

STATISTICS AND POLITICAL ECONOMY
IN THE
REHABILITATION OF UGANDA

by Reginald Herbold Green

"To plan is to choose. Choose to go forward".

- J.K. Nyerere

"Every choice requires a sacrifice".

- Soren Kierkegaard

"Our own reality - however fine and attractive the reality of others may be - can only be transformed by detailed knowledge of it, by our own effort, by our own sacrifices".

- Amilcar Cabral

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Statistics and Political Economy

Statistics are not an end in themselves. Numbers are not neutral - their availability or absence (and to whom) and the uses made of them have real political economic results which are never value free.

Who do political economists - government or enterprise or intellectual - want statistics? What uses do they serve?

- a. to describe aspects of reality in a quantitative way and one comparable over time (e.g. Coffee Marketing Board purchases) and - sometimes - across otherwise disparate quantities (e.g. constant price manufacturing sector value added data as measures of absolute manufacturing contribution to, and relative share in, the economy);
- b. to serve as tools to analyse reality e.g. detailed Balance of Payments statistics allow analysis of how a scarce resource (legal monetary sector foreign exchange) is being allocated and also what levels of activity are possible in certain import dependent sectors such as manufacturing, transport, repairs, construction;
- c. a basis from which or a tool through which to control/change selected aspects of reality. For example at the operating level a credit or a foreign exchange budget uses statistics on available/allowable foreign exchange or bank lending and of allocations by sector and firm to achieve a balance on external

account, an acceptable rate of increase in domestic credit formation, allocation of scarce resources according to a pre-set pattern designed to be consistent with certain political economic objectives (which vary from state to state and time to time). Similarly data on past and projections of future foreign exchange/ credit stocks, flows, uses are critical at the analytical level to drawing up a foreign exchange or bank credit plan that will relate to the economy in a way which produces the intended results rather than throwing up unexpected and undesired ones because the data for adequate estimation of linkages, impacts, incidences was not available (or was ignored).

The Critical and The Contextual

The statistics, approaches and methodology which are critical are those which - in a specific context - serve the objectives set out above. Which statistics, approaches, methodologies will pass this test will vary with time, place, political economic objectives to be served.

The first requirement is to present data on critical elements of reality. Detailed presentation on arrivals by lake, air and rail do not meet that test - they do not cover most travellers/visitors/immigrants and it is, in any event, not clear Uganda has great need or use for such data today even if complete. However, detailed data on sources and uses of foreign exchange (even if limited to legal sources/uses) do meet the test. They illuminate a critical aspect of the economy and are a basic input into policy oriented analysis and economic management.

A second requirement is reasonable accuracy and completeness. For

example to compute coffee production it is no longer (to 1971 it probably was) adequate to work solely from Coffee Marketing Board recorded purchases. Up to one third of coffee is smuggled. It is critical to know the true crop for several purposes - not least estimating rehabilitation requirements and scope for/success of measures intended to recapture coffee for legal channels. Similarly no estimate of tyre consumption in Uganda based on official imports would be of the least use when the official imports seem to be running 75-100,000 a year and the number of tyres needed to keep 40,000 vehicles on the road is about 300,000 a year. In the first case either macro or micro agronomic and in the second, perhaps, sample vehicle operating data are needed to secure a picture which represents, rather than distorts, reality.

Third, the statistics must be in time for their intended use. (This does not mean they cannot be revised later for more permanent records and longer term use.) This is especially true in respect to aspects of reality which change rapidly e.g. 1978 Gross Domestic Product data are not of much use now (nor for somewhat different reasons would 1979 ones). Export/Import data are needed one month in arrears (i.e. April by May 30) if they are to be used for short term economic management e.g. quarterly external balance manipulation, ongoing import allocation control. For longer term management and forward planning a 3 to 6 month lag in more complete, revised data is acceptable.

Fourth, data should be presented in a form and of magnitudes relevant to the users' needs. Statistics are not collected nor presented primarily to employ or to interest statisticians. Users have every right to insist their needs be respected (and in the case of the government to begin to

question budget allocations for statistical services if they are not). This requires collaboration between statisticians and users. The latter may well want the unattainable while the former may produce the unuseable when there is no necessity to do so. For example (and here the users seem to bemuse themselves) Money Supply as usually defined is a dubious magnitude either for analysis of economic forces or for control purposes because of the impact of external reserve changes. Domestic credit formation of the banking system (including the Central Bank) is likely to be both more relevant to analyzing economic balance pressures and to setting up and operating a workable monetary level magnitude and allocation system. In Uganda today special account would need to be taken of the makeup of currency holdings - the Sh 3,000 million odd in the hands of mafutamingi and their associates have considerably different implications than the Sh 1,200 million odd in "legal monetary sector" hands.

Toward Principles Of Selection

In selecting statistics for rehabilitation and development the why, what, when, how, where, who questions of journalism may be a useful first approximation, if not to a set of principles, at least to a useable guideline kit.

Why? Because there are identifiable users who need the data today to do their work properly e.g. consolidated parastatal sector cash flow and operating accounts are critical to planning rehabilitation of the public enterprise sector and working capital (bank credit) allocation. Similarly data on main manufactured goods output are needed urgently for a range of economic management, rehabilitation and development

decisions. But it is also necessary to look ahead - because a future need can be identified clearly and cannot be met unless statistics are collected now and time series begun (restarted) is also a good answer to "why?". In time series it is critical either to use a consistent basis for estimation (where possible with the series covering the years through 1972) or to make clear notes on when and how the series altered e.g. the pre 1972 Gross Domestic Product series is grossly deceptive because in 1969 the basis of estimation was improved causing a probable 10% increase in recorded GDP which in the published accounts has been treated as if it were a change in 1969 versus 1968 GDP i.e. an alteration in reality rather than the way in which reality is described.

What? The previous sections sketch this guideline - what is critical to describe, understand, control, manage, plan key aspects of reality.

When? As soon as practicable consistent with enough accuracy to be useable. That principle applies both to immediate statistical reconstruction and to subsequent ongoing work. Data subject to error (say + 5% or, in some cases, more) now or in August are better than data correct to + 1% a year from now; trade statistics with limited errors one month in arrear are far more valuable for economic management than near flawless data a year out of data by the time of publication. (And to take an extreme - but not unknown - case, messy mimeoed data on time are infinitely more to the point than a beautifully printed Statistical Abstract 36 months after the event!)

