LOCAL MARKET INFORMATION SERVICES IN THE STRATEGY OF AGRICULTURAL DEVELOPMENT

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THE BASIC NEED FOR MARKET INFORMATION SERVICES

The general economic functions of market information are familiar and can be logically related to the concepts of workable competition and the perfect market in space, form, and time. However, the importance of a formal market news service to the efficiency of performance of markets must be viewed within the context of the particular situation and the manner in which present information systems function. Wherever there is a market, an information network exists, even though (in some cases), slow, inaccurate, discriminatory in its availability to market participants or limited in the scope of information collected and diffused. Therefore, in assessing the need for introducing or expanding formal market news services, the adequacy of the present system, the cost of effecting improvements and the consequences that may be derived from them must be determined and evaluated.

Imperfect market information implies non-single valued expectations regarding price (and other terms) in future market transactions. Uncertainty regarding general price levels confronting producers in particular markets in expected sale periods, and uncertainties regarding differential rewards for producing commodities of particular qualities or "grades," are added to uncertainty about trends and seasonal changes in market supply and demand conditions in the aggregate. In areas with relatively poor transportation and communication facilities, the element of uncertainty, resulting from imperfect knowledge of available local market alternatives at the time the commodity is ready for sale, may add a significant component of price uncertainty to the already large burden that peasant farmers carry. This burden is especially large in the export crops unless mitigated by stabilization policies.[1]

The primary objectives of improving the agricultural market information system are usually considered to be (a) the efficient allocation of resources within the marketing system in producing space, form, and time utilities, (b) equalization of relative market power and distribution of income among participants in transactions, and (c) improving the structure of production incentives (prices) confronting farmers, specifically, general price levels of inputs and products and price differentials among grades or qualities of inputs and products. Inefficiencies in pricing, and allocation of resources in the marketing channel are ordinarily reflected in large marketing margins and farm price uncertainties. A local market information program oriented primarily to farmers and first buyers cannot significantly alter many of the sources of inefficiency, particularly those originating at much higher levels in the marketing channel. However, it can remove some of the uncertainities regarding available market alternatives and reduce exploitation resulting from unequal knowledge. It may also result in a nigher degree of integration of markets spatially and vertically, depending on the nature of the information collected and the diffusion system employed.

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[1]The likelihood of having a high order of local price instability and the likelihood of experiencing high orders of price uncertainty are, of course, increased with poor transportation and communication facilities, especially for non-subsistence crops which flow primarily into national and international markets.

Potential for Reductions in Market Uncertainty

Although the extent to which price uncertainty can be removed by more elaborate informational systems is conjectural and a matter of empirical fact in each situation, observational evidence and some systematic data suggest that price uncertainty attributable to imperfect information in local markets of less developed areas may be of substantial magnitude. Illustrative data in Table 1 indicate that prices received by farmers varied markedly for comparable quality kenaf fiber in a one month period of low, but stable baling plant and wholesale prices in Khon Kaen Province, Thailand. In the case of Grade B field bales (average grade assigned by enumerators trained in grading), the standard deviation was two-fifths as large as the average price.[2] Bangkok wholesale prices remained virtually constant throughout the survey period. Transportation bottlenecks were absent, since the period of the survey was after the rainy season and after the main kenaf marketing season. Therefore, deficiencies in market information and/or bargaining skill may explain this price variability. Since grades are relatively simple and functional for kenaf, we suspect that this market prices the commodity more efficiently (at this level) than most. There are no other major commodities grown in this region for which there are standards which are both highly refined and feasibility applicable by farmers or village dealers.[3]

Effects of Uncertainty Upon Technological Progress

Recent literature regarding the processes of agricultural innovation or technological change in less-developed countries has suggested that price uncertainty in produce or input markets may be a significantly greater deterrent to progress in less-developed countries than in developed ones. As conceptualized by Wharton [13], significant economic risks and uncertainties fall into the following classes (a) those regarding the productivity of any innovation, (b) weather, and (c) the prices of products or inputs. These risks and uncertainties jointly contribute to general economic uncertainty and assume particular importance owing to a strong element of "security preference" associated with a low-income subsistence agriculture. A situation of very low average income means that the risk of falling below what is culturally defined as a "minimum subsistence standard of living." or below a minimum physiologic level for survival or maintenance of health, is relatively high for given levels of price and/or yield variability.

