wead Ba k. 1928,

INCOMPLETE DRAFT

5. Empowerment of Women and Population

"The demographic factor is central to racial, political, and economic questions in South Af rica 200 235.

Chimere-Dan, 1993

"It is a sad fact that one of the few profoundly non-racial institutions in South Africa is patriarchy." \hat{a} 200\235 Albie Sachs, 1992

The human rights of women and the female child are an inalienable, integral and indivisible part of universal human rights

UN World Conference on Human Rights, Vienna, June 1993

5

South Africa is unusual in that it has(d) a national goal, set in 1983 (88?), for its total population size,

by 2025(?). This was set at 80 million, and exceeds most views of a population size within the country \hat{a} 200 \hat{a} 231s

carrying capacity. WDR 1993 calculates that South Africaâ $\200\231s$ theoretical population s ize at stability will

be 103 million. However, it seems probable that redressing historic discrimination against women will

be much of the solution to an orderly and equitable transition to democracy and sustainabil ity.

Empowering women as soon as possible to reach at least parity with men is overdue in such a spects as $\frac{1}{2}$

equal access to land and farming, job creation for women, health and social security, and f or $girla^200^231s$

education to match that now received by boys. Empowerment of women is nothing more and noth ing

less than increasing women $\hat{200}231$ s control over their own lives. This includes increasing the choices open to

women, especially in land reform, and women $\hat{200}231$ s access to resources and credit.

5.1 South African Priorities for Empowerment of Women

The history of women $\hat{200}231s$ activism in South Africa gives much hope that their increase d participation

will bring fundamental benefit to South Africa in the future $200\231$?. Both dead and alive leaders -- Lilian

Ngoyi, Helen Joseph, Ruth First, Winnie Mandela, Mamphela Ramphele among many other -- show the

potential force South Africa has in its women. The first comprehensive statement on women $200\231s$

emancipation released by any political party or organization in South Africa was that of the ANC on 2

May 1990 (Bazilli 1991). It acknowledges women \hat{a} contribution to the political struggle which has

brought South Africa to the eve of change; it acknowledges the persistence of gender discrimination in

all spheres and calls for "Womenâ\200\231s right to democratic participation in all decisio n-making must be there

in principle and in practice". The statement "within apartheid ideology, African women have been

perceived simply as the breeders of future generations of labor" does not have a complement to it that

any ideology that perceives women first as reproducers and only second as equals will cause injustice to

women as great as apartheid has.

In South Africa, most black women remain subordinate in home and society, with severely lim

ited

autonomy (Chimere-Dan 1993). This is an unaceptable waste at the very least. Women transmit tradition

and spark innovation and change, precisely the values so much needed by RRP. South African priorities

for empowerment of women, environmental sustainability, and for population stabilization, a s found in

the literature (eg: Caldwell and Caldwell 1993, Beinart & Bundy 1987, Palmer and Parsons 1977,

Rimmer 1991, Packard 1990, Meli 1989, Bozzoli 1991, Bazilli 1991, Himmelstrand et al.1993, Hyden

et al. 1991, Walker 1991 and others, see litt.), include the five points outlined below whi ch constitute

an approach towards a definition of womens empowerment:

1. Womenâ $\200\231s$ Empowerment: "the ability to take control over their own lives" (Achebe et al. 1990),

parity in opportunities for development as soon as possible (Chimere-Dan 1993). Women \hat{a} \231s

opportunity for informed decision-making of decisions affecting themselves and their famili es is

essential. The means for fulfilling women \hat{a} 200\231s goals should be under female control. W omen are

agents for economic and environmental change and must be recognized for their role in managing

resources and families. Equal rights for women on wages, ownership, land etc., as widely so ught

in the South African literature may be fundamentally effective for the success of RRP. Replication of current discrimination against urban women must be avoided in RRP by specifi

measures for empowerment. As all women are different, it is their decision-making that is the

key, rather than any blanket principles. The most efective empowerment recognizes that some classes of women are more vulnerable than others (eg: household heads, disabled, unemployed, pregnant, aged).

2. Girls \hat{a} \200\231 Empowerment: Increase educational opportunities for girls, as well as increased and

meaningful employment opportunities for women is an integral part of their empowerment. As incomes, education and employment opportunities for women improve the quality of life, fert ility

levels decline. Education of girls, at least up to that now enjoyed by boys, is arguably the most cost-

effective investment to improve the human condition. Noon meals help greatly $\hat{a} \geq 0 \leq 31$. Community-level

literacy and tutoring campaigns can be highly effective. Women want truancy rates decreased (Gouws 1990). Many girls do not attend school because they have to gather fuelwood or water \cdot

fuelwood lots and well drilling or similar arrangements by RRP thus have high payoffs. RRP recognizes that women with even an elementary school education raise living standards in de veloping

countries. Such women are thus empowered to have fewer children, take better care of those they

have, and earn more when they take a job or market their products.

3. Protection of Womenâ\200\231s Rights: Human rights policies are needed to prohibit gende r

discrimination. Historic discrimination against women needs to be rectified, and some of th is

may imply strengthening the law. Financial, agricultural, and banking arrangements may be included. Universal access of women to primary health care, including maternal and child he alth

care through programs that are woman-centered and women-managed. In addition, empowerment of women will halt involuntary, coercive or discriminatory family planning programs.

4. Womenâ\200\231s Unmet Needs for Reproductive Health: Support for rural womenâ\200\231s d esires will

reduce teenage, schoolgirl, adolescent, accidental, premature, and extra-marital pregnancie
s; will

delay marriage and defer the birth of the first child, and will space their children. Black

women

want to reduce today (Kollstadt 1992). Apparently easy concealment

of contraception is desired. At least urban young women want to prevent premature childbirt

and marriage from interfering with their education and employment (Caldwell and Caldwell 1993b). National programs admit reduction in teen pregnancies but are silent on abortion (as of

1988). Meet women \hat{a} 200\231s unmet demand for family planning, family size, and spacing planning.