How? That very much depends on the specific aspect of reality the statistics in question are to describe/analyze/contribute to changing. The methodology of a population census is not that appropriate to (legal

sector) balance of payments estimates; neither will be of much use in preparing "order of magnitude and makeup" statistics on smuggling into and out of Uganda. Yet each of these - census, BoFP, smuggling - is an area in which useable statistics are urgently needed, collected, compiled, checked and presented by the most appropriate (or least bad) available methodology.

Where? This can relate to collection, compilation, coordination and/or use. It is a question to which monolithic answers and hegemonic offices serve the users (and for that matter the quality and quantity of data) badly, but also one in which complete laissez faire and "creative anarchy" have distinct limits. Data collection should where at all practicable be by the body for whom data recording is a byproduct of its own basic operations e.g. revenue and expenditure by the Treasury and local government bodies, exports and imports by Customs, crop production by Agriculture (not simply by purchasing authorities who deal only with legally marketed output). Major exercises - e.g. population and specialized censuses - are exceptions because they are basically statistical exercises usually best carried out by a statistical agency. Data compilation should usually be by the collecting agency especially if it is also a user of the data once it is compiled. The classic case is evidently the Treasury as collector/compiler/analyzer/user of revenue accounts, but parallel cases exist in the Bank of Uganda and should exist in Agriculture, Animal Industries, Commerce, Industry, Health, Education, etc. No useful purpose is served by breaking the chain from collection through compilation to use by inserting an outside agency. Providing statistical competence - e.g. advice and a statistician - is of course another matter. However, where the collector/recorder does not itself use the data or where the data from one collector needs to be combined with that

from other collectors before use, an allocation of responsibility for overall data production is needed. Usually the best choice is the major user e.g. the Bank of Uganda for external transaction data (from the Foreign Exchange Allocation Committee, Customs, commercial banks, its own operations) and for monetary and credit data (from its own operations, commercial banks, Treasury). Where there is no single dominant user and/or estimation is very complex - e.g. parastatal sector consolidated accounts, Gross Domestic Product - there is a case for Central Statistical Agency compilation, estimation, prompt delivery to user. The same holds if the logical collecting body simply does not and appears - at least for the time being - to have no capacity or will to collect the data e.g. employment and earnings (logically labour) and manpower (personpower) stocks, flows, requirements (logically Education or Manpower Development if the latter were a separate ministry). However, none of this implies that the role of the Central Statistical Bureau should be limited to special statistical exercises, particularly elaborate data compilation/estimation not linked to one particular user and/or gap filling. On the contrary - it has at least six other functions:

1. to collect all statistical series of general interest from the bodies which collect/compile them and make them available for general government, enterprise, research and public use;
2. where appropriate to revise - restate - represent data in formats more suitable for general use than that appropriate to the initial compiling body;
3. to coordinate statistical collection, compilation, presentation presumptively through chairing a committee of collecting bodies and agreeing on/monitoring standard guidelines and practices;

4. to provide technical advice and support to institutions in respect to their ongoing, new or special one off (e.g. surveys, sectoral censuses) statistical work;
5. to estimate statistical personnel requirements and take leadership in developing Uganda based and overseas capacity to meet them (for all concerned agencies and enterprises, not only for itself);
6. to take leadership in planning for statistical development (both in response to requests and on its own initiative) and proposing sequences, priorities and time schedules.

Who? In one sense the answer to "Where?" is also an answer to "Who?". However, there is another aspect to this question. People who know what they are doing and how to do it. At the initial entry level this requires some training and some cross check system to avoid cases like that in which the value of a VC10 for then EAAC was entered at £10! Unless initial entries are correct the caveat "garbage in garbage out" will apply to the whole estimation process. Similarly at the other end of the spectrum professional statisticians should have a working knowledge of user needs and of the nature of the reality they are measuring. Lack of the first leads to producing series or presenting data in forms which serve no purpose. Failure to have non-statistical perceptions allows the grossest - and when caught most hilarious - errors to pass unchallenged. E.g. in 1971 Tanzanian draft National Accounts showed a huge rise in foreign private investment. When queried the statistician said it was a residual. In fact he had failed to catch the Tazara Railway! In another case the average for a salary class whose de facto top limit was Sh 60,000 came out at Sh 96,000 - the fringe benefits of all wage and

salary earners had accidentally been left in the last class instead of properly segregated as unallocable. More seriously through 1970 (at least) at least two East African states in computing real GDP rated an African employee as 1, an Asian as $1\frac{1}{2}$ and a European as 2 - hardly a value free procedure and one which rather meretriciously "proved" citizenisation slowed growth! A professional applied statistician should have caught each of these errors.

A Note On Accuracy And Estimation

Virtually all political economic (and other for that matter) statistics are statistical estimates, not total, exact counts or measurements. Even censuses are always subject to error (minus or plus), sample censuses to errors of estimation, estimates of agricultural output to even broader margins of error, order of magnitude estimates (guesstimates) of magendo to very wide margins indeed. Where there is 100% accuracy this is usually by definition e.g. Customs Collected (and paid over) can be known exactly. In that case the definition corresponds to a significant aspect of reality. The standard Kenya, Uganda, Tanzania wage and salary employment and remuneration data are much more dubious. They should be labelled "Wage and Salary Employees and Reported Remuneration by Government Units and by Employers of 10 or more who chose to answer a voluntary mail survey". Examination of the data in any detail shows that not only are there gaps, these vary widely from year to year and many of the initial entries (returned questionnaires) are self evidently inaccurate. As a very rough guide to large scale employer wage and salary earners and remuneration at national level and for some economic sectors the series has its uses but it is not at all what it purports to be or is often used as being.

The needs in respect to this problem can be summed up as "Intelligible Truth In Labelling". All statistical presentations should state clearly:

- a. main sources
- b. intended coverage (and exclusions)
- c. probable nature and magnitude of under/over counts or estimation errors
- d. broad nature of methodology used. Having detailed descriptions of all of these on file or in annexes to little seen documents is not an adequate substitute because it does not tell the busy user what he needs to know.

That said "accuracy" should not be a fetish nor an excuse. In Uganda today statistics relating to magendo (trade, transport, smuggling, assets) are desperately needed. The estimates can hardly hope to be precise. But it is much better that serious estimation be tried than that random guesses (usually much too low) be the only basis for policy. Statistics which are precisely wrong or precisely non-existent are no use at all; those which are approximately accurate can be of great value. To say that a pilot is not helped by knowing he is 500 feet above the runway + 1000 feet is true but not directly relevant; the precision of technical and clinical statistics is often neither possible nor necessary in the realms of political economy and economic management.