Subsistence farmers occupy economically vulnerable positions and lack social buffers, such as social

TABLE 1. FARM LEVEL OF KENAF FIBER PRICES IN KHON KAEN PROVINCE, THAILAND, JANUARY 20 – FEBRUARY 23, 1968

	Grade B	Grade C
Mean Price (Baht/Kg.)	.57	.47
Number of Observations	30	26
Range (Baht/Kg.)	1.03	.51
Standard Deviation (Baht/Kg.)	.24	.13

Source: Unpublished data from a survey by Chumnarn Sirirugsa, Division of Agricultural Economics, Ministry of Agriculture, under guidance of the senior author.

[2]Prices did not vary significantly with differences in size of lot sold, and adjustments were made to allow for differences in transportation costs, but these are quite low, in the order of ฿ 0.05 ($0.01) per kilogram for 50 kilometers.

[3]For paddy rice, the official standards are fairly simple, but precise application requires a high degree of skill and some equipment. No official grades exist for animals and many other products. Kenaf grades, although crude, are functional enough so that the trade accepts and uses them in international transactions.

security and welfare programs, against economic catastrophe and impoverishment. This suggests a likelihood of both a higher degree of aversion to added risks associated with technological change and relatively larger marginal responses to reductions of uncertainty, including price uncertainty, than commercial farmers in developed areas.[4] In less-developed countries, the extended family, maintenance of storage stocks, or other personal strategies, including conservatism in borrowing or innovating, are the main available accommodations for risk. As Lipton has stated, "many superficially odd practices make sense as disguised forms of insurance" [5, p. 341]. With reductions in risk and uncertainty, potential improvements in marketing efficiency may be effected, average farm prices may be raised, and greater profit rewards may be proffered to those who use fertilizer, improved varieties and other production innovations.

"NON-ECONOMIC" BENEFITS OF MARKET INFORMATION

We conclude that the provision of improved market information in less-developed areas may result in greater improvements in market performance and in technological progress and resource allocation at the farm level than would be true with equal improvements in developed areas. Despite this, shortages of funds and trained personnel in the less-developed countries make choices among such public investments difficult. When viewed from a perspective of direct economic benefits only, a number of other activities may have higher priority. However, the hypothesis of this discussion is that indirect contributions and "non-economic" benefits may make the provision of local market news services a point of substantial leverage in the general strategy of agricultural development.

Costs and Socio-Political Implications of Market Information Inequalities

In much of the literature on the less-developed countries, especially in the pre-1960 periods, allegedly exploitative interest rates, rents and prices for products and inputs have been singled out as deterrents to progress. Recently, the exploitation hypothesis has been seriously questioned by Wharton [12], Ruttan [9], Mellor [7] and several others. Wharton [12, p. 14] and Mellor [7, p. 109] point up the crucial issue of freedom of entry. Obviously, with freedom of entry, an exploitative margin is unlikely to persist, regardless of its origin. Ruttan cites data indicating a high degree of integration of rice and corn markets in the Phillippines which, he implies, would not be likely if there were significant degrees of (long term) monopoly power. While one may doubt whether it is possible to generalize these results very far beyond the particular commodities and countries studied, general observation suggests that for marketing firms in Thailand, capital requirements tend to be modest and rapid changes have occurred in numbers of marketing firms at the first assembler level as product mixes have changed. These indicate that entry and exit are relatively easy. If this is generally true, monopoly profits do not explain in a major degree the level of prices received at the farm level in the longrun. This applies equally to situations of monopoly power which exist because of unique knowledge–entry can erase profits, and learning by others is apparently stimulated by the existence of evident profitability [2]. Despite these factors, it is our contention that relatively good market information is still quite important, because of its potential effects (a) upon the distribution of income, wealth and power, (b) upon costs of marketing, and (c) upon possible bases of peasant political discontent. Kenneth Parsons refers to "the concentration of land ownership by the cummulative inequalities of economic development" [8, p. 25] and contends that in a low-income peasant society, the security which only the guaranteed access to land provides, makes land ownership necessary to effective political participation or "citizenship," as he terms it. In its absence, peasants become vulnerable to the political manipulations of landlords, moneylenders, and merchants upon whom they are dependent for survival. Hence, owner-cultivator patterns of tenure are important for maintaining a political climate conducive to policies supporting general development reforms.