In spite of widespread access to free birth control, black urban women want smaller familie s.

An average of 42% - 52% of births are unwanted (1989 or 1992 data?). Practically all (79%) low income/high fertility respondents in HSRCâ\200\231s 1992 survey said South Africaâ\200\231s population was

growing too rapidly and 75% said some form of intervention is needed.

5. Womenâ $\200\231s$ Equality: Rectify todayâ $\200\231s$ situation in which women bear most of the financial burden

of raising children, while men have most of the decision-making powers on fertility. Preven tion

of sexually transmitted diseases, especially AIDS, empowers markedly. Patriarchy and aparth eid

interacted to compel black women to accept contraception under circumstances that reduced their

choices (Klugman 1990). Klugman (1991) investigates the assumption underlying the concept of overpopulation. Massive information campaigns (radio, musicals, "green" theater like tt protest drama that grew from Port Elizabeth) directed towards both women and men, particula rly

addressing the links between women \hat{a} 200\231s empowerment, redressing historic imbalances, a nd

economic impoverishment.

52 Empowerment and Reproductive Health

An important aspect of empowerment of women is control over their reproductive health, as n oted

above. This is especially important in the context of environmental sustainability. Womens control over

their own reproductive health is essential for sustainability. Denial of information, choic e and decision-

making cannot be democratic. Democratizing reproductive health is essential for empowerment of

high (42% to 52%, HSRC, 1992?) rate of unplanned pregnancies. Women are demanding contracep tive

information and technology: 20.8% of women do not have family planning needs met, and these also are

fundamental to rural development. As 38% of South Africaâ\200\231s population have yet to e nter reproductive

ages, population stability * also is urgent. lack of population stability harms women more than men.

Indeed, rapid population growth within subsistence economies exacerbates maternal health an d infant

mortality, and compounds environmental degradation (i.e. soil erosion, depletion of soil fe rtility,

deforestation, and indirect effects on watersheds, irrigation, etc.), thereby increasing the impact of human

activities on the local resource base.

Slowing the momentum of population growth in South Africa will not be an easy task. In Sout

Africa, roughly 50% (38%7?) of the population is under the age of sixteen. Age structures s o heavily

skewed toward the young, who have yet to live their reproductive years, generate tremendous demographic momentum, particularly as modern medicine lowers death rates (i.e., infant mort ality) in

South Africa.

In the transition towards environmental sustainability, population stabilization as soon as possible is

the prudent goal, rather s population growth	than jus	t reducing t	the growth	rate.	Limiting	South	Africaâ\200\231

is an essential enabling condition towards an acceptable standard of living. Of course, slowing the

population growth rate is an essential first step. Indeed, given the fact that South Africa fails to provide

"minimum living levels" for 50 percent of the population at today $\hat{a}\200\231s$ population scale, how will South

Africa be capable of improving living standards when its 39 million (1992) population more than doubles

to 69 million before 2025? Attaining population stability prohibits even a one percent rate of population

growth, as this permits a population to double every 70 years. Population stabilization requires families

to be limited to 2 children or so per family on average. South Africaâ\200\231s current four children per woman

makes an equitable income increase practically impossible.

South Africa has achieved an impressive urban "demographic transition" (although more in de clining

fertility than mortality). By 1991 there were 57,240 (later 60,200) "clinical family planning service

points" or twice as many locations as there were for health care. South Africa has lower fe rtility rates

and lower preferred family size than any other country in Sub-Saharan Africa (Freedman, 199 2). Unlike

health services, family planning is free. Mobile family planning teams visit factories, min es, and at

times even some rural villages. This is by far the most effective such program in Africa, a nd one of

the better-funded ones in the world. Although the average advice time at such clinics is on ly two minutes

(Kollstadt 1992), even this intensity exceeds anything ever seen in OECD countries. The extent of

malpractice and coercion, which is partly responsible for the negative view of family plann ing on the part $\frac{1}{2}$

of many South Africans needs to be further ascertained, and future programs monitored to pr event any

recurrence (Berger 1992, Sached 1985, Bernstein 1985). Use of the Depo-provera injectable contraceptive has politicized the issue which can only be resolved by women themselves in a society that

accords them equal status.

By 1991, official statistics on South African contraceptive usage ran as high as 86.5% in sophisticated

urban communities, to 50.5% in some rural communities. As these figures seem to exclude hom elands

and unmarried women (pregnant women? singles without children?), they overstate the success rates.

Annual expenditures by 1987 were US\$10 per eligible woman or \$40 million (80 million Rand) according

to the South Africa Official Yearbook 1991-1992. Caldwell and Caldwellâ $\200\231s$ main (1993 b) question is will

this qualified achievement survive democratization? For the current purposes (eg: RRP) the question

becomes, will current urban fertility declines be repeated in rural areas, as women become empowered

and living standards rise, or will urban fertility declines reverse in rural areas as ex-ho melanders resume

farming after generations away from the land?

9.3 Why is Black Fertility not Lower?

The two important demographic unanswered questions remain, according to recent leading demographic publications (Caldwell and Caldwell 1993). First, given the advanced industrial nature of

South African economy and the intense family planning program, why is black fertility no lower than it

A is? Although the South African decline started 10 or even 20 years earlier than in Botswa na or

Zimbabwe, fertility in those countries is roughly the same as in South Africa. The second ${\bf q}$ uestion is

why, in a society with a great deal of early, premarital sexuality, and a frequent presumpt ion that teenage

and nonmarital pregnancy is largely accidental and undesired, have fertility rates under 25 years of age

 $\hat{A} > 100$ not been reduced? (Caldwell and Caldwell 1993). Data on abandoned children? Is it low? R RPâ\200\231s

environmental group may want to address these two questions.