Statistics And Objective Correllatives

Statistics are time and place bound. What is appropriate - still more what is priority - for Uganda in 1979 is not necessarily appropriate/priority

for Kenya or Tanzania or Zimbabwe or Sweden. What was appropriate/priority for Uganda in 1970 may well not be so today.

Three caveats must be made clear:

1. different does not mean inferior - it means appropriate to an objective context or correlative;
2. to say that what is impossible is inappropriate is not to say "anything is good enough for Uganda". Ugandans have suffered too much from that attitude e.g. by those abroad who accepted Amin on that basis and through a domestic attitude a letter to The Uganda Times of April 11 blasted as "This 'I don't care' attitude is too expensive for the reconstruction and rehabilitation efforts" - indeed it is and in statistics no less than in other fields;
3. it is not easy to identify what can (and often must) be cured and what must (at least for a time) be endured but that is the heart of intelligent choice so it must be attempted.

The Commonwealth Team Report, The Rehabilitation of the Economy of Uganda argues (p.4) that rehabilitation should (must) be a sequential process with each step designed not only to win back lost ground itself but also to lay the foundations for further steps and set in motion a cumulative process. This is eminently applicable to statistical rehabilitation. It is not possible to do everything at once. To plan is to choose and to choose is to sacrifice. Some desirable work must be delayed - the "bottlenecks" must be identified in statistics (as elsewhere) and the available resources deployed to break them. E.g. to concentrate on standard GDP accounts first would be

wrong - the basic data do not exist, the priority needs do not lie in this field, 1979 GDP would not be very interesting anyhow.

A second recommendation - that 1970, not 1979 or 1978, be used as the normal benchmark and reference point also has some validity albeit (as the Report itself says) with more exceptions. The data collected in 1970 are a first draft for a 1982 goal for statistical rehabilitation. A first draft only. Some data then collected were probably not priority. Some were in a rather dubious form - e.g., as noted, the employment data. There were notorious gaps - e.g. agricultural production including grower and local market consumed food crops; consolidated public enterprise sector accounts. Starting from a wasteland makes it appropriate to take these factors into account, not simply rebuild 1970 statistical edifices for their own sake.

But there is a further difficulty - reality has changed. The Report says (page ix) "the expansion of magendo meant that increasing fractions of production and distribution, import, and exports, escaped the networks of statistical collection". That is true and more perceptive than much analysis of post Liberation Uganda. But it is a gross understatement.

To use the expressive vocabulary of slang "Magendo First. Mafutamingis rule - OK!" That is the reality today. If one wants to change that reality one must first acquire detailed knowledge of it including statistical estimates.

II.

The Political Economy Of Magendo

"The mismanagement of Uganda's economy precipitated three new categories of

people; on top of the totem pole are the extreme economic egocentrics, the mafutamingis, on the bottom of the totem pole are their creation, the bayaye, and in between are their hybrids, the magendoists" - The Rev. Dr. Kefa Sempangi, "Rehabilitation In Uganda Since The Liberation War", Topic 11-IV-80.

This is a rather more perceptive start toward a structural and class analysis of magendo than facile phrases about "lumpen militariat" or equally facile prescriptions to wipe out the sector simply by devaluing or trebling controlled prices. However, it is at best a start.

Who are bayaye? Are market traders who - of necessity - buy food magendo and add markups related (at least in large part) to their own need to "eat magendo"? Are the newspaper sellers who buy papers at - about - Sh 4 and sell not at the cover price of Sh 5 but Sh 10? (Oddly when cover price is Sh 10 and price to them presumably Sh 8 the street price is Sh 15 not, as one might have supposed Sh 20.) The envelope sellers who charge Sh 2 each?

Who are magendoists? E.g. is the vehicle repair artisan who buys parts from mafutamingis or big magendoists (including car theft/stripping organizers) and then marks up parts and labour so his family can have meat-rice-salt-beer daily? Is the radical would be politician who refuses to take a salaried job because he would have to do magendo "on the side" (or "hunt for lines" some related way) but plans to run a pickup and charge "the going rate" when that "going rate" is magendo? What of the Central Tender Board whose lovingly recreated 1970 procedures mean that only a mafutamingi can meet tender and delivery dates on many of its advertisements? (Let me hasten to say I do not challenge the CTB's integrity nor suppose it intended this result from its procedures, au contraire.)

How does one classify "men of two worlds" (or women) - managers who "allocate" out the back door. E.g. a Kampala hotel had two deliveries of beer April 11. There was none on sale in it except at a "private" dance where there was beer at Sh 120 a bottle. Clearly these individuals are in magendo but not full time - indeed their ability to be magendoists turns on their feet.

To examine the sub class makeup and fringe membership of magendo is not to reject the prophetic denunciation (e.g. of Canon Shalita at All Saints, Nakasero on April 6 and 13th). At least many (including many part timers) do indeed see money and fail to see people. For many the damnation "They see shortage of food as an opportunity ... an opportunity to make more money out of hunger" is only too apt. But to combat this evil one must know its structure, its scope, its scale.

Magendo accounts today for about 45-50% of Magendo plus Legal Gross Domestic Product. Legal monetary comprises about 25% and subsistence (at standard GDP prices which understate it) about 25-30%. In 1970 the parallel percentages were about 3-5%, 65-70%, 27½-30%. In 1979/80 at current prices the orders of magnitude are roughly magendo Sh 35-40,000 million, legal monetary Sh 17,500-20,000 million, subsistence Sh 20,000 million (See Annex). Even these rough estimates give a better picture of what the state (and non-magendo businessmen) are up against in trying (plotting?) to regain control of the economy than either casual observation or standard economic analysis which assumes magendo to be non-existent, trivial or at the most marginal to the legal economy - not dominant as it is in Uganda today.

What are needed urgently are not standard GDP estimates but more detailed estimates of magendo/legal monetary/subsistence sector by sector with estimates of their areas and methods of interaction and overlap. That is

not traditional statistics but it is a priority task for statisticians (and economists) in Uganda today.

Some Sectoral Queries

Magendo is dominant or critical in at least seven economic sectors: exports, imports, commerce (trade), transport, vehicle repairs, construction, printing. How can data on its magnitude, structure and role be estimated? (Some first attempts appear in the Annex.)

Exports center on coffee. What is true production by district? Once that is known approximately it can be compared with UCB purchases by district and sources/levels of magendo coffee identified. Current estimates (e.g. Budget Speech 1979-80, p.4) of 50,000 tonnes would appear to be a minimum with 60-70,000 tonnes a more likely range. Other magendo exports are largely re-exports e.g. gold/diamond, from Zaire and sugar/hoes/etc., to Rwanda and Zaire. Some estimation of quantities may be possible e.g. via tracing allocations to border districts and amounts actually sold to users there (e.g. Arua hoe case Citizen 2-III-80). There is some reason to suppose the size of this magendo re-export of goods may be overestimated e.g. the Sh 15/kilo sugar swept off market by mafutamingis in late 1979 did not, by and large, go anywhere except into their godowns from which it is now emerging to retail at Sh 120/kilo.

