

To: Vice Minister Solomao (CNP)  
Vice Minister Igreja-Cunha (Ch IMC SDA)  
Minister Magid Osman (Finance)  
PDP Working Party Chairman (Carillo)  
National Director Juma  
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copied UNICEF / World Bank

From: R. H. Green

## CENSUS / SOCIAL SURVEY

1. Because this Sample Census / Social Survey is the major exercise proposed for Statistics over 1990/91 (with analysis continuing into 1992) it is important to get it right. The basic data of most importance to users (Ministries - Party - Researchers) must be collected and in a form suitable for the intended uses.
2. Certain issues require further urgent attention:
  - A. Is the Survey intended to produce population estimates? At what level? For election use?
  - B. How is it proposed to draw samples from unknown universes? And more particularly how are district results to be aggregated Provincially and Nationally?

C. Why are there no questions on basic tools/agricultural inputs/household equipment? On access to health post? On agricultural production? On income? Why is the budget (expenditure) question so aggregated in categories and in a form suitable only for wage earners with virtually no other and especially no significant non-cash income? Are the durable listed a good choice? Radios, sewing machines, bicycles probably — but why cameras?

### Population

3. We know we do not know the population of Mozambique. UNFPA (from New York) thinks it does because it has projected from 1980 as if there had been no war!
4. Nationally we suppose that — including refugees displaced across borders — there are 16.5 to 17.5 million Mozambicans:
- |                                |                  |
|--------------------------------|------------------|
| a. Urban/Small Town/Peri Urban | 4.0              |
| b. Deslocados in Camps         | 2.0              |
| c. Known Afectados             | 3.0              |
| d. Known Sector Familiar       | 3.5 - 4.0        |
| e. Refugees                    | 1.0 - 1.5        |
| f. Other                       | <u>3.0 - 3.0</u> |
| Total                          | 16.5 - 17.5      |

OF the "Other" the estimates we have on war-drought/war famine-high infant-child-adult mortality suggest 10 million are dead - the direct and indirect martyrs of Pretoria's Bandidos. OF the rest some are still terrorised/enslaved by bandidos, some are wandering in the imperfectly secure districts, some may be "errors of estimation" & war may have reduced the birth rate.

5. Provincial and District data are even more approximate and - to the extent known - not consolidated into our national population tables. These project from 1980 on a 2.6% growth assumption. We know:
- i. cities grew faster
  - ii. deslocados/affectados moved
  - iii. many sector familial households moved to less insecure areas (eg to Beira corridor)
  - iv. people were displaced across borders as refugees in Malawi, Zimbabwe, Zambia, Tanzania, Swaziland, RSA
  - v. death rates rose and perhaps birth rates fell so population did not rise 2.6% a year (unless that estimate was too low and would have been 2.8 to 3% without war).

6. IF we want the least bad available population estimates we must collect them from City - Provincial - District Administration:

- i • Urban
- ii • Small Towns
- iii • Peri-Urban
- iv • Deslocados / Returnados
- v • Afectados
- vi • Sector Familiar
- vii • Rough Guess as to OTH People in District with whom Administration not in contact

Only i - ii - iii (perhaps) - iv - v can be roughly (+ or - 5%) accurate. vi will have up to + or - 15% error of estimation and vii still more lack of accuracy.

But these rough estimates will be better than the precisely wrong 1990 projections of 1980 if there had been no war UNFPA and we are using now.

7. IF Para 6 is done it is possible the Sample Survey could help improve estimates. How much is open to doubt. Both 1989 25 District Survey and common sense suggest category vii people are almost impossible to contact and

Category vi hard to estimate numerically without a full census even though they can be interviewed for survey.

8. Whether Para 6 will produce good enough data for 1991 electoral purposes is for the Party to decide. It will not produce normally accurate ones outside cities, most towns and a few districts (eg Mueda). Furtw with up to 25-30,000 returnados a month August 1990 estimates will - for some districts - be seriously lower than 1991 reality while if affectados clustered around eg Inhambane, Xai Xai, Quelimane feel able to move to home districts the balance between districts in those provinces could also sharply. But the Para 6 approach will produce much better/more useable data than any starting from the totally unreal 1990 projections from 1980 census.

