Too Many Assumptions:
Researching Grain Markets in Tanzania[*]

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Underlying the current tidal wave of market liberalization policy in the second and third world is a belief in the ubiquity of entrepreneurial behaviour. Does a market in staple foodstuffs automatically blossom when state controls are removed? Contrary to ready assumptions about the operation of market forces, it is argued here that grain markets evolve, sometimes very slowly, as conducive demand and supply conditions coalesce and as cultural, social and physical impediments, in addition to political constraints, give way.

The first section of this paper briefly outlines the main features of the market supply of grain in Tanzania and research coverage until the mid-1980s. Section Two reviews the analytical background to a 1988 study of grain markets in five Tanzanian towns, followed by a description of circumstances contributing to the construction of the research methodology. Section Four considers the reasons for and the ways of avoiding the data collection pitfalls that were encountered during the study. Thereafter, the advantages of the methodology are considered and the overall methodological approach is assessed from the perspective of its relevance for future grain studies.

1. TANZANIAN GRAIN SUPPLY: HOUSEHOLD'S HASSLE, POLICY MAKER'S QUAGMIRE AND RESEARCHERS GYMNASTIC STADIUM

Grain supply is a topic of almost universal interest to Tanzanians. One could say that everyone wrestles with it. This section considers what the wrestling match entails for the consumer, the policy maker and the researcher.

For the householder, grain is of daily concern. Roughly 60% of food intake by weight consists of starchy staple foodstuffs in the urban areas. The composition of the urban staple food diet is wide-ranging. However, maize and rice dominate when measured by value (58%) or by weight (55%) of total staple foods consumed.[1]

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[1]   By value, the percentage composition is: maize (31%), rice (27%), wheat (18%), millet/sorghum (4%), barley and other cereals (2%), bananas/plantains (8%) and various roots including cassava and sweet potatoes (10%) (Tanzanian, Bureau of Statistics, 1976/77 Household Budget Survey).

Rural households, constituting approximately 85% of all households in Tanzania, have, in the main, practiced a policy of staple food self-sufficiency.[2] Thus, it is the country's minority of urban households who are most involved in staple food marketing issues.

For the government policy maker, urban supply of maize and secondarily rice have proved to be logistically difficult and politically sensitive (see Bryceson 1993). Due to climatic variation, Tanzanian harvests fluctuate widely from year to year. The fluctuations of marketed production, however, are amplified and could best be described as 'wild' rather than wide. National grain output derives primarily from millions of small-scale peasant farming households who sell only in normal to good years that surplus portion over and above their own consumption needs. Thus good harvest years result in large gluts of marketed production, e.g. 1977/78, 1985/86-1987/88, while bad harvests cause a seizure in the marketed supply, e.g. 1974/75, 1980/81-1983/84. During the colonial period, long distance grain wholesaling and retailing was largely in the hands of Asian traders whose extensive family and communal trading networks stretched the length and breadth of Tanzania.[3] After national independence in 1961, Asian traders were edged out of the grain trade and replaced by African agencies, initially African regional cooperatives for produce buying supported by the Dar es Salaam-based National Agricultural Products Board (NAPB), the marketing board for cereals. Later, during the 1970s, the NAPB/cooperatives complex was supplanted by a nationwide, single-channel marketing system under the aegis of the National Milling Corporation (NMC) parastatal.

It was the abysmal financial performance of the NMC and its inadequate capabilities in managing the purchase and distribution of grain in Tanzania which led to the IMF's insistence on marketing reform during the 1980s. Parallel markets in grain had sprung up in various parts of the country. The government's gradual change in policy towards the dismantling of parastatal grain marketing took two directions. On one hand, regional marketing cooperatives were re-instated in the early 1980s. On the other hand, somewhat contradictorily, but under pressure from the IMF, the parallel market was reluctantly legitimized in a staged progression. Thus, at the time of the 1988 study, the NMC's mandate had been whittled down to urban grain milling, wholesaling, and 'buyer of last resort' while the quasi-official cooperative marketing system and the 'open market' of private traders competed for crops and customers.