Imports by the magendo sector are largely the reciprocal of the sector's exports. (This is not literally true. Some magendo export proceeds probably are kept abroad. Some magendo foreign exchange is derived from fraudulent education and travel allocation claims which slip through the Bank of Uganda.) If magendo exports can be estimated so can imports by estimating

the foreign currency receipts, the share used in "to border" expenses and therefore the foreign currency value ex Nairobi or ex Kigali of magendo imports. On the face of it, the value is probably in excess of Sh 1,000 million a year and for consumer goods, tyres, vehicle spares is likely to be over 50% of total imports. A reverse check of magendo exports to Rwanda may be possible by estimating volume of matches, cigarettes, beer, edible oil, cloth coming from there as the brands are quite distinct from those likely to be legal imports or Kenya sourced magendo.

Trade is the heart of magendo. It is fed not only by smuggled goods but by gaining control over the bulk of local manufactures and legal imports soon after they leave the factory or the Seven Sisters import houses of the Advisory Board of Trade. The total magendo trade revenues may be in excess of Sh 25,000 million. This is also the most diversified sector with part time (e.g. officials, managers) and lower level (i.e. bayeye) "employment" concentrated here.

Some statistical estimates should be possible:

1. what % of goods are actually sold to consumers at controlled prices and which consumers, (See Food and Beverage GM's letter Times, Topic of 4-IV-80 stating Fresh Food allocation to VIP's, other allocations to consumer coops - where? how many? how much? - apparently not Makerere or Treasury -).
2. where do goods go "missing"? (i.e. at exit from factory or wholesaler? at retail level? at allocation committees? See e.g. Times 8-IV-80 on uniforms at Mbale, Citizen 14-IV-80 on hoes in rural Boganda on the last, Times 14-IV-80 on paraffin at Tororo on the second).

3. what are typical magendo prices main commodity by commodity? (e.g. is Sh 40 per packet and Sh 5 per stick - Times 9-IV-80 from Ibanda - typical of Sportsmen?). Are these prices stable (e.g. on 13-IV-80 one small envelope opposite GPO was Sh 2; 14-IV-80 same spot, same envelope Sh 1. Times usually Sh 3 - i.e. cover price - but sometimes Sh 5)? Are there consistent ratios magendo to controlled (or external) prices? i.e. 4 - 10 seems usual range (e.g. beer Sh 80 - 120 vs Sh 25; sugar Sh 120 vs Sh 15, tyres about 10 times Kenya or Tanzania retail, Nation Sh 15 - only postage stamps, electricity, gasoline seem to be normally available at controlled price). But salt seems to be Sh 1,000 kilo at bayeye level which is wildly out of line (especially as at that price it pays "small man" to smuggle on foot). Why? How much do magendo prices vary by district e.g. is Busia notably lower than Kampala? Fort Portal higher?
4. what is markup structure? What margins do bayeye get on what prices from whom? (Presumptively from middle level magendoist not direct from mafutamingi?)
5. can orders of magnitude figures for bayeye and magendoists overall and by district be estimated?

Transport is at the heart of food magendo. Recently a stick of matoke cost Sh 45 at Masaka. Kampala prices were then at least Sh 180 - later reports show Sh 250 Entebbe, 240 - 300 Kampala. At Sh 270 the rural/urban differential is 6 to 1 (versus 1.6 to 1 in Tanzania - Sh 30 Mushi/Sh 50 Dar es Salaam). At a guess the market trader gets Sh 30 leaving Sh 195 for the collector-transporter-"wholesaler". Are these the same magendoist? Who gets lion's (more appropriately hyena's or vulture's) share? The

transporter? Is food transport dominated by a few mafutamingis with magendoist collectors in rural areas and wholesalers in towns dependent on them? What is order of magnitude of food transport magenda? How do "rates" compare with public sector - e.g. Central Co-op Transport - rates?

Passenger magendo is also severe. Apparently some rates are 3 times People's Transport (e.g. Times 10-IV-80, re Mbale district). Is this typical? What share of business do UTC, People's Transport, Uganda Railways carry; what share magendo? Does share vary Greater Kampala versus other areas? Long distance versus district? By district? What are magendo fare levels? How much did they rise after 1979/80 Budget changes in magendo (or legal) transport costs?

Vehicle Repairs, Printing, Construction appear to be exceptional cases - magendo sector engaged in production. Is this the case i.e. are actual repairers, printers, construction fundis true magendoists in own right? Are they controlled by mafutamingis through spares, paper and ink, cement and other construction material supplies? How are producer unit margins set? How high are they? (Each of these is a sector so magenda tied that even government has to pay magendo prices to get most vehicle repairs, some printing, some construction/repairs done.)

Other. Is magendo spreading into production on a broader front. How typical were the 16 magendo jaggery mills cutting Lugazi cane which "greeted" the returning Mr. Mehta? Can large numbers of magendo workshops, small factories be identified? e.g. jaggery, enguli, coffee curing? How large is their turnover? Is magendo remaining a "quick riches" trade oriented sector with buildings/land a hedge for the future or is it going into goods production on an increasing scale?

Magendo Sector Assets

The sector has very substantial assets: currency (Sh 3 - 4,000 million), deposits (Sh 2 - 3,000 million?), government stock (Sh 500 million?), goods for trade (Sh 2,000 - 3,000 million at magendo wholesale value), vehicles (Sh 1,000 - 1,500 million at magendo value), buildings and land (Sh 5,000 million plus?), enterprises (e.g. repair shops, presses, jaggery mills - Sh 100 - 250 million?) - total Sh 15,000 - 17,500 million? Can these be estimated more "precisely"? Can their growth over 1979/80 be estimated?

What is the makeup of assets by sub-class i.e. bayeye (5%), magendoist (20%), mafutamingsis (75%)? Can any estimate of assets per member of each sub-class be derived? e.g. are there about 100 mafutamingsis with average total assets of Sh 120 million (including Sh 20 - 30 million currency) each? This seems incredible but sectoral asset total does not and at "magendo exchange rate" Sh 120 million Uganda equals Sh 12 million Kenya or - say - £750,000 which is not so incredible.