### SAMPLE

9. Sample surveys collect data from samples. These are selected from the universe (total population) by methods designed to ensure the sample is random, that is has same characteristics as total population. This approach assumes one has a good idea of size

of whole universe (population). But as Paras 3 thru 8 have explained in Mozambique we do not know the approximate size of National, Provincial or -especially- District universes (populations). How is a random sample to be selected?

10. In practice reasonable random samples can be selected from universes of unknown sizes. 1989's 25 District Survey was an example. These can reveal significant data about the population. There are, however, two problems:
- a. one cannot readily or accurately estimate the population backwards from the sample (ie the Sample Survey cannot become a Sample Census);
  - b. one cannot aggregate individual district results on a population weighted basis because one does not know relative populations.
11. Whether the Para 6 approach would give adequate universe estimates is unclear. It would provide less bad ones than we have now!
12. The limits noted at Para 10 do not destroy the value of survey



For applied policy (eg SDA, Priority District Programme) purposes. But they do mean it cannot be a contribution to preparing for an electoral process.

Questions

13. A new Question 13A is needed on
- Tools - agricultural (eg hoes, ploughs, cutlasses) construction (eg axes, adzes, rickshaws, wheelbarrows) otw
  - Household Equipment - eg buckets, tins, pots/pans, beds or mats, tables, chairs, dresses, shirts, clothes
  - Basic Goods Supply - eg Grain Root crops Cooking Oil Salt Sugar Tea or Coffee

14. In Question 15 irrelevancies of "Mayvina Fotografia" should be deleted. But additions should be made:
- Rural - Cattle Sheep otw Livestock Goats Chicken
  - Planted Trees (eg cashew, citrus)
  - Carts
  - Urban - drinkable goods (other than tools at Question 13A) artisans use -

15. Some agricultural/artisinal data are needed. An agricultural samples survey expert's advice is needed on how to Frame them!

### Agriculture

Area Available To Household

Area Cultivated

- Grains (which)
- Root crops (which)
- Tree crops / Plantains (which)
- Cotton
- Other What
- Vegetables
- Mixed (what mix?)
- Groundnuts/Pulses/Legumes

Area Grazed

- What kind of livestock
- How many

Amounts Produced

- Each Crop/Animal  
(last year / last month)

Amounts Consumed By Household.

Amounts Sold

- To Whom
- How Much Received

Quantities and Areas will have to be in units the household - and the surveyor! - can understand. Local expertise needed! Results will not be very accurate but better than we have now!

- A parallel set of questions is needed for artisan/handicraft production.



16. Question 14 as posed is not useful.

- it does not break down expenditure enough
- it either relates only to cash expenditure or will create chaos on coverage and valuation of goods (eg food, shelter) produced and consumed by household.
- An expert with experience in such surveys in Africa including household self provisioning is needed to advise. Such people are on staffs of Zimbabwe and Botswana Offices of Statistics and could be secured for - say 3 to 6 weeks - to advise either by bilateral request or via Commonwealth Fund for Technical Cooperation.

17. Question 14 does not cover income.

We desperately need better data on levels and sources of low income household incomes. The main categories are:

A. Wage and Salary (Salaire) Income

B. Pensions

C. Remittances (especially but not only from RSA)

D. Informal/Familial  
(Urban) (Rural)

- Casual (Non Salaire) Wages (type - domestic servant, construction, porter, for small

artisan or commmucant, other)

- \* • Sales of Artisanal/Handicraft Products
- \* • Small Scale Commerce — market stalls, street vendors, pavement sellers, shops below size having salaried employees and company records
- \* • Small Scale Co-struction
- \* • Fishing
- \* • Wood and Charcoal
- \* • Transport ( Push Carts — Ox Carts — Single or 2 pickups/minis/taxis/lorries/busses)
- \* • Crops
- \* • Livestock
- Rent (there are households who rent rooms or canico dwellings — How many and how significant income is we don't know — It is significant for aged persons of fairly modest means in — eg — Dar es Salaam)