National grain supply, over the past three decades, has provided a field day for social science researchers.[4] Geographers, political scientists, historians and

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[2]   For an expanded discussion of this phenomenon see Bryceson, D.F., *Food Insecurity and the Social Division of Labour in Tanzania, 1919-1985*, London: Macmillan, 1990, pp. 30-31.

[3]   Their trade was characterized by the combination of produce buying and retailing of multiple commodities by up-country **dukawallahs** (translated 'shopkeepers'). High margins on 'luxury' items such as tinned foods compensated for narrow margins on staple foodstuffs.

[4]   The author readily admits to her inclusion in this assembly.

especially economists have combed through official grain statistics and delved into state marketing agency operations. There have been few economists, resident or visiting, who have not been able to resist the temptation to undertake prescriptive analyses regarding Tanzanian grain supply. The Marketing Development Bureau (MDB) of the Ministry of Agriculture has generated massive amounts of marketing and price data upon which the analyses are based. Nonetheless, until recently there has been a large gap in the literature. The operations of the official marketing system have been researched in great detail, while the parallel market has remained uncharted territory subject to speculative enquiry. MDB-collected national open market consumer price data has been the only reasonably reliable data for making any assessment of open market performance.

Economists generally assumed that the parallel market was extensive, handling over two-thirds of national marketed production[5] and comparatively cost efficient. Gymnastic feats with figures and breath-taking assumptions were often required to make these conclusions. Meanwhile, the marketing agents themselves, African private traders, remained masked. How had they succeeded in being so all-pervasive and so cost-efficient in such a short space of time?

Throughout the first half of the 1980s, market liberalization was a politically-charged issue. Tanzanian government and party officials were defensive about state marketing, pointing to Tanzania's long legacy of food insecurity and the purported exploitive nature of traders. Economists, on the other hand, presented forceful arguments for market de-control on an extremely impressionistic knowledge of traders' operations.

2. ANALYTICAL PROBLEMS, OBJECTIVES AND ASSUMPTIONS

There was an obvious need for basic empirical study of open market grain structures and operations. The assumption that Tanzania's parallel market was ubiquitous did not tally with the fact that conducive conditions for its existence did not exist. There was a lack of road maintenance, as well as severe shortages of petrol, a decline in motorized vehicle import and an absence of a well-entrenched African mercantile tradition.

However, a growing incidence of open marketing in staple foodstuffs was apparent in many places. The population of traders, both its total number and individual identities, was largely unknown. Furthermore, traders were wary of recognition, having been subjected to a public campaign to stamp out 'economic saboteurs'. To avoid being swayed into a comfortable acceptance of one or

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[5] The first estimate of the size of the open market was a guessestimate, which appeared in a paper by Keeler, A. 'Preliminary Report on the Parallel Market for Grains in Tanzania', MDB, March 1983. This figure quickly became fact and was being cited in Marketing Development Bureau documents at the time of the 1988 survey.

another polarized views of the market necessitated digging into the history of marketed grain supply in Tanzania, seeking the formation of people's opinions about the market as well as the evolution of the market itself.

My 1988 study of Tanzanian urban grain supply took place within the context of an international study of developing countries' food marketing policies amidst world recession sponsored by the Geneva-based United Nations Research Institute for Social Development (UNRISD). The emphasis in the overall programme was on problems of food pricing and marketing in a social and historical perspective, and the way that those problems reflected basic distributive issues within society and the nature of the state.

At the outset, the main objective of the research was to gather qualitative data as a means of sketching a picture of Tanzanian staple food marketing and the government's market liberalization policies. This included: first, outlining the basic organizational structures of grain marketing and identifying functional categories of traders and how they interacted. The focus was on different types of traders and their relationships to producers, consumers, transporters and other traders. Second, the contours of different urban food supply complexes and associated functional networks of traders were to be examined. Third, delving into consumers' and policy makers' attitudes towards traders, the aim was to separate fact from prejudice. Fourth, exploring actual market liberalization policies in the context of other strands of enquiry, was to provide a basis for analyzing the policy initiative and estimating its viability in the long term. Finally, the past history of Tanzanian food policy was to be linked to current findings.