Budget Studies: Who Lives How

Budget studies for non-magendo households (peasants by district and crop, minimum - medium - high wage earners, lower - middle - upper salary recipients, non-magendo businessmen) are urgently needed. It is not clear how they survive. With matoke at Sh 240 a stalk how does a minimum wage earners family survive? An urban informal sector one? Surely "hunting lines" is not open to all the 100-125,000 households of Metropolitan Kampala/Mengo? If the Makere Faculty estimate that an academic household requires Sh 200,000 a year (pre tax) for normal professional person standard of living (1970 achieved standard?) which is 4 to 5 times present average how do they and other salaried persons get by? Personal borrowing on a large scale seems

unlikely. Are assets (houses, land) passing from legal to magendo sectors on a large scale?

A similar study for bayeye would also be useful (and probably possible unlike any attempt for magendoists or mafutamingis). For them the dictum "One must earn magendo to pay magendo" presumably applies with full force. It would be valuable to know what real consumption levels this sub-class has attained e.g. above high wage earners? widely scattered?

Methodology, Method and Madness

The forgoing queries, suggestions, guidelines for data collection/estimation do not (except for the budget surveys) look much like a "respectable" statistical rehabilitation programme. But if, as argued, they relate to two thirds of Uganda's present monetary sector economy they are critical to political economic rehabilitation and, therefore, the first priority in statistical rehabilitation.

Appropriate methodologies require discussion. Mass enumeration - a la a normal census - is not practicable for many aspects. But large sample surveys on the household budget, typical magendo prices, proportions of goods sold "legal" and magendo (e.g. as part of budget surveys) are practicable. Certainly lone investigators cannot do the job - a team at statistician/economist level is needed.

With serious thought applied economists and statisticians can devise methodologies likely to product useable answers to most of this sections "priority questions". A caveat is in order - this is not the usual dry,

safe statistical exercise. Mafutamingis have money and power. Their conduct suggests they have little concern for human welfare. The night sounds of Kampala suggest that violent action against reckless statistical investigators could be bought. It would be very unfair for one who cannot do the statistical investigation/fieldwork and therefore is (perhaps) largely outside its risks not to sound this warning.

Without these data mistakes will continue in policies designed to break magendo. Some will remain mysteries. The currency exchange is one. There is reason to believe Sh 2,500 - 3,000 million magendo money was exchanged. How? If one assumes each mafutamingi - magendoist - bayeye household has an average of three members old enough to have changed notes then 175,000 - 200,000 households would have been needed to evade the exercise by "splitting the money". Some of that clearly did occur. But are there 175,000 - 200,000 greater magendo sector households? (That would be 7-8% of all households if Uganda's population is 13 million and average household size five but excluding peasants it would be more like 40-50% of all households.) If not were non-magendo households "bought in" to do the exchanging? Were bayeye able to change 2 or 3 times each (e.g. at a bank, a PO and a Bank of Uganda agency)? How much bribery of officials occurred and what volume of notes did it cover? An estimate of mm-m-b numbers might help explain the currency exchange debacle and thus avoid similar future errors.

In retrospect the sugar disaster is easy to explain. 40,000 tonnes of sugar were put on market. Normal consumption and household hoarding ("provident laying in of stocks") accounted for - say - 15,000. The cost at legal retail of 25,000 tonnes (25,000,000 kilos times Sh 15) would be Sh 375 million. If the Sh 3,000 - 5,000 million sectoral cash estimate is even half right, then what happened is clear. The mafutamingis engrossed the sugar easily, held it

for three to four months and then returned it to market at Sh 120 a kilo. (Sh 15 initial cost, say Sh 10 bayaye purchasing services, Sh 10 storage, Sh 25 bayaye/magendoist margins on resale leaves Sh 60 per kilo or Sh 1,500 million on 25,000 tonnes profit for the mafutamingis. True not all has been sold that dear but Sh 1,000 million profit does not seem unlikely.) The mafutamingis presumably laughed all the way to their cash boxes at this attempt to break them which they turned into a major source of surplus.

There is no intent here to make fun of the Government of Uganda. Both the failures cited were serious - on the face of it sensible - attempts to break magendo. The almost contemptuous ease with which the mafutamingis brushed aside the first and turned the second to their profit is chilling not hilarious - magendo is entrenched, powerful evil not a subject for flippant cracks.

One should take to heart the words of Mozambique's Finance Minister, Rui Baltazar Santos:

We must look our mistakes squarely in the face lest we fall into repeating them.

But to do that Uganda needs more data on magendo than it now has. That is a - I would say the greatest - challenge to Uganda's statisticians and applied economists.

III.

The Statistics of Rehabilitation

There are three main clusters of "statistics of rehabilitation" plus a special case:

Statistics of Magendo

Statistics of Standard/Available Data

Statistics of Reconstructing/Constructing Standard Series

and National Accounts/Gross Domestic Product. None is adequate by itself, all are critical. This paper has stressed the first because the nature of economic conventional wisdom and of statistical standard methodology creates grave dangers that it will be totally overlooked and because it is probably a logical starting point for building other statistical bridgeheads into the unknown.

The statistics of magendo - or a set of programme notes towards devising a statistical exercise - have been discussed in the preceding section. However, it may be useful to consider again their specific role in the statistics of liberation:

1. to describe and to provide a basis for analysis of the magendo operations, the magendo sector, the political economy of magendo;
2. to help in identifying sectoral weaknesses and pressure points e.g. the apparent lack of a major direct production base, the dependence on coffee smuggling for foreign exchange;
3. to provide data on changes in sectoral size and makeup and in particular the results (direct and indirect, intended and unforeseen, positive and negative) of government/public enterprise measures on magendo.

For example if the mafutamingsis are to have hold on consumer goods market broken by flooding it, the minimum value need to bleed their currency reserves and prevent engrossing, forestalling, re-grating needs to be

estimated. E.g. Sh 1000 million cif plus Sh 750 million tax plus Sh 250 million legal wholesaler/importer margin plus - for the sake of illustration only - a 25% devaluation (Sh 7.25 to Sh 9.67 to 11) would give legal wholesale total price of Sh 2,667 million which begins to be right order of magnitude. Sh 250 million c.f. gives Sh 667 million which, like sugar, would be gobbled up ending by strengthening magendo.

Similarly to break food/transport magendo requires knowledge of approximate tonnages by route, present "legal" and magendo fleets on them. And any exercise needs to be tested for results against magendo (not "controlled") retail price movements - nationally, for greater Kampala/Mengo/Entebbe, by district.

