or only quasi-legal. The frequent result is harassment in the name of the health hazards they pose and their obstruction of traffic. While there are obvious problems on both sides, the Street Food Project has demonstrated very clearly that the time has come for city governments to take a developmental as well as regulatory aproach to this sector.

C. RECOMMENDATIONS

Several recommendations are immediately apparent from the results of the project. Giving rise to these recommendations is EPOC's finding of a positive and expanding role of the street foods sector in cities of

developing countries. In proposing the following recommendations the objective is to maximize the benefits that can accrue to a city and its population from this trade while at the same time minimize the costs so long associated with its presence. In making these recommendations EPOC believes that the following two considerations are critical:

(1) constraints on the time budgets of the many women involved in the street food trade must be recognized if the women are not to be displaced by men as a result of the introduction of an innovation;

(2) project assistance must be carefully scaled to the operational level of this form of microenterprise.

The analysis has shown that the street food vendor is confronted wth numerous constraints. Some bear directly on the operation of his/her enterprise, others are imposed from outside the enterprise and are defined by the physical as well as governmental environment in which the vendor must conduct his/her trade. The recommendations are divided in order to reflect these two dimensions. The distinction is made between assistance provided at the level of the street food establishment and assistance provided at the level of the street food sector as a whole.

1. Assistance for the Street Food Establishment

A lack of working captial was identified by the vendors as a primary constraint in all countries. However, overcoming this limitation requires seeing the problem as more than just the provision of credit. Of equal importance is the broader issue of improved access to resources, particularly inputs, since they make up the bulk of a street food

enterprise's operating costs. The project has suggested three approaches to this problem. The first involves the provision of credit assistance geared directly at the needs of the street food vendors in each country: small units of capital avabile for limited periods of time and at market interest rates. In view of the well documented country differences among street foods vendors in their levels of skill and familarity with credit institutions, the mechanisms for the delivery of this assistance are likely to show considerable variation.

The second recommendation aimed at improving access to resources, concerns linking street food vendors as a group directly with suppliers, similarly organized at the point of rural production. The benefits of direct linkages between vendors and suppliers are several. They permit the vendor to bypass both the local retailer and the middleman, thus lowering the cost of inputs. From the perspective of the rural producer, linking supply with demand for food crops provides a regular, if not assured market, for his/her output. With the increasing emphasis being given by many governments to rainfed and secondary crop production, focusing on the street food trade suggests an approach that links rural production through marketing and distribution directly to urban demand.

Lowering production costs is clearly key to increasing returns to vendors while maintaining the role of street foods as a low cost food for the urban poor. Access to different technologies was recommended as a way to achieve this end in all countries. Modification of equipment currently in use or the introduction of new appropriate technology was seen as an area deserving of attention. In view of the high degree of perishability

of many street foods, the application of food preservation techniques to widely consumed and seasonal street foods was proposed in Senegal and Bangladesh. To achieve this, an urban extension service, akin to its rural counterpart, which trains vendors in new food processing techniques might offer possibilities for introducing such innovations.

A third recommendation calls for vendor and consumer education on nutrition and health issues. Without question, reducing the health hazards posed by some street foods is an essential issue. Alerting both vendors and consumers alike to this issue is a priority. A training program that focuses on nutrition as well as hygiene and is targeted on vendors who sell to school children is also advocated. In Nigeria, such programs have existed for many years. They have been a prerequisite for obtaining a license to sell street foods outside or inside schools. Since school children are significant consumers of street foods -- in some countries they are identified just behind children under five as a population nutritionally at risk -- the introduction of such programs can have an important developmental impact.

The individual country projects identified training in business and management skills as an area of intervention. Improvement of these skills may help vendors to gain a better understanding of the relationship between costs incurred and profits earned. A program in simple business skills is recommended on a small scale, possibly as part of credit assistance program. Experience elsewhere has shown that where training in bookkeeping has been given to small-scale and microentrepreneurs, the evidence

indicates that this does not necessarily lead to increasing firm efficiency.

2. Assistance to the Street Foods Sector

The quasi-legality of the trade is an underlying problem for many vendors active in the street foods trade. Apart from vendors who sell in areas specifically designated by city governments, e.g., market-places, most other street food vendors practice a trade that not only is perceived by governments in negative terms but whose physical presence on streets and foodpaths is in violation of city codes. In view of the persistence of the street foods trade in cities in developing countries, overcoming this problem is a priority issue for vendors and the city alike. The provision of new as well as improved existing serviced space for street food activities is strongly recommended.