In essence, the study's aim was to trace the evolution of the market, both its material growth and operations as well as people's perception of it and government's policies towards it. Regional variation in market development was likely given Tanzania's widely differing agricultural production zones, unequal development of regional transport infrastructure and differences in location of marketed food demand relative to supply areas. On the demand side, variability would be influenced by inter-town differences in: the volume of NMC-supplied grain, the potential for household self-provisioning and extra-market supplied foodstuffs.

3. FIELD METHODOLOGY

Since the research was conducted as part of a consultancy assignment, the field methodology was influenced not only by field conditions in Tanzania, but also by the terms of reference stipulated by UNRISD. Being part of a multi-national research project, the Tanzanian case study was aimed at providing findings on recent market liberalization reforms for comparison with other countries undergoing similar reforms, including Zambia, Senegal, Mexico and Nicaragua. Having previously researched the history of Tanzanian food marketing, I planned

to do extensive interviews with policy makers focussing on the past three years when government had become more amenable to market liberalization.

The main worry at the outset was whether or not the field research could begin on time. UNRISD had budgeted for the various international project components to begin in 1988. To facilitate inter-country comparability, it was necessary to start the field research within the current marketing year some three months after I had agreed to do the work. Tanzanian research clearance, at the time, tended to involve a minimum of six months waiting time on average.

In Tanzania, the main maize and rice marketing season extends from July to December. I planned to do my field work in September when the market was well-established. Arriving in early September with telephone confirmation that research clearance and research association was a near certainty, I discovered that this was an over-optimistic assessment. Research clearance from the national research council was not ready which prevented me from starting the interviews with policy makers. This setback was transformed into an advantage. It became evident from casual conversation and media coverage that market liberalization was proceeding at a rate that superseded policy makers' perception, let alone control. Ascertaining the nature of the new policies from the policy makers, could only take one so far in understanding the process. Market liberalization was being moulded by the interaction of policy-makers, traders and consumers. The six weeks delay in getting research clearance gave me the time to entirely restructure my study. I decided that it was necessary to do a reconnaissance survey of traders' and consumers' activities and perceptions.

As a reconnaissance exercise, the study was given a more regional focus. In addition to administering questionnaires in Dar es Salaam, four up-country towns were covered which necessitated a greater input of local research assistance. A research team was assembled, consisting of university graduates and post-graduates representing various social science disciplines who originally came from or were currently resident in one of the surveyed towns. The survey enumerators were selected on the basis of their knowledge of their local areas and their performance during the piloting of the questionnaire in Dar es Salaam. Their disciplinary biases were as follows: one historian, one librarian, one sociologist and two economists.

Given the little so far known about open marketing of food, my survey design aimed at gaining an awareness of the range of variation in the main staple food markets at its different levels of operation, rather than focussing on the details of any segment of market activity. Maize and rice trading and consumption were targeted. Collection of data on other major staple foods when and where they were combined with maize and rice trading. Survey site selection was on the basis of the surplus or deficit status of the town in relation to maize and rice. Thus, Dar es Salaam, as Tanzania's largest town and the biggest deficit area for maize and rice, was an obvious choice. The consumer demand of Dar es Salaam had dominated parastatal grain marketing. Mwanza, the second largest town and a deficit maize and surplus rice area, was also relevant in this regard. It was known as an area of

sometimes severe urban food shortages. Arusha and Mbeya, intermediate-sized towns in major maize surplus and rice/maize surplus areas respectively, were chosen to provide a contrast. Finally, Songea, a small town in a very large maize surplus area represented the opposite extreme to Dar es Salaam, and thereby completed the range of towns by supply/demand type. Hitherto, surplus grain areas had generally been considered from the perspective of the producer. Thus, a survey of urban consumers in surplus areas had the additional value of filling a gap in Tanzanian market studies.

The trader and household surveys began in late October lasting until late November. Generally by the end of October approximately 70% of maize and rice and 90% of paddy have been purchased and at the end of November this figure is over 80% of maize and rice and 95% of paddy. The six-weeks delay in obtaining research clearance actually served a useful purpose in the trader questionnaire. Traders were in a position to reflect on the overall nature of the current marketing season, rather than being in the midst of the season and not certain what volumes would be handled and what problems would arise.