One of the potential factors involved in the cummulative process to which Parsons refers is unequal access to information. We would contend that relatively small, shortrun imperfections in the adjustments to market changes may be unimportant in explaining persistent low prices for products. However, operating through their effects on saving, indebtedness–and, sometimes, dispossession of land–they can still be important in determining the long term distribution of wealth in land, and with it, access to power. Thus, the equality of access to information, as it affects short term and/or individual bargaining power, may have consequences for the

[4]Preliminary results from an unpublished study of fertilizer adoption by rice farmers, which was conducted by Halvor Kolshus under supervision of the senior author, tend to confirm this hypothesis with respect to weather risk. Although selling little in his original subsistence state, the subsistence farmer contemplating use of production-increasing purchased inputs faces the possibility of increasing his vulnerability to uncertainty and, under credit purchases, the possible loss of even his means of subsistence.

long term pattern of wealth and income distribution and for long term political development. It may affect these through speeding the entry and exit of firms as market conditions justify it, and by improving the precision and speed of market and production adjustments.

In addition, it is difficult to discount totally the almost universal observation by political scientists and sociologists that exploitation of peasants by merchants and moneylenders is at the root of much peasant political unrest. The recent works by Wolf [14], the older study by Jacoby [3], and many others have this recurrent theme. What is the basis for the divergence of their views from those of Wharton, Ruttan, Mellor, and others? Are they reconcilable?

Even with free entry, under conditions of imperfect knowledge of alternatives, exploitation of individuals can occur if one party to a transaction is better informed than another. Assume that there is easy entry of new firms and a relatively profitless longrun equilibrium results. It may still be one in which large profits on one individual transaction are offset by losses on another.[5] Spatially differentiated markets tend to characterize the less-developed areas with their limited road systems and transport. Especially, in such markets, imperfect information may reduce the price elasticity of the individual factor (farm product) supply confronting such individual buyer firms [13, pp. 5-7] and result in a lower-than-optimum output, profitless, high cost and low price equilibrium.[6] Thus, seriously imperfect market information may both increase farm price uncertainty and reduce the level of farm prices. This, indeed, may "justify" the feeling of noneconomists that farm product prices are secularly excessively low and the low price may persist even though a true exploitative profit margin does not exist. This may also explain the apparent inconsistency of the increased skepticism of economists about the economists' validity of the exploitation hypothesis and the apparent belief by the economists in the effectiveness of the propaganda appeals to alleged exploitation of peasants by merchants. They may mistake the waste of monopolistic competition for the monopoly profits of classical oligopoly or monopoly theory.

Heretofore, we have assumed that firms operating in local markets have upward sloping average factor cost (supply) functions facing them. The upward slope results from differential costs of acquiring information in spatially differentiated markets with imperfect communication systems. However, the existence of unequal information and bargaining positions among farmers, and the absence of accurate and relevant local market information services, may have unfortunate psychological implications even when firms confront horizontal average factor cost (supply) functions and operate at least-cost scales.[7] We would speculate that relatively low but stable and uniform prices among farmers would come to be accepted as "normal" over time, but not prices which are lower than those other villagers receive for comparable products. In the absence of information on market conditions, which provides farmers with parity of bargaining power, the middlemen and the government which "tolerates" them, may thus fall heir to the blame for low, unequal, and unstable prices.

In Northeastern Thailand, wholesale prices and related information from the Bangkok markets are regularly diffused over the radio networks which blanket the country. According to survey information collected by the Division of Agricultural Economics in Northeast Thailand, virtually all farmers appear to have access to radios and a vast majority are intensely interested in market news.[8] However, the illiterate or

[5]Implicit in this statement is a price discrimination model in which, at equilibrium longrun output, the marginal costs of product to the marketing firm are equal, but the average costs (prices) to the less knowledgeable sector of the market are lower than those in the more knowledgeable sector.

[6]Implicit are assumptions that farmers are differentially knowledgeable and that to acquire information involves a cost. Thus, the supply function facing the marketing firm, i.e., average factor cost, slopes upward. In equilibrium, it is tangent to the derived (derived demand) average revenue curve to the left of the maximum point of the DAR curve, and no excess profits occur. This would be consistent with the observations of W. A. Lewis [4] and many others that there exists an excessive supply of merchants and petty-traders in many less-developed countries.