The urban occupational reason — "fired if pregnant" —— is probably the strongest reason for use of

contraception at present. High rates of population increase results precisely in the failur e of black

populations to achieve a fair share of participation in the benefits of economic developmen t, which is

literally "eaten up" by large families. Whites, with only half TFR, are able to accumulate surplus over

population increases. In South Africa \hat{a} 200\231s deeply divided society, community and political resistance is high

to a program imposed by the minority population with a clear political agenda. However, eve n steeply

declining black fertility would make little difference to the country $\hat{a}\200\231s$ racial proportions over the critical

near to medium term. Political leaders on all sides are probably already convinced that smaller families

and slower rates of increase would benefit the black population.

A general political consensus regarding the urgency of stabilizing the population is probably a

necessary condition (Pelser et al.1992), and the sooner population is discussed and debated the sooner

such political consensus may be reached. The worst case would be to defer discussion of the population

issue until some later time. Chimere-Dan (1993) concludes that a national post-apartheid population

policy in a future nonracist and democratic society would raise wider issues concerning rationales,

organization and strategies for the delivery of family planning in South Africa. Failure to address such

wider issues could guarantee failure of any policy. Family planning must be part of reprodu ctive health

services for success.

 $54\ \mbox{Over-reliance}$ on a Demographic Transition \mbox{oD}

-

What RRP seems to want is a quick completion of the demographic transition in rural areas.

urban demographic transition in South Africa is progressing, but it is very atypical. It do es not seem to

be the "normal" income adequacy plus education level demographic transition, for the occupational

reasons noted above. Therefore, the urban track record is most unlikely to be a reliable gu ide for rural

areas. Empirical knowledge of key demographic determinants for the black 80% of South Afric aâ $\200\231s$

population is very poor. Sadieâ $\200\231s$ (1988) calculations suggest total black fertility rates exceeding 5 children

per woman for 1985 to 1990. Urban fertility rates have fallen gradually ***% from about 196 $\,$ 0 and

more steeply from the early $1970 \hat{a} 200 \hat{s}$ (Mostert et al 1991) because contraception and s terilization is used

for occupational reasons. This means employers require contraceptive use before hiring (Kollstadt 1992),

and may fire the employee for pregnancy. (Presumably this will no longer be politically acc eptable???)

Job-loss was jeopardized a womanâ $\200\231$ s right to stay in the urban area instead of returning compulsorily to

a homeland. In addition, live-in domestics had to send any children back to a homeland with unacceptably high mortality rates. Caldwell and Caldwell (1993b) suggest that urban program results

have reached a plateau. This means that South Africaâ $\200\231s$ urban demographic transition has not been the

 $\alpha\200\234$ normal $\alpha\200\235$ education and income one experienced elsewhere. This puts into dou bt the chances of a similar

transition in rural areas. Although unrelated to RRP, it also casts doubt that the urban ${\sf tr}$ ansition will

persist in urban areas when apartheid and related policies cease.

Black rural women want 20% more children than do black urban women (Mostert 1990). There is a clear urban-rural difference in implied demand for contraception. Lotter (1975) found 5.7 living

children per urban woman, and 6.1 for rural women. Rural fertility rates may not be falling . Rural areas

have few fixed clinics; users rely on irregular mobile services; a full 80% of black women use a monthly

pill or injection both of which require highly regular, steady supplies and precisely timed use which do

not yet pertain in rural areas. Because a relatively large proportion of contraceptive use is for spacing

rather than for limiting numbers of births, users are likely to be less scrupulous in contraceptive practice,

especially problematic with the methods used (Freedman 1992). Demographic transition theory is unable

to predict the speed of fertility declines. The reasons for urban fertxllty declines do not pertain in rural

areas, which has lower and briefer educational standards, earlier marriage, and little or n \circ occupational

reasons for family planning. Are rural infant mortality and malnutrition better or worse th an in cities??

Prudence dictates that not too much reliance be put on an expectation of an automatic demog raphic

transition to solve the rural predicament of excessive people/land ratios (Roth 199**). On the contrary,

as mentioned above, liberation from overcrowded homelands to small farming communities will increase

the desire for larger families. In addition, families value numbers for claiming rights to communal or

redistributed lands. The AIDS virus and associated diseases (eg: TB) will exacerbate the ch allenge on

small farmers. Farm productivity will decline, labor will become scarcer, delays, accidents and

breakdowns will increase: output will suffer. Loan/credit defaulters will increase as money is needed for

health costs. AIDS seems more likely to hasten land abandonment as farms are liquidated to pay debts

and medical bills, rather than leading to intensification. These trends would swamp the ons et of any demographic transition.

acmographic cranbicion.

The demographic transition has an enormous way to go from a fertility rate of over 5 to replacement

levels of 2.1. South African demographer Charles Simkins (1993) concludes that nothing would be more

useful for South African development than a rapid drop in fertility. For the demographic ${\sf tr}$ ansition to

help the RRP, empowerment of women is probably an essential precondition -- improved income s, health,

educational levels of the bottom 78% have to rise. That means direct investment in empowerm ent will

be necessary, rather than indirect or future or trickle down hopes. While acceleration of the demographic

transition certainly should be a goal, it is imprudent to rely too heavily on its spontaneo us rural

occurrence.

Although it would be wishful thinking to believe in an automatic rural demographic transiti on, the

transition from high birth and death rates to low birth and death rates is exactly as desir able at the

transition from low to high life expectancy. For example, B = D at 40/1000/year imply, at equilibrium,

a life expectancy of 1000/40 = 25 years. After transition B = D of 15/100 = 67 years. Just

as-low

throughput means greater durability for a given stock of goods, so low throughput maintenan ce of a given $\frac{1}{2}$

population means longer average lifetime.