Between 30-35 traders were interviewed in each up-country town and over 60 Dar es Salaam traders were questioned. Because the total population of traders was unknown, any sophisticated sampling technique was bound to be nothing more than pseudo rigour. Instead, heavy reliance was placed on the survey enumerators' knowledge of their local town and ability to gain good rapport with the traders. The enumerators were asked to cover the various local markets, bus stops and other localities where maize and rice transactions occurred and to get interviews with traders spread over all functional levels of trade, ranging from very small-scale retailers, through mobile intermediaries and large-scale wholesalers. Having obtained research clearance from the municipal authorities, the enumerator usually was officially introduced to the market master at the town's central market and began sampling there. From there, he traced trade networks along from stationary retailers outwards, trying to get a comprehensive picture of the town's maize and rice supply system, using his knowledge of the town and contacts to meet various categories of traders. This approach could best be called spectrum sampling based on informed intuition. Used as a form of reconnaissance, it is a low-cost, efficient approach. During analysis, the logical consistency and completeness of its findings are put to the test. Gaps, biases and misinformation in the data become evident when piecing together the mechanics of the local trading network and how it links into wider national conduits of trade.

Sampling for the household survey took a similar approach. Tanzania has ten-year census data, a 1976 household budget survey and a party neighbourhood cell system which facilitates standard random sampling procedures. However, the growth of the parallel economy and diversification of household income under the recessionary conditions of the 1980s has made the earlier official household budget survey data largely obsolete. The aim of the household survey was to cover a wide spectrum of income levels while minimizing financial and time costs. The survey enumerators not only knew the socio-economic hierarchy of

different neighbourhoods in their towns, they also were aware of the new material signs of wealth differentiation resulting from the changing configuration of household income. Enumerators were requested to interview households from all the major neighbourhoods in their towns to obtain wide coverage of income and ethnic diversity, household size variation and female headship. Permission to approach households for questioning was sought from the municipal government and party officials. In neighbourhoods where the enumerator did not have contacts to facilitate household introductions and casual encounters were not feasible as a basis for widening the selection field, party authorities were often instrumental in putting the enumerators in contact with households to select from. However, the enumerators were careful to avoid identification with officialdom.

The enumerators, as long-time residents of the town, applied their in-depth knowledge of the town's population to the selection of households. The result was a small household sample with sufficient socio-economic variation to tentatively distinguish different household patterns. Most importantly, at the inter-town level, the findings of the household survey could be juxtaposed to the trader survey, revealing relationships between open market food trading and urban household food provisioning strategies.

Data collection in the field was not restricted to questionnaires. All survey enumerators spent four weeks in their survey locality and kept a daily diary which listed their work progress and recorded additional field observations as well as research problems they encountered. The best of these diaries read like detective notebooks, day by day, piecing together the evidence to form a picture of the local trading network and household food strategies. Following the completion of their field work, each survey enumerator wrote an overview paper which provided a summary of different categories of traders, the structure of the open market for grain in the locality, how the local open market fit into the national market and the inter-relationships between the open market and the official market, as well as identifying local household strategies for securing household food supply in relation to income level.

Further contextual data was provided by interviews with officials regarding the nature of the policy, the policy formulation process and the effectiveness of the policy. At regional level, survey enumerators interviewed municipal authorities responsible for local trading bye-laws and representatives of the official food distribution system, namely cooperative officials and key NMC staff. In Dar es Salaam, officials in the Ministry of Agriculture and other ministries were interviewed to get up-dates on policy formulation at the national level. In addition, field observations and findings from interviews were bolstered by a detailed study of historical documentation on marketing, urban population and physical town growth.