Statistics of Standard/Available Data

These include government accounts, money supply - credit - banking, legal exports - imports - balance of payments. Everything is relative; the initial data on some are none too well recorded, there are lags in compilation. But basically the Treasury, the Bank of Uganda, Customs, Commerce, Foreign Exchange Allocation are generating the basic data and compiling it. Improvement of presentation, classification, coordination and availability to users and enhancement of (statistical/applied economic) capacity to analyze are fairly straightforward tasks. They take time and effort and require more perspiration than inspiration, more tedious checking than blinding inspiration but they are important and can be done.

Statistics of Reconstruction/Construction

For these there is no ongoing basic data recording or estimation process now going on in even a minimally satisfactory way. For some, too, 1970 is no

guide. Uganda's pre 1971 statistical service was technically competent (more so than Tanzania's, perhaps less so than Kenya's) but not very imaginative in identifying and meeting user needs (marginally less so than Kenya's, very much less so than Tanzania's). Re-building 1970 is not good enough.

At least nine clusters of series can be identified as of priority importance:

1. Agricultural (and livestock and fishing and - less critically initially - forestry including charcoal) production (including subsistence), sales by district in physical and value terms;
2. Manufacturing (large, medium, small and artisanal including repairs) output by major commodity and commodity classes in physical and value terms, preferably by province. Also a rough sectoral (and major product) input/output analysis including imports, local goods, local services, labour, taxation, operating surplus, financial expenses, depreciation, maintenance, physical (fixed and working capital) and financial investment;
3. Transport statistics for passengers and goods with at least rough data not only of fleet but of numbers of passengers, passenger miles, tonnes of goods, tonne miles, fares (for people and goods). Some categorization among urban, local, long distance domestic and import/export/international travel is needed;
4. Prices - by commodity and location, where possible including importer, factory, wholesale as well as retail levels and with broader coverage than old line consumer price indices e.g. rents, transport fares, intermediate goods, construction materials;

5. Household budget studies (treated in magendo statistics section above);
6. Wages, salaries, fringe benefits (including estimates for small employer and domestic service) linked to overall, sectoral, district employment (wage and salary) estimates;
7. Income distribution estimates preferably categorized into: peasant, self employed non agricultural without permanent employees, businessman with one or more permanent employees, wage earner (up to say Sh 2,000/month). Geographically divided by province and urban/rural. While initially for money income these should be expanded to include "self consumed production" (subsistence).
8. Fixed capital formation by type of asset, economic sector, province (with greater Kampala-Mengo-Entebbe and Jinja identified separately). At a later stage estimates of non-cash investment should be included e.g. coffee trees;
9. Selected sources/uses balances e.g. Sectoral Cash Flow For Agriculture, Industry, Parastatals, Government, Banking (evidently the sectors overlap - the data are needed for different purposes with different reference frames); e.g. again imports - local production - export by main commodities, intermediate goods, consumer goods, construction materials, other capital goods.

These series need to be parallel to rather than integrated with the magendo ones. The latter should become a matter of historic record with the breaking of the sector and its collapse back into a "normal" parallel market: troublesome but secondary, a drain on the legal monetary economy but

quantitatively much smaller than that sector. There are very real problems - conceptually and practically in consolidation. For one thing the sector's "value added" is not a true contribution to but a deduction from the "Wealth of Nations" (in this case Uganda) so a consolidated Gross Domestic Product table while useful for certain purposes needs to be treated with extreme caution and magendo systematically held separate as a third (Illegal Monetary) broad segment not lumped with either subsistence or Legal Monetary.

National Accounts - A Special Case

National accounts are a special case for several reasons:

1. they are not - as is often the case in practice - limited to GDP tables, indeed GDP tables may not be their most important component;
2. there is no coherent theory of GDP accounting, agreement on what is being measured, nor workable standard methodology (the UN standard system is used in full by nobody; its "simplified" version for developing countries is a watered down version of the industrial economy model not a genuine "appropriate_ or "intermediate" technology;
3. complete national accounts for Uganda cannot now be compiled/estimated and - as noted above - would face major conceptual, interpretation problems because of the 45-50% magendo "share".

In respect to the first point several of the basic blocks for national accounts - including sectoral, sources/uses, income distribution, consumption - are included in the priority series. Without them any GDP

estimate is very shaky and limited in its direct applicability (as was the case in pre-1971 Uganda).

The second point requires a full paper - indeed conference - to consider in depth. Standard GDP tables have their uses. But their treatment of subsistence is totally unsatisfactory for most uses. If it is intended to measure command over real resources then subsistence production/income should be valued at monetary sector retail prices.

For that purpose a kilo of maize meal grown, pounded and used in a village near Fort Portal has the same value as a kilo bought in Kampala after commercial milling, transport, commercial markups (and magendo!) not ¹/₁₀ as much as standard GDP valuation tells us. Similarly "real" GDP is a misleading category. It means "in constant domestic prices". That tells us physical volume but, if external trade is significant, nothing much about command over real resources. E.g. if the price of coffee doubles Uganda is in a real sense better off and if the price of petroleum doubles it is really worse off. For "real" GDP in a true sense export money values should be deflated by import prices. If terms of trade worsen (as they have in most recent years - not 1976-77 - for Uganda) then this "real" figure will be below the "constant (domestic) price" as well as the "current price" GDP.

The third point has been treated earlier. It may be noted that a decline in current price GDP (and possibly constant price as well!) is a major target so long as constant price GDP outside magendo rises. Breaking magendo will not merely lower prices and redistribute income; it will wipe out meretricious real value added in the sector which contributes as much to the welfare of Uganda and Ugandans as did the salaries of the State Research Bureau (which also appeared in GDP).

If the programme broadly sketched above can be accomplished, Uganda will have

done more than create the data base for breaking magendo and for clawing back to 1970. It will have done more than recreate the statistical base of a decade ago. It will have gone forward. The programme would yield the most relevant and complete statistical base in Southern and Eastern Africa. That base would make economic management and planning (by enterprises as well as the state) much better informed and, potentially at least, more effective in attaining their political economic targets (whatever these are). The programme cannot be done overnight or in one year; there is no reason it could not be completed in five.

IV.

A Valediction

The tasks outlined are not easy. They look nearly impossible - even to this author as proponent. Nearly, not absolutely.

There is no freedom not to attempt them if one is serious about the role statistics can play in the rehabilitation of the political economy of Uganda. The first necessity - politically, socially, morally as much as economically, is to break magendo. Until there are better statistical descriptions, estimates, analyses the people and government of Uganda must wage that struggle in the dark. Not only does that make it harder to identify paths forward from dead end roads or routes to precipices without bridges, it also makes it much harder to determine how far one has come and in what direction. Statistics and statisticians can shed light - magendo like its founder Amin and all entrenched evil hates and fears the light.