5.5 Immigration and Refugees

How probable is the risk that social spending on RRP and health, education, water supply, infrastructure will attract large numbers of immigrants? A recent evaluation of a labor intensive road

project some 1000 kms from Mozambique revealed that almost 100% were male Mozambicans. Although

data on illegal immigrants are not available, guesstimates suggest there are 6 million refu gees already in

the country. RRPâ $\200\231s$ environmental group may want to expand on this theme: From Surro unding countries

Zimbabwe, Malawi? Migrant labor e.g., Lesotho; contract miners; Returning exiles?; Refugees eg from

Mozambique and other wars?

The other migration question RRP \hat{a} \200\231s Environmental Group may want to address is that of circular

migration from neighboring countries such as Swaziland and Lesotho. Over half of Lesotho me n work

in South Africa. Many Swazi men also work in South Africa. But the total fertility rates in those two

countries are substantially higher than in South Africa. Although such people return home m onthly or

annually and may eventually retire in their country of birth, they are contributing to the population

pressures of South Africa.

Figure 5:

South African Priorities to Approach Environmental Sustainability

00

- . Empowerment of women to accelerate the transition towards population stability in rural a s well as urban communities.
- 2. Increasing governmental and NGO assistance for renewable energy sources.

W

- . Promoting human capital formation, with a particular emphasis upon improving education, t raining and employment creation for girls and young women.
- 4. Supporting technologies which provide increased employment opportunities for unenfployed and underemployed individuals in rural areas. Training on-the-job, apprenticeships, tutoring
- 5. Provision of improved health care for mothers, infants and children, social safety nets for the rural poor, and targeted assistance to low-income groups.
- 6. Providing increased support for conservation and management of natural resources such as forests, croplands and water.

Figure 6:

International Needs to Approach Environmental Sustainability

For completeness, at the international level, environmental sustainability needs:

- 1. Focusing upon direct assistance to the poor, rather than expecting general economic development efforts to alleviate poverty.
- 2. The concept of sufficiency, rather than overconsumption.
- 3. Internalizing environmental costs in energy prices and accelerating the transition to re newable energy sources.
- 4. Internalizing to the manufacturer or municipality the costs of disposal of toxic and non -toxic (eg: sewage) wastes. Halting exports of such wastes to South Africa. Such measures

provide incentives to minimize toxic waste generation where it is produced.

- 5. Hastening technology transfers to rural areas, such that they may leapfrog environmental ly-damaging stages of rural economic evolution.
- 6. Broadening conventional cost-benefit analysis to internalize environmental costs.
- 7. Increasing grants for rural areas to reach global environmental standards. World Bankâ $200\231s$ eg: Global Environmental Facility.
- 8. Supporting the maintenance of biophysical infrastructures upon which all economic activi

ty is built, and financing environmental investments as extended infrastructure investments.

6. Empowerment of Women in RRP

Presumably the many means to increase income (Y) have been ranked by RRP on a least cost sequence. But income and population should be also treated independently, and there is no reason not

to recognize two-way causation, with both Y and P capable of autonomous change. It is certa in that of

the many means to decrease population, the top options are more cost effective than latter options to

increase income. This is very important because subsistence -- that state above death but b elow capital

accumulation -- means maintaining all physiological processes including reproduction, funct ioning at full capacity.

Democratizing access to family planning is essential to approaching environmental sustainab ility. At

the moment, the upper classes have the information and resources to plan their families, wh ich are largely

denied to the lower classes. As a result, this unethical situation has led to a near Europe an-type

population growth rate (TFR 1.9 for South African whites, ie: nearing replacement level), w hereas Black

TFR exceeds 4.6. The implications are inescapable: white population remains constant while the

black population doubles within one generation. The typical upper class family with a reproduction

ratio of one, and the lower class family with a reproduction ratio of two, will thus double and quadruple

their numbers respectively over one generation (c. 25 years). Far from limiting anyone $\hat{200}$ \231s freedom,

democratization means extending to blacks the same options currently enjoyed by whites of \boldsymbol{l} imiting and

spacing their progeny.

South African society is strongly bimodal. An upper class combines property ownership and c ontrols

its fertility leading to high per capita incomes. At the other extreme is a very large lowe r class that

combines labor income with largely uncontrolled fertility. For the RRP this class will be \boldsymbol{u} nfortunately

stable, since there is little chance of capital accumulation out of a labor income if ferti lity is not

controlled. Democratizing access to family planning includes addressing the causes of differential

fertility. Differential fertility is likely a response to differential mortality: maternal mortality is 22 times

higher for blacks than whites, infant mortality seven times higher, and life expectancy 10 years lower for

blacks than whites. Democratization includes meeting unmet demand for family planning which is $\hat{A} \div .30\%$

for blacks and zero for whites.

RRP seems to spend much of its attention to freeing de-skilled laborers and converting them into

small farmers. Even with the many safeguards envisaged to prevent land consolidation by lat ifundistas

from bankrupt or abandoned farms, it seems prudent to admit the possibility that many small farms will

fail early on. This is made more likely because new farmers will want larger families -- more hands not

less -- at the very time when the decrease in fertility is essential. If highly capitalized , well-informed

whites with generations of farming experience and low population growth rates have already depleted

13% of farmland by overstocking, inept plowing, and salination of irrigated lands (**** 199 3), the

challenges for RRP black farmers -- women and men -- must be minimized to the fullest exten t possible.

Empowerment of women, environmental sustainability, reproductive health, training and renew able

energy systems are therefore essential.