Meshing quantitative survey data collection with more unstructured interviews and qualitative field observations made it possible to tackle sensitive issues from a number of different angles and helped generate a wider and more accurate picture of urban grain trading. Information on incomes, prices and profits

was gathered in the survey questionnaire and supplemented by qualitative data collection. The inclusion of a household as well as a trader survey provided further cross-checks. Neither compromised the other, since the enumerator had time for both and they were mutually exclusive in a locational sense. Household questionnaires were conducted in households rather than in public marketplaces.

Respondents' reluctance to answer survey questions due to the ambiguous legality of the market was not an obstacle in the household questionnaire. In the trader survey, it was apparent that traders in the towns where municipal policies were still restrictive, were more guarded in their replies.[6] However, survey questions had been formulated with the possibility of traders' reluctance to answer in mind. It was surprising to find that trader wariness was only very pronounced in one of the up-country towns. Within towns, the general principle of strength in numbers seemed to apply. The retailers, who were the most visible and most numerous category of traders, were candid about their businesses. It was the replies of the large-scale traders which did not always add up to a coherent operational picture.

4. TRAPS AND PITFALLS

Logistical obstacles and oversight gave rise to a number of limitations in the data collection. Naturally if one had to do it all over again the research would have been redesigned to avoid such problems as far as possible.

The initial problem of reconciling two institutional calendars with the Tanzanian agricultural calendar was unavoidable. Getting Tanzanian research clearance to start the study on time with respect to the post-harvest marketing season and UNRISD's project schedule were outside of my control. The research methodology had to be flexible to accommodate this uncertainty.

In a similar vein, the need for research approval from municipal officials was a stipulation that could have posed obstacles to the researcher's rapport with informants, particularly wary traders. This, however, proved less so than originally feared because of reliance on enumerators who were accepted as belonging to the town and good-intentioned.[7] This section focuses primarily on the hitches encountered in the two surveys that could have been side-stepped.

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[6]   See Bryceson 1993, Chapter 5 for a discussion of this.

[7]   It should be noted that Tanzanians are so used to party sanctions in research that a few of the traders asked for proof of the enumerator's official research clearance before agreeing to be interviewed.

5. TRADER SURVEY AND QUESTIONNAIRE

Any second time around would involve far more careful piloting of the questionnaire. Due to the research clearance delay, I was unable to be on-site during the piloting of the questionnaire. The questionnaire was piloted in Dar es Salaam under the direction of the survey administrator who discussed matters arising with me over long-distance telephone. Expensive telephone calls, endeavouring to make oneself heard over the static, is not the ideal medium for ironing out problems and refining the questionnaire.

One area that had to be largely omitted from the questionnaire was traders' credit. Traders of all scales of business were maintaining that they did not receive any substantive credit. While it seems that the incidence of financial credit has not developed to any recognizable extent amongst traders who are so new to the game, nonetheless, being on the spot might have produced more pointed questions that would have revealed more intricate exchange relationships between traders in lieu of credit.

Had there been more time and money it would have been advisable to pilot the questionnaire for each town. Dar es Salaam traders' understanding of questions sometimes differed from that of their up-country colleagues. Inter-town variation in municipal council rulings on trade, especially with regard to trader purchase restrictions, made some of the questions less pertinent up-country. Traders' sensitivities to specific issues in certain towns could have been allayed by phrasing particular questions more obliquely.

Maintaining accuracy in grain measures was a problem throughout the study. To facilitate data coding, most of the questions regarding grain purchase and sale were asked in terms of kilogrammes. Maize retailers however were usually selling in volume measures, such as a *debe*[8] of maize or smaller local volume measures for rice based on a commonly accepted sized bowl. The enumerator had to exercise vigilance that the trader's mental conversion into a kilogramme measure was reasonable.