No task once seriously attempted is likely to prove quite as difficult as a cold, critical survey before starting would suggest. Once a first stage is

accomplished it makes further stages manageable. As the Commonwealth Mission pointed out the collapse of the economy into magendo and the statistical system into chaos was sequential with each breakdown weakening what remained and laying the foundations (more realistically undermining the foundations) for the next collapse. On the rehabilitation campaign the reverse can be true - each advance, each rebuilt piece of data, each bridgehead against the unknown can lay the foundation for further advances in knowledge, additional series, new conquests for knowledge.

What can be done at once is likely to seem - and to be - a small step. That neither denigrates the importance of taking it nor of considering where to take it. As the Chinese proverb puts it "Even the longest journey begins with the first step". And, therefore, it is important for that first step to be in the right direction.

ANNEX

A. Currency Exchange Notes

(Sh U 000,000)

Category	Pre Conversion		Post Conversion					
	Expected	Probable Actual	Intended			Actual		
			Notes	Bank	Void	Notes	Bank	Void
Magendo ¹	1,500	3,000	500	500	250 to 500	2,700	300	-
Outside Uganda	1,500 to 1,750	500	250 ²	-	1,250 to 1,500	250	100	150
Ordinary Citizens & Business	1,600 to 1,850	1,350	1,350	500	-	1,150	200	-
Lost and Destroyed ³	250 to 500	250	-	-	250 to 500	-	-	250
Total	5,100	5,100	2,100	1,000 ⁴	2,000	4,100	600 ⁴	400

Notes: Very approximate. Expectations were, necessarily, vague; probable actuals remain so.

1. Probably Bayaye - 5% (150), Magendoist - 20% (600), Mafutamingi - 75% (2,250)
2. Presumably some smuggle back was anticipated despite border closure.
3. 5% (250) is very low under the circumstances. It raises a question whether illegally issued notes were in circulation or records of issue incomplete.
4. Compulsory deposits currency over Sh 5,000 per individual converting.

B. Matoke Price Buildup

(One stalk) (Sh U or T)

	<u>Uganda</u>			<u>Tanzania</u>
Peasant/Local Market ¹	45	45	45	30
Collector Margin ²	20	25	30	2½
Transport Margin ²	75	105	125	10
Wholesale Margin ²	20	50	60	2½
Retail Margin ²	20	25	40	5
Retail Price Capital City ¹	180	250	300	50

Notes:

1. Known prices - 3 different for Kampala retail probably represent drought impact as early March to mid April.
Local markets: Masaka, Fort Portal, Moshi
2. Rough estimates of margin breakdown. Rise in collector/wholesale/retail share assumed on basis currently drought scarcity of food as well as "transport drought" scarcity of urban food.

C. Coffee Smuggling

I - Volume (tonnes)

Peak Output Estimate (1969) ¹	250,000	
Peak Legal Exports (1972) ²		221,000
Probable Smuggling (1972)		20,000 ⁺
Basic Industry Capacity (1969/72)	245 - 250,000	
<hr/>		
Losses (1973/79)		
Overage	(20,000)	
Rooted Out/Overgrown	(20,000)	
Inadequate Inputs	(20,000)	
Gains (1973/79)		
New Maturities ³	10,000	
Total	50,000	
<hr/>		
Probable 1979/80 Production	200,000	
Legal Purchases/Exports ⁴	130 - 140,000	
Smuggled Estimate	60 - 70,000	
<hr/>		

Breakdown:

Robusta to Tanzania	2,500 - 5,000
to Kenya	50,000 - 55,000
Arabica to Kenya	7,500 - 10,000

Notes:

1. D. Belshaw in Commonwealth Team Report.
2. Bank of Uganda.
3. Some new, replanting through 1973.
4. CMB, Bank of Uganda.

II - Magendo Foreign Exchange From Coffee

(Kenya Connection Only)

· Robusta value per tonne ex-Kenya	Sh(K)	25 - 27,500
Paid to smuggler (60-67%)		15 - 20,000
"Cooperators" Margins (33-40%)		8 $\frac{1}{3}$ - 11,000
· Arabica value per tonne ex-Kenya	Sh(K)	30 - 35,000
Paid to smuggler (60-67%)		18 - 24,000
"Cooperators" Margins (33-40%)		9 - 14,000

(Sh 000,000) ¹	Uganda	Kenya	Uganda		
	Magendo Receipts	"Cooperator" Receipts	Legal	Export	Loss
Robusta	750 to 1,100	425 to 550	1,250	to	1,400
Arabica	150 to 225	67 $\frac{1}{2}$ to 140	225	to	300
Total	900 to 1,325	492 $\frac{1}{2}$ to 690	1,425	to	1,700

Notes

1. In Kenya Shillings. (Magendo rate for Uganda Sh 1:10 so receipts in Sh(K) worth up to Sh 9,000 - 13,250 in Sh(U). Legal rate Sh(U) = about 1.05 (Sh(K) so Uganda loss marginally lower in "official" Sh(U) terms-)

D. Gross Domestic Product

I. GDP Summary 1970 - 1979/80

1970 (1966 Prices) Sh 000,000

	<u>Official</u> ¹	<u>Adjusted</u>
Subsistence ²	2,187 (30%)	2,187 (29%)
Legal Monetary	5,091 (70%)	5,060 (68%)
Illegal	- -	250 (3%)
	<hr/> 7,278 (100%)	<hr/> 7,500 (100%) <hr/>

Illegal at 1970 Prices	Sh 300
a. Two Way Smuggling	Sh 50 to 75
b. Capital Flight	Sh 225 to 250

1979/80 (Early 1980 Prices)³ Sh 000,000

	<u>Total GDP</u>	<u>Legal Sectors Only</u>	<u>"Ex Magendo"</u> ⁴
Subsistence ²	19.25 (26%)	19.25 (52%)	19.25 (43%)
Legal Monetary	18.25 (24%)	18.25 (48%)	25.25 (57%)
Magendo	37.50 (50%)	- -	- -
Total	<hr/> 75.00 (100%)	<hr/> 37.50 (100%)	<hr/> 45.00 (100%) <hr/>

Notes:

1. 1972 Statistical Abstract; Ministries Finance, Planning and Economic Development - cited in Bikangaga Report, 1974.
2. Standard GDP valuation. Grossly understates real command over resources - especially basic food, housing.
3. Very rough estimates. To degree understate prices then subsistence and magendo understated relative to legal monetary.
4. Assumes magendo ended and actual services/goods of sector carried out legal monetary sector at its prices.