It would be a tragedy if current urban discrimination against women became replicated in RR ${\tt P.\ A}$

"new" farmer is one who did not grow up on a farm and who will lack traditional knowledge t hat "old" $\,$

farmers take for granted. This tendency is exacerbated because, in addition to being new farmers, they

will essentially be immigrants or refugees as soon as they are liberated from homelands. The strong

tendency for immigrants and refugees to boost their fertility as soon as they arrive in the ir refuge or new

site is well documented. This means that effective components to achieve reproductive healt $h\ \text{--}$ safe

motherhood, lower child mortality, girls \hat{a} 200\231 and women \hat{a} \200\231s education, social security, reliable tenure,

contraceptive access and information \hat{a} 200\224 are essential from the earliest stages of RR p

Major provision for land laborers seems inevitable. Women are better at many forms of labor than

men, such as collecting tree seeds, tending saplings, cooking and water management. Given that 50%

of South African society is now unemployed, encouraging land laborers seems a major opportunity to

help reverse the need for more familial hands by increased fertility. However, unless the s pecial efforts

amplified in this paper are provided for, those land laborers will remain at subsistence, n ot perishing but

not accumulating, and may also have high fertility. There is little incentive to control fe rtility if there

is little chance of moving beyond subsistence.

The operational significance to rise above subsistence is very clear. All rural restructuri ng from

homeland to agriculture must be accompanied by empowerment of women including effective health,

especially reproductive health services. This is arguably more important than acquiring agricultural skills.

As many family beneficiaries of RRP will be illiterate, this democratization of contracepti on needs to be

made a priority. The means of choosing to limit reproduction include the relatively cheap a $\operatorname{\mathsf{nd}}$ simple

information and access to contraceptive devices. These will be ineffective in all societies unless

accompanied by the more difficult attainment of a cultural level of self-discipline and und erstanding

sufficient to motivate their effective use. All this must be placed within the broader cont ext of women-

centered reproductive health services.

Although the case for small farmers -- equal opportunities for men and women -- with reliab le tenure

is generally compelling as the focus for RRP, it may not always be the first step. The poss ibility seems

to be admitted (see: TOR RRP "Converting Group Title to Individual Title and vice versa") that

providing de-skilled homelanders with the necessary agricultural skills will take time, especially for high-

value crops. Of course, traditional maize production will need less initial training; export crops much

longer training will be essential. But even with maize, pest control will be important. Alt hough South

Africaâ $\200\231$ s plant protection scientists lead the world in maize protection by integrat ed pest management

(New Scientist 1993), it will be important to generalize lab results, prefer low-tech over esoteric biocides,

and get the message out to the farmers.

Major effort is needed to identify homelanders or RRP candidates who still have ideas or \exp

about rural cooperatives or some forms of communal land tenure, and build on them to the fullest extent

possible. As working and single mothers, often as household heads, are more a norm than an aberration,

this has major implications in program implementation and project design. Possibly an inter im step

towards small farmers can in certain cases be multi-family communal farms with the extra ${\tt ro}$ les as

training centers and farmer selection. Possibly the rural cooperative itself should be divided up at the

rate in which people become trained and selected to enter the propertied class. Land rights should be

accorded equally to men and women.

To be as explicit as possible, the other end of the trends should also be admitted. While the lower

classes get more children, the upper classes will shrink. Following the "swart gevaar \hat{a} \200 \235 (black peril, e.g.,

Brown 1987) scare, the 1967 "Babies for Botha" campaign appealed to whites to breed faster provoked

both a black and a white backlash, for different reasons. White TFR at 1.9 is now below rep lacement

rate, compared with 4.6 for blacks. The rich must be expected to get richer and numerically smaller.

The implication of this trend, which can be quantified, should be thought through by RRPâ 200231s

environmental group, and any opportunities recognized. On the other hand, there is no risk that reduction

in black population growth rates will materially reverse blacks $\hat{a} \geq 00 \geq 31$ current numerical dominance. Black

population rates will certainly make it unnecessarily difficult for their wages to increase in the face of

such an "unlimited" labor supply. Progressive empowerment has already radicalized to the ex tremes on

both black and white sides. Therefore appropriate attention to poor whites may reduce polar ization.

By definition, reproductive freedom is incompatible with population control. ParaphrasingJ. S. Mill,

one of the greatest champions of liberty who ever lived: First: to produce a child if that child does not

have at least the ordmary chances of a decent existence is a crime against that child. Seco nd, state aws

which forbid marriage unless the couple can show they have the means of supporting a family are

legitimate powers of the state, and are not violations of liberty. Third, such laws prevent injury to

society. In other words, it is not an infringement of individual liberty to prevent offspring being borne

into lives of "wretchedness" nor where they harm third parties or society in general.

6.1 The Argument for the Empowerment of Women in RRP

It is important to emphasize that blacks are poor in South Africa NOT solely because they have large

families, nor are smaller families the only solution. But the problem is so grave that all or most non-

coercive incentives probably are necessary to improve the quality of life for most South Af ricans in any

acceptable time frame. The argument for empowerment of women, particularly for democratizat ion of

their own reproductive health includes:

- 1. Reduces the burden of educating the masses which is an essential pre-condition for techn ology
- transfer to de-skilled people. Without such measures the proportion of illiterates will inc rease.
- 2. Increases the savings rate by lowering the dependency ratio; improves loan/mortgage reti rements;

accelerates rising from subsistence to the middle class (ie: some capital accumulation).

- 3. Facilitates sustainable agriculture, which is not feasible where a surplus farm populati on depresses wages.
- $4.\ \mbox{RRP}$ should calculate the extent to which one marginal dollar spent on birth control may be more

cost-effective in RRP \hat{a} 200\231s goal of raising per capita income, than a dollar spent on c onventional development

projects. Is there an ethical tradeoff to be faced by RRP: many people at low resource use

per person,
or fewer people at higher resource use per capita?