[7]This may be especially true in cases where wholesale market information is widely diffused. Wholesale information can become the norm; i.e., what farmers believe they "ought" to get for their products if no information about local prices is available against which prices actually received can be compared. In a context of no local information source, the frequent admonition that farmers should "sell it to the radio" reflects misleading information more than arbitrary power. However, this would seem to create an obvious basis for political unrest.

[8]Data were collected from a non-randomized sample of 27 farmers in July 1969, and another of 68 farmers in December 1969. Interviews were conducted in three villages in Khon Kaen Province in the smaller survey and in 16 villages in Mahasakrakam Province in the larger one.

marginally literate peasant farmer in a less-developed economy, such as in Northeast Thailand, cannot regularly depend on local price movements to reflect changes in wholesale prices. Furthermore, he probably could not ascertain local price equivalents to wholesale prices if margins were exactly constant.

As noted in Table 2, 1966-1968 data on marketing margins in the region show very clearly that for some commodities average region-wide marketing margins between farm and wholesale market levels were quite variable from month to month. We would expect margins between individual local markets and whole-

TABLE 2. STATISTICAL RELATIONSHIPS BETWEEN BANGKOK WHOLESALE PRICES AND MONTHLY AVERAGE FARM PRICES IN THE NORTHEASTERN REGION, 1966-1968

Statistic	Commodity and Price Units		
	Non-Glutinous Paddy Rice (Baht/M. Ton)	Kenaf Fiber (Baht/kg.)	(Baht/kg.)
(1) Average Bangkok Wholesale Price	฿ 1240	฿ 2.78[a]	฿ 8.21
(2) Average Farm Price	฿ 1100	฿ 1.76[a]	฿ 7.44
(3) Standard Deviation of Farm Price	฿ 105	฿ 0.75	฿ 1.63
(4) Standard Deviation (3) as a Percentage of Mean Farm Price	9.5%	42.6%	21.9%
(5) Highest Gross Margin	฿ 490	฿ 1.62[b]	฿ 1.68
(6) Lowest Gross Margin	–฿ 70[c]	฿ 0.37[b]	–฿ 2.46[c]
(7) Average Gross Margin	฿ 140	฿ 1.02	฿ 0.77
(8) Range in Gross Margins	฿ 560	฿ 1.25	฿ 4.14
(9) Range as a Percentage of Mean Farm Price	45%	71%	48%
(10) Standard Deviation of Gross Margins	฿ 102	฿ 0.39	฿ 0.91
(11) Standard Deviation (10) as a Percentage of Mean Farm Price	9.2%	22.1%	12.2%
(12) Standard Error of Estimate	฿ 77	฿ 0.29	฿ 0.93[d]
(13) Standard Error of Estimate as Percentage of Mean Farm Price	6.8%	15.9%	12.1%
(14) Correlation Coefficient (r) Wholesale vs. Farm Price	.58*	.93*	.83*
(15) Linear Regression Slope Coefficient (b)	+0.52	+0.71	+1.03

(continued)

TABLE 2. (continued)

Statistic	Commodity and Price Units		
	Live Cattle (Baht/Head)	Live Buffalo (Baht/Head)	Live Chickens (Baht/kg.)
(1) Average Bangkok Wholesale Price	฿ 1394	฿ 1583	฿ 12.33
(2) Average Farm Price	฿ 1083	฿ 1108	฿ 10.82
(3) Standard Deviation of Farm Price (2)	฿ 168	฿ 172	฿ 1.01
(4) Standard Deviation (3) as a Percentage of Average Farm Price (2)	15.5%	15.5%	9.3%
(5) Highest Gross Margin	฿ 459	฿ 860	฿ 6.47
(6) Lowest Gross Margin	–฿ 35[c]	฿ 155	–฿ 2.33[c]
(7) Average Gross Margin	฿ 311	฿ 475	฿ 1.51
(8) Range in Gross Margins	฿ 494	฿ 705	฿ 9.80
(9) Range as a Percentage of Average Farm Price (2)	45%	64%	91%
(10) Standard Deviation of Gross Margins	฿ 108	฿ 149	฿ 1.96
(11) Standard Deviation (10) as a Percentage of Mean Farm Price (2)	14.2%	13.4%	18.1%
(12) Standard Error of Estimate	฿ 111[d]	฿ 128	(See St'd. Dev.)
(13) Standard Error of Estimate as Percentage of Mean Farm Price (2)	10.3%	11.2%	Not Sig.
(14) Correlation Coefficient (r) Wholesale vs. Farm Price	.76	.69*	Not Sig.
(15) Linear Regression Slope Coefficient (b)	+0.99	+0.58	Not Sig.