Achieving legitimacy is perhaps the most difficult of the recommendations to implement. At the same time, it is possibly the most important. As a first step toward providing trading space, governments must sanction the presence of street foods traders within their city. This is only possible if the street food trade is associated with a positive contribution to the urban economy. But recognizing the street food trade is more than simply the de facto if not de jure legitimization of this trade, it also involves establishing a coordinated administrative infrastrucutre responsible for street vendors. Responsiblity for the street foods trade is now fragmented among several city departments. Regulation and licensing of vendors tends to fall within the ambit of the

police and finance departments; obstruction to traffic flows to the department of transportation; and the provision and maintenance of market-places to public works.

Recognition of the street food sector calls for both vendors and governments to acknowledge that there are legitmate concerns on both sides. The vendors surveyed have shown a willingness to pay taxes if serviced space is provided by the city and if the charges do not require them to raise their food prices beyond the budgets of their clients, the urban poor. Licensing procedures, whose complexity has often served as a tool of control, should be simplified so as attract vendors into the system not repel them. Similarly, health and sanitation regulations should be practicable both for the government and the vendor. Mechanisms for the collection of daily operating fees from street vendors as well as market-place traders need to be found.

A commitment by government involves planning with street vendors rather than without them. The emergence of vendor associations should be integral to this process. The creation of vendors' organizations can benefit their members as well as the city. With such an institutional base, the vendors can and do assume the role of self regulation, taking on responsibilities for market-place maintenance, sanitation, and garbage disposal. Collection of license fees might also be added. More importantly, such organizations can provide the institutional mechanism for communications between governments and the vendors.

Street foods are too persistent and too pervasive a phenomena to be ignored. Viewed from the perspective of the developing country's urban

economy, their significance both as a means of income generation and as consumption items is probably equal to other goods and services provided by the informal sector. A more creative approach to managing and encouraging the street foods trade has been the underlying thrust of this paper.

It would be inappropriate to end this paper without returning briefly to the gender issue, an initial impetus for addressing street foods as a sector. While rarely the only sellers and preparers of street foods, the street foods trade is an economic activity pursued by many women. The trade requires skills that many women already have and food preparation and sales allow for an accomodation within the time constraints imposed by women's other domestic responsibilities. Moreover, in some ciites at least 50% of the women are heads of households, and for many of these women this form of income generation is the only alternative to family destitution.

NOTES

1. Perceptions became important in deciding whether to include fruits. The consensus arrived at during a meeting of three country directors working on the Street Food Project was that when an individual piece of fruit is sold, it is more likely to be consumed on the spot and could thus be classified as a street food. By contrast, a bunch of bananas which is purchased for consumption at home would not be classified as a street food.

2. Fried or boiled tempe is made with fermented soybeans but can be made with ground nuts and other standard legumes.

3. Secluded within their homes, many Muslim women are active in the street food trade processing the raw ingredients. Sales to the public are delegated to other members of the household, particularly children, but also husbands.

4. Estimates of this population by city are provided in Part III of this paper.

5. The term "coffee shop" is used here to denote a stationary stall, physically identified by four bamboo stakes supporting a roof of bamboo leaves and a small table and a number of stools.

6. In Indonesia, this system is referred to as rantangan; in Bombay, according to the practice of khanawal, mill workers' meals are delivered to the factory door in tiffin boxes; l'abonnement du bol, a common practice in parts of urban West Africa, is a system under which the consumer pays a woman a month in advance for meals (Cohen, 1984).

7. Details on employees per street food firm are discussed later in the chapter under labor inputs.

8. In deriving these estimates, the following data were used. In Ziguinchor, Posner (1983) estimated that 96% of the enterprises were one-person firms, although 25% of the vendors are assisted by unpaid family members on an informal basis. Barth (1983) argues that the average establishment in Iloilo City utilized 2.9 persons. The data for Manikganj are derived from a census of the numbers economically active in the street food trade.