Over half (52%) of women interviewed recently (1989, HSRC) said their last pregnancy was unintentional, and 42% recorded their last pregnancy as unwanted. Satisfying the expressed wish of

women to space or limit future births averts large numbers of maternal deaths and infant de aths.

Lowering these two death rates removes an incentive for large families. Safe motherhood ben efits are

available at low costs \hat{a} 200\224 much lower than practically all other investments needed to approach

environmental sustainability.

Abortion is an abomination to many, and this should be realized. However, it may often be the lesser

of two evils if the alternative is infanticide, abandoned babies, and unwanted children. In addition, unsafe

and illegal abortion -- conservatively estimated at 100,000 pa (Bernstein 1985) -- kills la rge numbers of

mothers. As a back-up to complement contraception, safe and legal abortion is a health matter (WDR

1993). The right to safe motherhood includes the possibility of safe abortion. African mate rnal mortality

rates are the highest in the world (over 600 deaths per 100,000 live births). In 1975, perh aps to reassure

the churches, an even harsher abortion law was passed in South Africa than the previous one , with

conditions so difficult to meet that in 1980 there were only 464 legal abortions in the who le country, of

6.2 AIDS

Africa has more than half the world \hat{a} 200\231s AIDS victims. South Africa has a significant and rising

proportion (***** 1993)., RRPâ $\200\231s$ Environmental Group may want to address the extent to which AIDS

stops people at the peak of their working career, drains agricultural labor, and increases sick time off,

health insurance. AIDS also diverts money for investment and savings into health care and f unerals.

AIDS may retard cash crop production hence reduce household incomes. Death of head-of-house hold

forces remaining family members to reduce their agriculture. Children may be taken out of s chool to

replace lost farm labor.

6.3 ANC Economic Manifesto on Population

Chimere-Dan (1993), the source of this comment, notes a strong tendency within ANC leadersh ip

to narrow the concept of population policy to birth control, a cautious integrationist approach.

Empowerment, which includes control of women over their own lives, especially reproductive choice,

is the overarching concept embracing population. Although not specifically mentioned in ANC \hat{a} 00\231s July

1991 Economic Manifesto, there are three areas with implications for population policy. Family

planning is subsumed under integrated social and economic programs; gender oppression; and the material

base of gender oppression, especially women \hat{a} 00\231s unpaid labor (Chimere-Dan 1993). To the extent RRP

empowers women and democratizes reproductive health, environmental sustainability will be \boldsymbol{v} astly more

likely.

The new constitution offers the possibility of new policy for the empowerment of women. The constitution could state that decisions about reproduction lie with women; the state could assume the

dution of	odugation	and the	provision	of a	oruj gog	agarding	+ o Doo	c (1991)	In April	1002
ducies of	education	and the	PIOVISION	OI S	ervices,	according	to kee	5 (1991).	III APIII	1992,

representatives of more than 60 women $200\231$ s organizations formed the National Women $200\231$ s Coalition, a

response to the slowness in progress in negotiations. The coalition includes white conserva tives as well

as members of the ANC Women \hat{a} 200\231s League and though shaky, remains intact (Vollenweider 1993). It

proposes to ask women with grass-roots surveys what they want in a post-Apartheid South Africa and

to produce from their answers a "Womenâ\200\231s Charter" to be incorporated into the count riesâ\200\231 new

constitution. If, as Rees (1991) suggests, the problems with present contraceptive policy a re poor

education, poor knowledge of contraceptives by women and men, poor use and availability of contraception, and the abuse of contraceptives by health workers and the state, education a nd the

provision of services can be the main focus of state responsibility. Women $\hat{a}\200\231s$ right to democratic

participation in all decisions will ensure the principle that it is a women $a \geq 00 \leq 31$ s responsibility to control her

own fertility. It is she who must make sense of environmental sustainability and choose acc ordingly.

6.4 Counter Arguments: Over-reliance on a Boserup Transition X

It will be important for RRP \hat{a} \200\231s Environmental Group to examine the likelihood of a B oerup transition.

Some, possibly the minority, African "Futures" scenarios point out the stimulus value of higher

population densities. Ester Boserup and successors have observed relationships between high er population

densities and agricultural intensification. The Boserup hypothesis of an autonomous adjustment through

intensification and higher value crops, to population growth has not been proven in recent Poverty/Population/Nexus work in Africa in the Bank. Some Bank staff (eg: Christoffersen and Nekby)

used to suspect it had been disproved at least under the least favorable farming conditions . It is

undeniable that some societies intensify rural production when land has become scarce and p opulation

densities are becoming high. But according to Roth (199*??) population/land ratios will be excessive if

all current homelanders able and wanting land get it. Second, Boserupâ $\200\231s$ transition theory is observed

over several decades. Tiffenâ $\200\231s$ (1992) Machachos Kenya study showed intensification over a 50 year

period. Some Boserup-type cases show that the environment has to be severely degraded befor e the

intensification starts. It will be important to evaluate such scenarios before relying too much on Boserup

optimism for the case of South Africa.

Boserupâ\200\231s response theory, a variant of "challenge and responseâ\200\235 has, on oc casion, been observable.

But that does not mean that it is a reliable basis for an overt policy. Response is difficu lt enough right

now without extra challenges. Maximizing opportunities should be RRPâ $\200\231s$ goal rather than challenges.