II - GDP 1979/80¹ (Sh 000,000,000 Early 1980 Prices)

1. Non - Monetary²

Food (Agriculture)	15.30
Charcoal, Poles (Forestry)	1.25
Construction/Dwellings	2.70
	<hr/>
Total	19.25
	<hr/>

2. Monetary

	<u>Legal</u>	<u>Magendo</u>
Export and Industrial Crops	3.50 ³	1.75 ⁴
Food Crops ⁵		
Farmer	1.50	-
Transport	-	2.20
Collection/Wholesale	-	1.00
Retail	.30	.10
Forestry/Fisheries ⁶	.50	.50
Wages and Salaries	3.00	-
Manufacturing ⁷	2.00	1.00
(Vehicle Repairs)	(.10)	(.30)
(Printing)	(.10)	(.10)
(Jaggery/Enguli)	(-)	(.50)
(Other)	(1.80)	(.10)
Domestic Manufacture Distribution ⁸		
Commerce/Transport	1.125	10.50
Import Distribution		
Legal ⁹	1.4	8.0
Smuggled ¹⁰	-	10.0
Construction ¹¹	0.25	1.0
Public Utilities ¹²	0.15	-
Housing ¹³	1.00	0.25
Passenger Transport ¹⁴	0.25	1.25
Miscellaneous Services ¹⁵	2.25	0.25
General Government (excluding wages/salaries)	1.00	-
Total	<hr/> 18.25	<hr/> 37.50
		<hr/>

"Ex Magendo"

Magendo Distribution, Transport
Production At "Legal" Prices¹⁶

7.50

Legal Monetary Sector "Ex Magendo"

25.25

Notes:

1. All estimates rough and preliminary.
2. 1978=14.0 Assumes 50% price increase 1978 to early 1980. Further assumes 10% decline food output, 1979/80 physical output other components equal to 1978.
3. Farmer 1.0 to 1.2 Tax 1.0 to 1.1 Processing/Transport/Commerce 0.8 Board Surpluses 0.5 to 0.7.
4. Basically Uganda cost 70,000 tonnes smuggled coffee. Sh 25,000/tonne. Perhaps 0.75 to 1.00 to farmer.
5. Retail purchases domestic food 6.0
 To Grower 1.5 (Treated as all legal)
 To Transport 3.0 (-1.0 input cost. Treated as all magendo)
 To Distribution 1.5 (-0.1 input. Collection/wholesale treated as magendo.
 Retail shops magendo/market women- legal.)
6. Rough estimate from ealier GDP series. Forestry dominantly charcoal, poles.
7. Includes repairs, artisanal production.
 Output Sh 5.75
 Less:

	Wages/Salaries	.50
	Imports	.75
	Local Purchases	.50
	Taxes	<u>1.00</u>
<u>(2.75)</u>		

"Value Added" 3.00
 as shown _____
8. Assumes bulk initial transport/wholesale legal (3.0 times 25% = 75)
 (Magendo .5 times 100% = .80)
 Retail level 25 to 30% Legal (1.25 times 30% = .375)
 Magendo (3.35 times 300% = 10.0)
 Assumes 1.25 repairs 70 to 75%/artisanal/etc. direct to consumer.
9. Total 5.25
 Petroleum (1.25) + 50% Other (2.0) Legal Transport and Wholesale at 30% = 1.0
 Balance magendo sold at 10.4 (4 times legal on average) less input cost 2.4 equals 8.0.
10. Smuggled goods about Sh 1.5
 Sales price about Sh 12.0 (8 times import price)
 Costs (Imports 1.5 plus "loss" Uganda
 export smuggling 0.5) 2.0
 Magendo "Value Added" 10.0
11. Sectoral Sales 2.25
 Wages and Salaries 0.3
 Imports 0.4 - 0.5
 Local Materials 0.2 - 0.3
1.0
 "Value" As
 Stated Here 1.25
12. Excludes private sector water trade.
13. Very rough. Existence magendo landlords known, prevalence unknown.

14. Railroad, UTC, Peoples Transport, Co-op Transport, passenger operations
"Legal" sector. Rest classed as magendo given 3 to 1 or more fare
differentials.
15. Very rough from 1978 and prior series GDP.
16. Food and Forestry 1.0 Manufacturing .5, Distribution (Manufacturing) 2.0,
Distribution (Legal Imports) 2.0, Construction 0.25, Other Services/Rents
0.25, Smuggled Exports 1.5 = 7.5.

III. Gross Domestic Product Use 1979/80 (Sh 000,000,000)

	<u>Subsistence</u>	<u>Legal Monetary</u>	<u>Magendo</u>	<u>Total</u>
Private Consumption	19.00	15.50	31.00	65.50
Public Consumption	-	6.00	-	6.00
Physical Investment ¹				
Enterprises/Persons	0.25	1.00	1.75	3.00
Public Sector	-	2.50	-	2.50
Capital Export ²	-	-	0.50	0.50
Total Uses	19.25	25.00	33.25	77.50
Physical Asset Transfers ³	-	- 2.00	+ 2.00	-
Total Adjusted	19.25	23.00	35.25	77.5
External Deficit	-	- 2.50	-	- 2.5
Monetary Lending ⁴	-	- 2.25	+ 2.25	-
Sector Income	19.25	18.25	37.50	75.0

Notes:

1. Buildings, Machinery and Equipment, Civil Engineering, Stocks of Goods-Inputs-Spares.
2. Illegal buildup of external assets.
3. Purchases by Magendo from Legal Monetary sector - land, buildings, vehicles.
4. Net by sector. Net flow basically Magendo to Government via purchases of stock, holding additional currency, bank deposits.

Selected Related Reading

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Note on Author

Dr. Green is a Professorial Fellow of the Institute of Development Studies at the University of Sussex. In 1965-66 he was a Research Fellow at the then East African Institute of Social and Economic Research, a member of the Makerere Economics Department and a consultant in the preparation of Work For Progress. Over 1966-74 he was Economic Advisor to the Tanzania Treasury. He is a member of the Advisory Group on Economic Matters of the World Council of Churches, a consultant to the economic secretariat of SWAPO, a member of the Southern Africa Development Coordination liaison committee, and a trustee of the International Center for Law in Development. Currently Professor Green is serving as a special consultant to the Uganda Ministry of Finance and to the Tanzania Ministry of Finance under the auspices of the Commonwealth Fund For Technical Cooperation. The analysis, views and recommendations of this paper are his personal responsibility and are not necessarily those of the Uganda Ministry of Finance, the Tanzania Ministry of Finance and/or the Commonwealth Secretariat.