9. A detailed interpretation of these value-added figures follows later in this section.

10. Tape is a fermented cassava stick and kerupuk is a cassava flour chip.

11. This pattern of business behavior is not supported by the survey results in Bogor, where commission selling is popular. However, the differences are misleading since other vendor studies undertaken by other researchers in Indonesia report money lending and high interest rates to be standard.

12. Processed products sold by street food vendors include candy, instant coffee, packaged fruit drinks, and beer.

13. Sebstad's (1982) analysis of the small-scale street vendors who belong to the Self-Employed Women's Association (SEWA) in Ahmedabad, India, found that the credit received by these small-scale street vendors and home-based food producers was used for working capital (60%), social obligations (4%), debt repayment (12%), health care (4%), and other purposes (20%).

14. In a survey of informal sector activities in the slums of Calcutta, Romatet (1983) found that value-added constituted 19.53% of the turnover of 42 such micro-industrial enterprises.

15. Each unit in the Philippines has an average of 1.8 family workers. The minimum daily wage is 33 pesos. However, retail establishments with fewer than 10 workers are not covered by the minimum wage.

16. Based on observation, Barth (1983) suggests that reported sales in Iloilo City were probably only about 60% of actual sales. Posner (1983) has argued that her price and expense figures are accurate, since in Ziguinchor the wholesale price of many goods is fixed by the government and there would seem to be less discrepancy between reported and actual sales.

17. Tangana and bon-bon selling call for relatively expensive capital investment including fixed stalls and cement ovens respectively.

18. Their sample included the unskilled who sold fresh fruits or vegetables or bought desserts for resale, and the semi-skilled who prepared elaborate dishes. In a few cases, the latter actually paid to learn to cook.

19. Housewives, unemployed, and other are included in "informal sector."

20. Underwood (1960), in his discussion of the marketing system in peasant Haiti, clearly documents this activity and shows how special areas in wholesaling markets are often given over to vendors who prepare and sell refreshments.

21. In a detailed examination of rural household expenditure patterns in backward regions, Hazell and Roell (1983) found that the average budget share of total household expenditures for precooked snacks was 1% and 2% for Muda, Malaysia, and Gusau, Nigeria, respectively; comparable marginal shares were 0.87% and 2.62%. Their data further indicated that with expenditure elasticities of 1.34 and 1.43 in Muda and Gusau, respectively, increases in rural household expenditures were accompanied by disproportionately larger increases in purchases of prepared snacks.

22. Since this figure includes what clients buy for themselves as well as others at each purchase, it slightly overstates per capita consumption of prepared, ready-to-eat foods (Barth, 1983).

23. For the consumer, buying fried foods rather than preparing them at home is an economically rational decision. Oil is expensive and a relatively large amount is required for the preparation of small quantities. Also, is view of the high cost of fuel, frying food is energy inefficient for the many households using charcoal as opposed to LPG. In view of the the short, but intense heat required for frying, a high energy loss is experienced.

BIBLIOGRAPHY

Barth, Gerald A. 1983. Street Foods: Informal Sector Food Preparation and Marketing in the Philippines. Iloilo City, Philippines: Equity Policy Center.

Barth, Gerald A. and Mei-Jean Kuo. 1984. Crossing the Gap Between Microeconomic Activities and Small-Scale Food-Catering Enterprises. Washington, D.C.: Equity Policy Center.

Bromley, R. 1978. Organizing, Regulation and Exploitation in the So-Called "Urban Informal Sector:" The Street Traders of Cali, Colombia. World Development 6 (9/10) pp. 1161-1171.

_____ 1982. Working in the Streets: Survival Strategy, Necessity, or Unavoidable Evil, in Urbanization in Contemporary Latin America. A. Gilbert, J.E. Hardoy, R. Ramirez, eds. London: J. Wiley and Sons.

Bunster, Ximena and Elsa M. Chaney. Forthcoming. Sellers and Servants: Women Working in Lima. New York, New York: Praeger.

Buvinic, Mayra. 1984. Projects for Women in the Third World: Explaining their Misbehavior. Washington, D.C.: ICRW.

Carter, J. and J. Mends-Cole. 1982. Liberian Women and Their Role in Food Production and Their Educational and Legal Status. Liberia: USAID/Government of Liberia.

Chapman, Barbara Anne. 1983. EPOC Office Memorandum.

_____. 1984. Preliminary Summary of Street Food Vending in Bogor. Interim Report. Washington, D.C.: Equity Policy Center.