Countries with high fertility rates are long on challenge and usually short on response. The challenge

of nearly 3% rural population increase combined with land scarcity and land degradation -- before RRP

even begins -- is too great a challenge, and the risks are too high to rely on it for polic y. The counter

theory is much more widespread in practice and seems the more likely in rural South Africa, namely

overpopulation and land degradation leads to abandonment of farms and swelling rural unempl oyment or

urban slums. This is plausible in South Africa as the lands are intrinsically fragile. If f arms do

eventually become depopulated, the remaining people could either intensify as under the Bos erup theory,

or consolidate land which will have become abundant once again. Consolidation seems the more likely,

but the risks are too great even to admit.

Assisting homelanders to become farmers under the RRP, even over a generous schedule, may

degrade the resource base before Boserup signals kick in. In view of the extreme scarcity of reasonable $\frac{1}{2}$

farmland in South Africa, and its relative fragility, it would be imprudent to rely on Bose rup transitions.

Clearly RRP wants to prevent land degradation and farm abandonment. As land is already scar ce for the

numbers needing it, and as capital will be scarce even to maintain current land quality, it will be

especially important for RRP to prevent further degradation beyond the 11 million has (13%! of total

farmland) already damaged. In this case prevention is not only cheaper than cure, land rest oration may

be impossible in large areas as bedrock is already exposed because of widespread land abuse . The

prudent course would be to democratize family planning to the homelanders preferably before or at the

latest concurrent with RRP. The other Boserup-type benefit of higher populations, making electric grids,

transport networks and industrial and commercial markets feasible, is most because most of these exist

already. If they donâ $\200\231t$ yet exist in the overpopulated homelands, they are less like ly to be brought

forward by the much lower rural population densities envisaged under the RRP. Certainly RRP should

foster agricultural markets as well as intensification. Land is far too scarce for extensive land use. (See

Section 3.2.)

 $RRP\hat{a}\200\231s$ Environmental Group also may want to assess why the densely populated homelan ds failed

to conform to Boserupâ\200\231s hypothesis. Many, if not most, homelands are on good to very reasonable

agricultural soils, and relatively well watered (e.g., Ciskei, Transkei, Vanda, most of Nat al, and

elsewhere). If the Boserup transition has not yet materialized on such relatively promising sites on which

populations doubled or more, what are the conclusions for RRP?

In economies little advanced over subsistence all over the world, home garden plots are oft en very

helpful to the family. InIndonesia, the best example, a small agroforestry plot supplies fr uits, nuts, roots

and tubers. A few ducks are raised on the small house pond downstream from the septic leach field.

Some home gardens produce enough green manure, husks and peelings to support one pig to rec vale

residues. In slightly more sophisticated systems, all the household cooking energy is derived from a

home-built methane or biogas digester. Pond fish are the main source of protein. Such minut e home

gardens normally cannot support all the family $\hat{a} = 0 \cdot 231$ s food needs, but are exceptionally useful supplements to

a patch of rice, maize or cassava, depending on what country.

In the homelands, there seem to be few, if any, such resilient and sustainable systems. Instead, cattle

seem to be the main form of agriculture. RRP may want to explore the implications of cattle \cdot Home

gardens are highly productive at low levels all year, and can never run down the system, no matter how

neglected. On the other hand, cattle always tend to degrade their resource base unless they are

scrupulously managed. In South Africa, it is the low labor requirement of poorly managed cattle which

is one of cattle \hat{a} 200\231s main attractions. The tendency to overstock is often irresistible. Land degradation

ensues and will often become irreversible throughout much of South Africaâ\200\231s dry and

T Biodiversity and Conservation Units

7.1 Biodiversity

Biodiversity conservation is the inverse of the expropriation of the wildlife niche by huma ns.

Draconian policies depopulating the countryside and a harsh climate have resulted in South Africa having

a large portion of national territory in some form of conservation status. The tradeoff is between

empowerment of women and a transition towards environmental sustainability on the one hand, versus

increasing the appropriation of the natural environment to support ever larger numbers of h umans at a

low standard of living on the other. It is unlikely and would be vastly uneconomic for Sout h \mbox{Africa} to

convert all wildlands to human use. Even converting ALL of South Africaâ $\200\231s$ National Parks to rural

development would only buy a year or soa^200^231s delay until demographic pressures built u p once more, but

with the irreversible loss of possibly South Africa \hat{a} 200\231s main attraction for local and foreign visitors.

South Africa would be a truly impoverished country with no wildlands at all.

The question becomes how much would South Africa prefer to conserve? Certainly all conservation

areas that already "pay their way" in a crude economic sense, by ecotourism or whatever. In other words

those tracts that earn more in an immediate sense as they are, rather than what they would be expected

to earn if appropriated for human use. = The extremes of this tack are urban zoos specializ ing in

charismatic megafauna. Such zoos can attract many fee-paying citizens, but have almost trivial

environmental value. The exception is captive breeding for evential re-release into depopul ated wildlands.

But economists have not yet managed to value by far the main value of conservation, namely biodiversity.

So even if a reserve is not touristically economic does not necessarily make it less valuable to society.

 $RRP\hat{a}\200\231s$ Environmental Group may want to rank South Africa $\hat{a}\200\231s$ conservation unit s on a rough species

conserved per ha. basis, in which case the remnant moist coastal forest ecosystems may come out on top.

Certainly RRPâ $\200\231s$ environmental group is unlikely to counsel "strict preservation" in most instances -

- that could become a recipe for paralysis, and may be counter-productive in the long run. Prima facie,

it looks as though South Africa should conserve somewhat more wildlands than it has at present, rather

than somewhat less. That is why RRP \hat{a} 200\231s EG may want to rank all ecosystems as yet unconverted to

human use: National Parks at one end, through remnant degraded forest, to regenerating aban doned lands.

