To: Vice Minister Solomao (CMP)
   Vice Minister Igreja-Campos (CH IME SDA)
   Minister Magid Osman (Finance)
   PDP Working Party Chairman Carilloho
   National Director Juma
   National Director Statistics
   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 sample from unknown universes? And more particularly how are district results to be aggregated Provincially and Nationally?
6. 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 as good choice? Radios, sewing machines, bicycles probably — but why canvases?

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. Desloca dos/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
      3.0 - 3.0
   Total 16.5 - 17.5
Of the "other" the estimates we have on war-drought/war famine-
high infant - child - adult mortality suggest 100 million are dead - the
direct and indirect martyrs of Preloria'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" eg 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 proj-
ect 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 Town
   iii. Peri-Urban
   iv. Deslocados / Returnados
   v. Afectados
   vi. Sector Familiar
   vii. Rough guess as to other 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 overestimation and vii still more lack of accuracy.

But these rough estimates will be better than the precisely wrong 1990 projections of 1980 if true had been no war UWFPA 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
8. Whether Pwa 6 will produce good enough
data for 1991 electoral purposes is for
the Party to decide. It will not produ-
uce normally accurate ones outside
cities, most towns and a few dist-
tricts (e.g. Mueda). Further with up to
25-30,000 returnados a month, August
1990 estimates will - for some districts-
be seriously lower than 1991 reality.
while if affeetedados clustered around
e.g. Inhambane, Xai Xai, Quelimane feel
able to move to home districts the
balance between districts in those prov-
inces could also sharply. But the Pwa 6
approach will produce much better/more
useable data than any starting from
the totally unreal 1990 projections
From 1980 Census.

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 popu-
lation. This approach assumes
one has a good idea of size
of whole universe (population). But as
Paragraphs 3 through 8 have explained in
Mozambique we do not know the
approximate size of National, Prov-
incial or - especially - District uni-
verses (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. Thus we, however, two
problems:
a. One cannot readily or accurately
estimate the population back-
wards from the sample (i.e. 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 popu-
lations.

11. Whether the Para 6 approach would
give adequate universe estimates
is unclear. It would provide less
bad ones than the ones we have now!

12. The limits noted at Para 10 do
not destroy the value of survey
for applied policy (e.g. 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 (e.g. hoes, ploughs, cutlasses) construction (e.g. axes, adzes, pick-axes, wheelbarrows)

**Household Equipment**
- e.g. buckets, tins, pots/pans, beds or mats, tables, chairs, dresses, shirts, clothes

**Basic Goods Supply**
- e.g. grain, root crops, cooking oil, salt, sugar, tea or coffee

14. In Question 15 irrelevantly "Magvina Fotografia" should be deleted. But additions should be made:

**Rural**
- Cattle, sheep, Ovu Livestock
  - Goats, Chicken
  - Planted Trees (e.g. cashew, citrus
  - Carts

**Urban**
- Durable goods (other than tools at Question 13A) artisans use -
15. Some agricultural/artisanal data are needed. An agricultural sample survey expert's advice is needed on how to frame them!

**Agriculture**

**Areas Available To Household**

**Areas Cultivated**
- Grains (which)
- Root Crops (which)
- Tree Crops / Plantains (which)
- Cotton
- Other What

**Areas 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 (e.g., 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 sourced 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 (Salarie) Income
B. Pensions
C. Remittances (especially but not only from RSA)
D. Informal/Familial (Urban) (Rural)
- Casual (Non Salarie) Wages (type—domestic servant, construction, porter, for small
artisan or communcant, oth

* 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 Construction
* 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)
* Feed (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 export
required at Prva 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, e.g.

**Health**
- How far is nearest posto/centre?
  - Is it functioning?
  - How many times did your household use it last year (month)?
  - Maternity / Child Clinic
  - Immunisation
  - Consultation
  - Otsw

- 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 fontaine?
  - Does it work?
  - Do you / your household use it?
  - If not how does 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 trade?

eg soap grain
   cooking oil sugar
   tomato paste fish
   tobacco/cigarettes cloth
   hoe/jembe needles
   oto 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 wood Ing, watering and isn't there to tell him!)
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 Estimates (Para 6)

B. Select

- All Provincial/National Capitals
- All 40 Priority Districts
- 45 of Other 90 Districts (or 1/2 of All Other 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-
ion and analysis experts (e.g. from
Commonwealth Fund for Technical
Cooperation, IFAD, UNICEF, perhaps
Statistical Office of Botswana
and/or Zimbabwe.)

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
weather (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 2?
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 harvest) would also improve quality of agricultural question responses.

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17-III-90
Maputo

Distribution is to:
a. Senior Mozambicans to whom I work
b. agencies which asked me for advice
Unfortunately I received Draft Questionnaire 16.30 on 16-II-90 so have not had time to discuss this memo with Statistics nor UNDP.