Cheng, Lum Keak. 1982. Fresh Food Supplies in Singapore, Paper presented at Food For Cities Symposium, East-West Centre, Honolulu, Hawaii, 1982.

Chetwynd, Jr., Eric. 1980. Regional Planning Projects to Strenthen the Contribution of Urban Centers to Rural Development. Paper presented to Seminar of Urban and Regional Planning in Developing Countries, University of Warwick, England.

CILSS. 1980. Etude du Marche Urbain Sahelien (Senegal et Haute Volta) des Cereales Locales et de leurs Derives Suscepetibles de se Substituter aux Importations. Paris: Marcomer (consultants).

Cohen, Monique A. 1978. Regional Growth or Regional Location? A Comparison of Growth and Equity Approaches. Development Planning Unit Working Paper No. 6. D.P.U., University College, London.

_____. 1981. Achieving Regional Development: The Experience of Mali and Indonesia from a National Development Planning Perspective. Unpublished manuscript, Department of Urban and Regional Planning, University of Wisconsin-Madison.

_____. 1984. The Urban Street Food Trade: Implications for Policy. Washington, D.C.: Equity Policy Center.

Cohen, Monique, John English and Harold Brookfield. 1977. Functional Diversity at the Base of the Urban System in Peninsular Malaysia. Journal of Tropical Geography, 45, pp. 12-25.

D.A.I. 1979. Local Organization and Rural Development: A Comparative Reappraisal. Washington, D.C.

Da Vanzo J. and D.L.P. Lee. 1978. The Capatibility of Child Care with Labor Force Participation and Non-Market Activities: Preliminary Evidence from Malasian Time Budget Data. Santa Barbara: Rand.

Durant-Gonzales, V. 1983. The Occupation of Higglering. Jamaica Journal, 16.3, pp. 2-12.

FAO. 1983. Guide to Improving Rural Markets. Provisional working document drafted by the Marketing and Credit Service, W/Q3795, Rome.

Findley, S. 1977. Planning for Internal Migration. Washington, D.C.: U.S. Bureau of Census.

Forbes, D.K. 1981. Production, Reproduction and Underdevelopment: Petty Commodity Producers in Ujung Pandang, Indonesia. Environment and Planning, 13, pp. 841-856.

Gibb, A. 1974. Agricultural Modernization, Non-Farm Employment, and Low-Level Urbanization: A Central Luzon Case Study. Unpublished Ph.D. Dissertation. University of Michigan.

Greenstreet, Miranda. 1981. When Education is Unequal. IDS Bulletin, 12(3) pp. 14-18.

Hazell, Peter B. R. and Alisa Roell. 1983. Rural Linkages: Household Expenditure Patterns in Malaysia and Nigeria. Research Report 41. Washington, D.C.: IFPRI.

Heyzer, Noeleen. 1981a. Towards A Framework of Analysis: Women in the Informal Sector. Institute of Development Studies Bulletin, 12(3), pp. 3-7.

_____. 1981b. Women, Subsistence, and the Informal Sector: Towards a Framework of Analysis, Institute of Development Studies Discussion Paper 163, Sussex: IDS.

Hollnsteiner, Mary Racelis. 1978. Peri-urban Malnutrition: A Neglected Problem. Assignment Children, 43, pp. 25-46.

Infante, T.R. 1975. The Woman in Early Philippines and Among the Cultural Minorities. Manila: Unitas Publications, University of Santo Thomas.

Institut Senegalais de Recherches Agricoles (ISRA). 1980. Recherces Rizicoles en Casamance. Station de Djibelor, Rapport d'Activités.

Kaplinsky, R. 1979. Inappropriate Products and Techniques: Breakfast Foods in Kenya. Review of African Political Economy, 14, pp. 90-96.

Kujore, O. 1983. Street Foods Project Proposal: A Nigerian (Ile-Ife)/EPOC Proposal. Unpublished manuscript.

Kusharto, C.M. 1984. In B. Chapman, 1984.

Lam, Timothy Thim-Fook. 1982. Food for the City: The Role of the Informal Sector. Paper presented at Food for Cities Symposium, East-West Centre, Honolulu, Hawaii.

Linn, J. 1979. Policies for Efficient and Equitable Growth of Cities in Developing Countries. World Bank Working Paper No. 342.