And then advising RRP of the costs and benefits, including non-economic and intangibles, of their

conservation or conversion. Biodiversity $200\231$ s bottom line is extinction of species: "â $200\234$ The folly our

Wilson puts it. We, today $\hat{a}\200\231s$ generation, should strive to ensure that we leave for o ur descendants a

resource bundle that we would like for our predecessors to have left for us, as Prof Bromle y puts it (cf:

Philosoper John Rawlsâ\200\231 "veil of ignorance" test, tba).

 ${\tt RRP \hat{a} \setminus 200 \setminus 231s}$ biggest contribution to biodiversity conservation would be to stabilize popul ations. There is

no way habitat can be effectively conserved in an overpopulated country with high growth rates. RRP;s

environmental group should be asked to advise on the status of South Africaâ\200\231s 229 p rotected areas. The

international norm of 10% minimum of national territory and 10% of each major ecosystem hav e not yet

people and such receipts could become sustainable.

The scrub could become profitable if sold as charcoal or other products. The risk could be that once people get used to removing woody vegetation from inside conservation units, they may cut

non-scrub when all unwanted scrub has been removed. Is it possible that elephants could be induced to

trample enough scrub by themselves? Some National Parks worldwide actually use controlled fires to

maintain whatever balanced boscage is felt desirable. Queen Elizabeth Rwenzori National Par k in Uganda

burns or is burnt almost annually. The Independent Development Trust is promoting a feasibility study

of scrub clearance and its potential inside conservation units and in surrounding buffer zo nes.

7.4 Buffer Zones

RRP could create employment at the same time that conservation tracts are enhanced by promoting buffer zones around them. These can provide sustainable livelihoods for the surrounding

people and convert them into supporters of the conserved areas rather than encroachers.... \cdot .. tba

8. Environmental Assessment

South Africaâ $\200\231s$ very reasonable environmental procedures and guidelines have already been drafted

for some time. However, they are not yet enacted. Their compliance is voluntary hence spora dic.

 $RRP \hat{a} \geq 00 \geq 31s$ environmental group may want to review such provisions and make them mandator y for RRP or

devise others. Certainly, all of RRP \hat{a} \200\231s program will be subject to environmental ass essment as soon as

project identification stages start. The Institute of Natural Resources, Pietermaritzberg, has proposed

an Environmental Forum to promote the adoption of environmental assessment nationwide, which could

help RRP in a big way.

In spite of highly commendable provisions, the 1989 Environmental Conservation Act (# 73) i

largely ineffective because the Department of Environmental Affairs has not passed regulations which are

essential for effective implementation of the Act. The only exception is the 1990 noise pollution

regulation. Importantly for RRP, the act provides for environmental assessment (EA) which a re now

required by all multilateral and practically all bilateral development agencies, and by mos t governments.

 ${\tt EAs}$ are undertaken in Spouth Africa, but seemingly on a voluntary basis. As RRP will probably need

several EAs, it would be in its interest to strengthen EA capacity -- to assess, to review, and to ensure

implementation, as well as to evaluate post hoc results. The Act also provides for a Board of

Investigation. This would effectively promote the public participation so urgently needed in the EA of $\dot{}$

large projects.

The whole area of environmental legislation is of direct concern to RRP, dependant as it is on water

and other common property or common access resources, biocide and agricultural substances, soil

erosion, overstocking and sedimentation. Glazewski, Dodson and Smith (1993) write that envi

ronmental

people and such receipts could become sustainable.

The scrub could become profitable if sold as charcoal or other products. The risk could be that once people get used to removing woody vegetation from inside conservation units, they may cut

non-scrub when all unwanted scrub has been removed. Is it possible that elephants could be induced to

trample enough scrub by themselves? Some National Parks worldwide actually use controlled fires to

maintain whatever balanced boscage is felt desirable. Queen Elizabeth Rwenzori National Par k in Uganda

burns or is burnt almost annually. The Independent Development Trust is promoting a feasibility study

of scrub clearance and its potential inside conservation units and in surrounding buffer zo nes.

7.4 Buffer Zones

RRP could create employment at the same time that conservation tracts are enhanced by promoting buffer zones around them. These can provide sustainable livelihoods for the surrounding

people and convert them into supporters of the conserved areas rather than encroachers.... \cdot .. tba

8. Environmental Assessment

South Africaâ $\200\231s$ very reasonable environmental procedures and guidelines have already been drafted

for some time. However, they are not yet enacted. Their compliance is voluntary hence spora dic.

 $RRP \hat{a} \geq 00 \geq 31s$ environmental group may want to review such provisions and make them mandator y for RRP or

devise others. Certainly, all of RRP \hat{a} \200\231s program will be subject to environmental ass essment as soon as

project identification stages start. The Institute of Natural Resources, Pietermaritzberg, has proposed

an Environmental Forum to promote the adoption of environmental assessment nationwide, which could

help RRP in a big way.

In spite of highly commendable provisions, the 1989 Environmental Conservation Act (# 73) i

largely ineffective because the Department of Environmental Affairs has not passed regulations which are

essential for effective implementation of the Act. The only exception is the 1990 noise pollution

regulation. Importantly for RRP, the act provides for environmental assessment (EA) which a re now

required by all multilateral and practically all bilateral development agencies, and by mos t governments.

 ${\tt EAs}$ are undertaken in Spouth Africa, but seemingly on a voluntary basis. As RRP will probably need

several EAs, it would be in its interest to strengthen EA capacity -- to assess, to review, and to ensure

implementation, as well as to evaluate post hoc results. The Act also provides for a Board of

Investigation. This would effectively promote the public participation so urgently needed in the EA of $\dot{}$

large projects.

The whole area of environmental legislation is of direct concern to RRP, dependant as it is on water

and other common property or common access resources, biocide and agricultural substances, soil

erosion, overstocking and sedimentation. Glazewski, Dodson and Smith (1993) write that envi

ronmental