E. Household Self Provisioning (produced for own use)

- Food (by main category) including
  - Livestock
  - Fish
- Housing
- Other (eg Fuel)

(\* IF possible gross income, expenses in cash, net income in cash)

For this set of questions the expert

required at Para 16 (or one specialised on income side of Household Income and Expenditure surveys) will again be needed!! The data may not be very accurate but will advance our knowledge.

18. Certain General Data could be added fairly easily. eg

### Health

- How far is nearest posto/centre?  
Is it functioning?  
How many times did your household use it last year (or month)?
  - Matw/child Clinic
  - Immunisation
  - Consultation
  - OTW
- How far is nearest primary school?  
Is it functioning?  
How many children of your household (ages 6-12) attend it? How many do not?
- How far is nearest well or fountain?  
Does it work?  
Do you / your household use it?  
If not how do your household get water?  
How many hours a day does it take to get water? Who gets it? Does it cost money? How much?

- What fuel does your household use? How do you get it? How much a month does it cost (if bought)? For what quantity? If collected, how long does it take each week to collect fuel? Who does the collection (eg wife, girl, man, boy?)?
- How far is nearest store? Do they buy crops? Do traders ever come to your village? Where do you sell crops?
- What 10 products would you most wish to be able to get in shop or from trader?  
 eg soap                      grain  
    cooking oil                sugar  
    tomatoe paste            fish  
    tobacco/cigarettes      cloth  
    hoe/jembe                 needles  
    otw tools                 dry cell batteries

These are pretty simple questions which respondent will be able to answer quickly (unless he is he and she - wife - does wooding, watering and isn't there to tell him!)

Coverage/Timing

10 Capitals  
~~100 Districts~~

19. The Survey could be run in August (with known universes for sample selection) in August. But it would not be worth deploying major Mozambique effort and UNDP support for that even if added questions can be built into it in time. We need rural data even more than urban and we cannot realistically do more than one major statistical survey exercise every other year.

20. The Survey probably cannot be done in all districts. What might be possible is to:

- A. Run Population Rough Estimate (Para 6)
- B. Select -
  - All Provincial/National Capitals
  - All 40 Priority Districts
  - 45 of 90 OTW Districts (or 1/2 of All OTW Rural Districts if 10 Capitals include some districts)
- C. Revise questions in close consultation with -
  - All potential user Ministries
  - University
  - Interministerial Commission on SDA

securing services of experienced African agricultural and household budget study sample survey question and analysis experts (eg from Commonwealth Fund for Technical Cooperation, IFAD, UNICEF, perhaps Statistical Offices of Botswana and/or Zimbabwe.)

210 That exercise is likely to take up to 6 months (2 to 3 for Population Reestimate, 2 to agree on questions, 1 to 2 to redesign questionnaire. Then we need:

- a. to test questionnaire on say 1,000 urban and 1,000 rural households and revise as needed
- b. recruit/train surveyors
- c. mobilise Party and public support

which is at least 3 more months.

Even assuming agreement on this schedule very quickly the 9 months begin about 2 April and end 1 January 1991. I believe winter (rains) and harvest (people have no time to waste on peregrinating outsiders asking questions until the crops are in) would make May 1991 earliest feasible month after January?



I realise a proposal to delay is unwelcome. But it is important to do the job right and to get a return on our investment of Stats Office Personnel - Capacity - Transport - Finance and of external support. A May date (just after harvests) would also improve quality of agricultural question responses.

Ⓜ

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17-II-90  
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Distribution is to -

- a. Senior Mozambicans to whom I work
- b. agencies which asked me for advice

Unfortunately I received Draft Questionnaire 16<sup>30</sup> on 16-II-90 so have not had time to discuss this memo with Statistics nor UNDA.