*Significant at P – 0.01.

[a]B Grade baled fiber at the Bangkok wholesale level and mixed grade field baled fiber at the farm level. Actual mean grade of an entire crop is somewhat below B Grade but above C Grade.

[b]Months of May through August eliminated in computation of high, low and range of kenaf price margins due to limited marketings and possible unrepresentative price data.

[c]Negative values indicate farm prices higher in the Northeastern region than Bangkok wholesale prices possibly due to production deficits. See text discussion.

[d]Application of statistical correction factor for small sample number accounts for standard error of estimates exceeding slightly standard deviations of margins.

sale markets to be much more variable than their averages.[9]

Quite obviously, the estimation of the quantitative contribution of market imperfections to political alienation and insurgency are beyond the scope of available direct evidence and of the intended content of this article. But, in the case of Northeast Thailand, if feelings of exploitation contribute to unrest, it cannot be attributed to the landlords or moneylenders both of whom play distinctly minor roles in the region.[10] Conjecturally, the product markets, factor markets, and consumer goods markets with their imperfect information systems are much more likely bases for such feelings. In any event, it seems obvious that decisions relating to market information programs are not necessarily politically neutral in their implications.

Planning, Research and Administrative Needs

In most developing countries farm and/or local market price data which is region—or market-specific are conspicuous in their absence. Yet the evaluation of virtually any kind of agricultural development program, price stabilization program, production incentive program, new enterprise or production innovation requires such data. Moreover, the effective administrative surveillance of many types of programs requires that such data be available from reliable sources and with minimum delay.

For obvious reasons, mail surveys are generally not effective in less-developed countries, and enumerative surveys of a formal statistical type are too expensive, too demanding of manpower and too slow to serve many of these needs. However, if a local market news gathering system is geared to information relating to prices paid to farmers, and market reporters are properly trained and supervised, valuable region-and-market-specific data can be provided on a week to week or day to day basis which is reasonably accurate and which can be adjusted to equivalence with farm level prices if transportation cost data are collected for this purpose.

Benefits Through Surveying and Monitoring Local Markets

Markets are complex and the limited technically trained staff available for marketing research must concern themselves primarily with major issues of export control, regulatory legislation and the like, which confront their national governments. The problem of developing markets and market institutions at the regional and local level tend to be short changed in research and action programs. However, in the process of setting up a local market news program the full range of problems of (a) establishing grades or quality categories which are consistent with national official grades, but understandable by farmers and lesser merchants, (b) competitive structure, and (c) the lack of reliable weights and measures for products, etc., are brought out in bold relief. Moreover, local market reporters, if properly trained and supervised, become intimately familiar with changing market structures and practices and emerging problems, and, thus, provide an important source of continuing market intelligence, a marketing problem monitor.

SUMMARY

While the exploitation hypothesis in the technical sense of longrun monopoly profits may be invalid in the local markets of most developing countries, a combination of relatively easy entry, spatially differentiated markets and highly imperfect market information may create a situation of suboptimum scale, high cost, low product prices, high degrees of price uncertainty, and misallocation of resources. Price uncertainty may contribute significantly to technological retardation, progressive inequalities in income and wealth distribution and to peasant unrest.

A local market news program is usually justified on the basis of pricing efficiency and equalization of bargaining power of the parties to market transactions. Yet, in the context of a less-developed agricultural economy, it can potentially serve much

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[9]With the exception of the data on kenaf prices for one month cited earlier, no data which can properly be termed reliable farm price data have been collected for individual markets. Following the training of personnel in the arts of market reporting in connection with the market information program initiated in Khon Kaen Province in 1969, we have reason to believe that the price information gathered may have become fairly representative of real delivered prices received by farmers, but this has not been rigorously verified.
For a more complete discussion and interpretation of data in Table 1, see [10, Appendix 1].