Traders' under-reporting of prices and volumes was not surprising in the political climate prevailing at the time of the study. There were, however, a number of checks on price misinformation. Given that the survey was conducted towards the end of the marketing season, traders were asked seasonal high, low and average purchase and sale prices for the commodities they dealt in. This got around the problem of short-term daily and even hourly price fluctuation. However, based on recall, it was open to the attitudinal optimism or pessimism of the trader. Being a study of attitudes towards trade this was not undesired and had the advantage that traders' replies could be juxtaposed to seasonal prices reported by consumers in the household survey. In so doing, the consuming public's attitudes towards traders' prices was partially revealed. The Tanzanian Marketing Development Bureau of the Ministry of Agriculture publishes bi-monthly figures

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[8]   A large tin container measure of roughly 17 kgs.

on open market prices which could be usefully compared against the seasonal prices reported by traders and consumers. Nonetheless, in view of traders' over-sensitivity about profit margins, it would have been helpful to have asked for prices on the trader's most current commodity consignment and determined profit margins on the basis of that. This would have provided another check on the traders' reported seasonal averages. In a few cases the seasonal figures produced negative margins, which were feasible but not likely.

Traders' mis-reporting of volumes handled seemed inevitable. Apart from the possibility of wanting to mislead the enumerator, traders were not in the habit of keeping accounts on sales, making haziness of memory a survey obstacle. Traders were asked the total volume of maize and/or rice that they purchased last year, that they expected to be purchase this year, as well as the volume purchased last week. Besides spotting inconsistencies in the trader's responses to the questionnaire, detection of under and over-reporting could only take place after gaining a familiarity and feel for the market overall, considering the traders' place in the trading network in terms of who s/he purchased from and sold to. By soliciting traders' opinion as regards who were the biggest maize and rice traders in their town, further insight was gained to check against volume information.

Market-sited interviews minimized survey search costs, being the most logical and easiest way to find traders, and suited traders who generally did not have the time to be interviewed away from the market. The main drawback of market-sited interviews is the lack of privacy during the interview and the possibility of traders clustering and standard replies being given by the individual traders in a specific market place. Furthermore, it encourages a bias towards retailers. Both of these drawbacks are mitigated by acknowledging that they exist and doubling efforts to avoid their occurrence. Traders should be interviewed only during lulls in trade with the insistence that, as far as possible, the interview take place without others present.

Retailer bias is, in part, connected with the difficulty of distinguishing trader categories. Network analysis pivots on delineation of functional types of traders and indeed it is this delineation that is at the crux of tracing market evolution. Data used to categorize traders included: 1) volumes traded, 2) purchase and sale prices, 3) ownership of capital assets and 4) purchase and sale patterns. The unreliability of volume data has already been discussed. Purchase and sale prices were useful indicators of traders' retail, wholesale or mobile intermediary functions. Ownership of capital assets provided few clues since most traders, whatever their function, operated with minimal capital assets. Only a minute number had transport vehicles and storage. Only one owned his premises. Many town-based selling agents operated without rented market stalls, including wholesalers. Thus, categorization of traders mainly hinged on the trader's pattern of commodity purchase and sale in terms of location and transaction agent, i.e. suppliers and onward purchasers, and whether the trader had regular suppliers or customers.

Lack of trader differentiation in a town did not always signify an embryonic market.[9] Both Songea and Arusha towns had traders who acted as retailers and mobile intermediaries bringing produce from rural areas. The wholesaling functions were very underdeveloped in both cases. In Songea, this pattern was part and parcel of embryonic market development, whereas in Arusha it represented an adaptation to a dense network of local farmer markets and high urban market taxation.

Identifying mobile intermediaries and interviewing them was a general problem in all the towns. By nature, mobile intermediaries do not spend a lot of time in towns, let alone town markets. In some towns and with some highly desirable commodities, such as paddy and rice, they often very consciously avoid town markets and associated taxation, preferring to carry out their transactions at guest houses and bars. Mobile intermediaries are key to the open market's low costs. They are frequently using extremely inexpensive, by-the-way transport and shoulder most of the costs of security of the load enroute. They necessarily have to be flexible and inventive in getting their goods to market. Such work is a training ground for future wholesalers who use the period to establish valuable supply contacts. At the time of the study, it appears that most mobile intermediaries were working on their own account. Over time the business autonomy of mobile intermediaries could be subject to change. The elusiveness of mobile intermediaries made interviewing them one of the survey's major challenges. Any future study should place special emphasis on understanding mobile intermediary trader operations since they are the linchpin of the whole system.