MacAndrews, C., H.B. Fisher, and A. Sibero. 1982. Regional Development, Planning, and Implementation in Indonesia: The Evolution of a National Policy, in Too Rapid Development: Perceptions and Perspectives from Southeast Asia, C. MacAndrews and Chia-Lin Sien eds. Athens, O.: Ohio University Press.

Marshall, G.A. 1964. Women, Trade, and the Yoruba Family. Unpublished Ph.D. Dissertation. Columbia University, New York.

Mazumdar, Dipak. 1981. The Urban Labor Market and Income Distribution: A Study of Malaysia. World Bank.

McGee, T.G. and Y.M. Yeung. 1977. Hawkers in Southeast Asian Cities: Planning for the Bazaar Economy. Ottawa: International Development Research Centre.

Moser, Caroline O.N. 1978. Informal Sector or Petty Commodity Production: Dualism or Dependence in Urban Development? World Development, 6, 9/10, pp. 1041-1064.

_____. 1981. Surviving in the Suburbios. Bulletin of the Institute of Development Studies, 12, pp. 19-29.

_____. 1983. The Informal Sector Reworked: Viability and Vulnerability in Urban Development. Paper presented at the U.N. Centre for Regional Development Seminar on the Role of the Informal Sector in Urban Development, West Berlin, November 1983.

Nelson, N. 1979. How Women and Men Get By: The Sexual Division of Labor in the Informal Sector of a Nairobi Squatter Settlement, in Casual Work and Poverty in Third World Cities. R. Bromley and G. Gerry, eds. New York: John Wiley and Sons.

Owens, Naomi. 1983. Street Foods in Bangladesh. Interim Report. Washington, D. C.: Equity Policy Center.

Owens, Naomi and Naseem Hussain. 1984. Street Foods in Manikganj. Interim Report. Washington, D.C.: Equity Policy Center.

PADCO. 1984. Senegal Urban Development Assessment. Washington, D.C.: PADCO.

Pellow, Deborah. 1978. Work and Autonomy: Women in Accra. American Ethnologist, 5.4, pp. 770-785.

Peluso, N.L. 1981. Survival Strategies of Rural Women Traders of A Woman's Place Is in the Market: Four Case Studies from North Western Slemen in the Special Region of Yogyakarta. World Employment Program Research Working Paper 17. Geneva: ILO.

Pernia, Ernesto. 1982. The Performance and Prospects of Small and Intermediate Size Cities in the Philippines. Discussion Paper 8208. School of Economics, University of the Philippines.

Posner, Jill K. 1983. Street Foods in Senegal. Washington, D.C.: Equity Policy Center.

Reusse, E. 1974. Accra's Food Retail Trade: A Case Study of Food Marketing in West Africa. Unpublished manuscript.

Robertson, C. 1974. Economic Woman in Africa: Profit Making Techniques of Accra Market Women. Journal of Modern African Studies, 12.6, pp. 576-64.

Romatet, E. 1983. Calcutta's Informal Sector Theory and Reality. Economic and Political Weekly, December 10, pp. 2115-2128.

Rondinelli, Dennis A. 1983. Secondary Cities in Developing Countries. California: Sage Publications.

Rondinelli, Dennis A. and Hugh Evans. 1983. Integrated Regional Development Planning: Linking Urban Centers and Rural Areas in Bolivia. World Development, 11.1, pp. 31-53.

Sebstad, J. 1982. Struggle and Development Among Self-Employed Women: A Report on the Self-Employed Women's Association, Ahmedabad, India. Washington, D.C.: USAID.

Simmons, E. 1975. The Small-Scale Rural Food Processing in Northern Nigeria. Food Research Institute Studies, 14(2), pp. 147-161.

Szanton, C. 1984. Personal Communication.

Teilhet-Waldorf, S. and W.H. Waldorf. 1983. Earnings of Self-Employed in an Informal Sector: A Case Study of Bangkok. Economic Development Cultural Change, March, pp. 187-607.

USAID. 1982. Economic Profile of Western Visayas (Region VI. Manila: USAID.

Underwood, F. 1960. The Marketing System in Peasant Haiti. Yale University Publications in Anthropology No. 60.

World Bank. 1980. World Development Report 1979. New York: Oxford University Press.