[10]A study by the Division of Agricultural Economics [1] reports 7.3 percent tenant-operated land in 3 provinces. A study by Kasetsart University [6] in Khon Kaen indicated only 3 out of 520 sample farms are tenant-operated. A 1965 study estimated total indebtedness of Northeast Thailand farmers to average only about $70 (Baht 1398) [11, p. 20]. One-third had no debts.

broader needs. It has the potential for limiting peasant unrest resulting from apparent (but possibly unreal) exploitation, reducing some inefficiencies and inhibitions to technological change, possibly increasing average farm prices, and providing greater peasant understanding of market conditions and alternatives. Of equal importance, such a program provides a means of removing one basic obstacle to effective economic research, development planning and administration of agricultural programs—a lack of current, inexpensive, and region or market-specific information on prices at or "near" farm levels. Finally, the existence of local market reporters who are trained for their job provides a ready and continuous monitor of emerging problems in operating programs and in the performance of the markets which will be useful in administrative, planning, and marketing research functions.

REFERENCES

1. *A Study of Agricultural Economics Conditions of the Farmers in the Province of Roi-Et, Mahasakrakam and Kalasin in 1962-1963,* Div. of Agr. Econ., Ministry of Agriculture, Bangkok, 1964.

2. Griliches, Svi, "Hybrid Corn: An Exploration in the Economics of Technological Change," *Econometrica 25,* pp. 501-522, 1957.

3. Jacoby, Erich H., *Agrarian Unrest in Southeast Asia,* Asia Publishing House, New York, 1961.

4. Lewis, W. A., "Economic Development with Unlimited Supplies of Labor, " *The Manchester School,* May 1954. Reprinted in A. N. Agarwala and S. P. Singh, The Economics of Underdevelopment, pp. 400-448, Oxford Univ. Press, New York, 1963.

5. Lipton, Michael, "The Theory of the Optimizing Peasant," *J. of Development Studies,* Vol. 4, pp. 328-351, (as quoted by Eric R. Wolf [14]).

6. Long, Jancis F., Millard F. Long, Kamphol Adulavidhaya, and Sawart Ponesuwan, *Economics and Social Conditions Among Farmers in Changwad, Khon Kaen,* Faculty of Economics and Cooperative Services, Kasetsart Univ., Bangkok, 1965.

7. Mellor, John W., "Agricultural Product and Input Markets in South Asian Small-holder Agriculture," *Agricultural Cooperatives and Markets in Developing Countries,* (K. R. Anschel, R. H. Brannon and E. D. Smith, editors) Frederick A. Praeger Publishers, New York, 1969.

8. Parsons, Kenneth H., "Agrarian Reform Policy as a Field of Research," *Agrarian Reform and Economic Growth in Developing Countries,* Farm Economics Division, Economic Research Service, U. S. Dept. of Agriculture, Washington, D.C., March 1962.

9. Ruttan, Vernon W., "Agricultural Product and Factor Markets in Southeast Asia," *Agricultural Cooperatives and Markets in Developing Countries,* (K. R. Anschel, R. H. Brannon and E. D. Smith, editors) Frederick A. Praeger Publishers, New York, 1969.

10. Smith, Eldon D., Nguen Srisuruksa, and Perry Phillipp, *Workable Building Market Information Services for Less-Developed Areas–Practical Issues and Answers in Northeastern Thailand,* CDC Development Paper No. 2, Center for Developmental Change, Lexington, Kentucky, Oct. 1970. Also published in modified and abbreviated form as "Establishing Market Information Services in Less-Developed Areas," *FAO Monthly Bulletin of Agricultural Economics and Statistics,* Vol. 10, No. 10, Food and Agricultural Organization, United Nations, Rome, Oct. 1970. Also published in French and Spanish.

11. Thisyamondol, Pantum, Virach Aromdee, and Millard F. Long, *Agricultural Credit in Thailand–Theory Data and Policy,* Faculty of Economics and Business Administration, Kasetsart Univ., Bangkok, 1965.

12. Wharton, Clifton R., Jr., "Marketing, Merchandizing and Moneylending: A Note on Middlemen Monopsony in Malaya," Agricultural Development Council, New York; reprinted from *Malayan Economic Review,* Vol. VII, No. 2, pp. 14-44, Oct. 1962.

13. _____, "Risk, Uncertainty and the Subsistence Farmer," multilith, Agricultural Development Council, New York, 1968; delivered at joint session of Am. Econ. Assoc. and Assoc. for Comparative Economics, Chicago, Ill., Dec. 1968.

14. Wolf, Eric R., *Peasant Wars of the 20th Century,* Harper and Rowe, New York, 1969.