With hindsight, it is apparent that the trader survey questionnaire did not ask enough questions on traders' socio-economic background, most notably their educational level. Most traders had some primary education, often up to Standard VII, which is the usual level of attainment under Tanzania's Universal Primary Education programme underway since 1976. Due to lack of data, the survey did not shed any light on associations between education and trading activities. Does formal education help or hinder a trader's career?

One glaring finding was that traders as a recent occupational group in Tanzania were attracted to trading as a form of livelihood and much needed income rather than profit per se. What is not clear however is how traders differ from the rest of the lower income, 'blue-collar' population. What motivates them to take entrepreneurial risks?

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[9] For discussion of the incidence and nature of trader differentiation, see Bryceson 1993, Chapter VI and van Donge 1993.

6. HOUSEHOLD SURVEY AND QUESTIONNAIRE

The separate income and expenditure streams of African household members are well-known. In a period of recession and household budgetary stress, even more fragmentation can be expected. While food expenditure, particularly of staple foods, is more likely than other items to be joint, there is still the problem of dealing with non-pooling and the fact that any one person interviewed will provide only a partial picture of household food expenditure. Either the head of household or senior female was interviewed in the survey. It would be advisable to interview both, if time and research funding allowed, to get a more complete picture as well as ascertaining if there is any sexual differentiation of purchases by food type and market source. The survey did not ask any questions regarding the purchase of cooked meals. This may be a significant element of food expenditure in certain household types.

It was interesting to note that in some towns the survey findings went contrary to received wisdom and 1976 Household Budget Survey results regarding the association between household income level and incidence of urban farming. For several decades evidence suggested that it was poor households who relied on own farm produce to supplement their low income. According to the 1988 survey results, in the largest towns, namely Dar es Salaam and Mwanza, it was the wealthier rather than the poorer households who were engaged in direct food provisioning through agriculture. This phenomenon requires further investigation, specifically with respect to the location of the farm, the importance of hired as opposed to family labour, and the degree of subsistence as opposed to commercial objectives embedded in the farming activities. The 1988 survey results suggest that the farming effort of these wealthier households is highly commercial, using a substantial amount of hired labour to produce for a commercial market facilitated by the households' favourable access to cultivable land and transport.

Designing urban household food surveys in Tanzania requires a certain amount of openness regarding anticipated categories of activity. There is a blurring of the role of food consumer into that of food producer. In some instances, certain survey questions about open market food prices were understood more from the perspective of a food producer rather than a consumer. Because standard categorizations in household food consumption surveys are not always pertinent, the collection of background data about the locality and its history is the only way certain fundamental perceptual errors can be avoided on the part of the researcher.

7. COMBINING QUANTITATIVE AND QUALITATIVE RESEARCH TECHNIQUES

It must be stressed that the trader and household surveys were formulated and carried out, following several years of historical data collection and analysis of

Tanzanian food supply and marketing systems. My perception of the nature and speed of market liberalization was influenced by a familiarity with previous marketing policies and their outcomes. Because Tanzania had been subject to a number of nation-wide grain marketing policies since independence, policy makers, and indeed researchers like myself, were used to making glib statements about the grain market in Tanzania generally. The findings of the 1988 trader and household surveys provided ample evidence to show just how misleading such generalizations are. What if the ordering of research techniques had been reversed, i.e. a cross-sectional survey had preceded detailed historical research? No doubt, survey findings would have led me to give more attention to regional variation in my historical enquiry. Nonetheless, it is advantageous to begin with historical research. Surveys tend to be executed within strict time schedules and budgets which do not make adequate allowance for background data collection. The uni-dimensional nature of many surveys is a net consequence. So many of the pitfalls of market survey work can be avoided if sufficient contextual data is at hand.

Combining qualitative and quantitative data collection almost invariably throws up additional issues that beg research attention. Gender and grain markets is one such area. Since all the field enumerators were male, it is likely that certain biases were introduced. The data suggests that in many areas female traders are numerous, but they tend to operate as small-scale retailers. The 1988 reconnaissance surveys regrettably overlooked the gender dimension. Exploring the implications of gender requires more in-depth household survey work directed at the income and food expenditure patterns of both senior females and males within the household. Coming to terms with gender in trade would necessitate daily activity schedules for men and women traders to show what, if any, time constraints exist for women traders. Oral histories of men and women traders could reveal their different trading career tracks. And, as is the case with trader studies in general, seasonal survey data collection of at least a year's duration is necessary to get a feeling for traders' management of capital, stocks and time. Differences between men and women traders could prove to be highly revealing.

8. ADVANTAGES AND IMPLICATIONS OF THE METHODOLOGY EMPLOYED

The methodology for the 1988 study was a product of planning and necessity. As is always the case, methodological improvements could have been made with additional time, money and foresight. However within the study's given resources, there were a number of features that proved especially valuable in carrying out the research which will be briefly reviewed before considering any implications the methodology might have for future grain studies.

Having well-briefed, local graduate survey enumerators doing the on-site survey work was extremely important. Their effectiveness was based on knowing their locality, being able to win the confidence of informants and officials as well as having formal training in the social sciences. Their diary-keeping and the

writing of an overview paper expanded the data base and was useful in cross-checking with the survey data. The areas that the enumerator gave adequate or less than adequate attention were very clear from this documentation. Their terms of reference were specific enough to launch them into an intensive and fairly comprehensive study with unambiguous direction, yet, given their on-the-spot findings they had to use their judgment and be prepared to ask questions that were not pre-programmed. They were detectives piecing together the market chain, relationships between traders, consumers, transporters and official marketing structures. The combination of trader and consumer surveys proved essential to the enquiry. The household survey was not intended to be a precise, detailed study of household consumption. It was more an accompaniment to the trader survey, offering an indication of the type of consumer demand the traders were serving. This was aimed at greater understanding of why trading networks take the functional forms and patterns that they do. The inter-town comparison of consumer demand provided marked contrasts, less in terms of commodities consumed and more in terms of the level and seasonality of demand.

Selecting a sample of towns which spanned a wide range of urban supply and demand conditions was critical for later analysis. From Dar es Salaam's densely populated and market-reliant residents to the opposite extreme, small-town Songea with its agriculturally-inclined population, the results provided a synchronic snapshot, suggestive of the evolution of Tanzanian urban market networks. Delving into the background of each town, longitudinal data provided clues regarding the local evolution of urban grain supply networks.

Finally, the study's analytical focus on context, combining historical background with reconnaissance survey data in a multi-disciplinary framework helped give a fresh slant to some heavily debated Tanzanian marketing issues. With historical data it was possible to relate present social, economic and political aspects of market development more coherently. The rather crude argument regarding the state's urban bias in marketing policy could be revised to show that state marketing policies are influenced by variation in the nature of consumer demand between towns. Theoretical and policy issues emerged more clearly from a detailed empirical study which traced market development historically. Furthermore, with an appreciation of the historical background, greater inference was possible from the reconnaissance survey data.

What, if any implications can be drawn from this methodology for future studies? Maureen Mackintosh has called for greater attention to real as opposed to abstract markets (Mackintosh 1990: 43-53). The original UNRISD research proposal (UNRISD 1987) was premised on this objective and the project's final output has included a number of publications elucidating the operation of real markets in various parts of the developing world (Hewitt de Alcantara 1992a and 1992b; Appendeni 1992; Utting 1991 and 1992). The need for detailed empirical studies of market evolution under the present transitional situations prevailing in Eastern Europe and former socialist-inspired developing countries is pressing. Even in well-entrenched market systems, there is not enough appreciation nor up-

dating of the basics regarding market structures and the division of labour in trade.[10] Ready assumptions about the operation of the market are usually misleading and merely succeed in confirming past misconceptions. It is time to document what is *really* happening as grain markets evolve and market agents, both buyers and sellers, establish conventional patterns of behaviour on *their* own terms. In so doing, a body of information will coalesce to challenge the tyranny of abstract market models and the false hopes and expectations they generate.

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[10]   For a clear illustration of an institutional approach to African agricultural commodity marketing see van der Laan 1993 and Houtkamp & van der Laan 1994.

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