The development of demography in South Africa: A relevant social science or a tool for counting subgroups?

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Introduction

Critics have in the past commented on the inability of demography as a social science to offer explanations or predictions of changing demographic realities and criticised it as being a discipline lacking in comprehensive theory. As early as 1952, Vance reproached demographers for their weakness to produce theories (Vance, 1952).

Compounding the issue is the criticism that, in spite of the large amounts of money being spent on social science research, there appeared to be a general apathy towards implementing the recommendations made by researchers. The usefulness of the findings in effecting any policy adjustments was called into question. This has led to scepticism about the value of social research. A further objection was that the recommendations smacked of social engineering that, when implemented, impeded the freedom of people.

Some critics have even proposed that demographers should merely offer techniques and procedures to analyse population data and refrain from offering explanations for perceived or forecasted phenomena. Such a reductionist viewpoint of what demography has to offer needs to be seen in the light of the fact that the demographer’s main source of basic information on population matters has, for a long time, been the statistical information collected and analysed by government agencies. Demography was consequently seen by many as little more than a government population counting tool.

In contrast to this viewpoint, is the view held by some social scientists that demography is primarily concerned with the pursuit of knowledge and not with the application of that knowledge in policy formation. Although these two views of demography are contradictory, both question whether demography constitutes a worthwhile social scientific endeavour.

Abrahms (1982), in describing the broader context from which social sciences evolved, defines a discipline as “a rudimentary organization of phenomena which yields problems for investigation. The organization occurs on the basis of some more or less explicitly theoretical presuppositions...”

The theoretical presuppositions mentioned in this definition are discussed in the section on the scientific practice of demography, and the problems for investigation are dealt with in the discussion on demography as a research endeavour. The comments on the development in demographic thought do not pertain only to development in South Africa, but also to advancements made by the guiding institutions and practitioners in this discipline abroad. Although the major developments in this field were echoed in demographic pursuits here, it largely went unchallenged in South Africa.

"Theoretical presuppositions": the scientific practice of demography

Demography as a social science constitutes a human activity through which a specific activity in the spectrum of reality is studied objectively to accomplish a true understanding of the phenomenon (Mouton, et al. 1985: 7-17). Demographers are indeed engaged in research activities that can lead to a better understanding of the dynamics of human populations by investigating the major population processes, namely fertility, mortality and migration and the cumulative effects thereof.

Looking at the history of demographic research, it appears that the gradual development and maturation of the theory
and the methods of demography (i.e., its ontology, epistemology and methodology) were in tandem with the favourite theories and disciplines of the time and were influenced by the perceptions of those in charge of official records. Furthermore, it seems that the discipline's record of predicting the future has not always been an unblemished one. Predictions often resulted in alarmist reports in the popular press about overpopulation or genocide.

In the early forming stages of the discipline, budding demographers focused on the refinement of measurement techniques and the discovery of those population variables of interest that could be reliably presented to explain the link between population and socioeconomic development. Efforts to study demographic behaviour in its social and cultural context produced only particularistic empirical summaries of limited range. This led to the criticism that demography lacked the universalism in theory achieved by the related disciplines. The failure to find a "grand theory" for demography was, in part, due to ideological thought regarding the population-development equation that found its way into policy and programmes and partly the effect of the focus on the refinement in methodology described above (Hodgson, 1988).

During the 1920s, the study of population was dominated by a sociobiological approach that viewed population as yet another organism, acting on and influenced by a range of factors that affect a society’s ability to adapt and survive. Malthus, whose works greatly influenced the budding science of demography, proposed biological determinants for the differentials in population growth, namely hunger and sex. He even proposed a biological (albeit behavioural) solution to the inherent threat of the Population Principle (overpopulation), namely that of moral restraint (Grebenik, 1989).

In the early part of the nineteenth-century, research on population issues was mainly concerned with the study of mortality. The emergence of the actuaries in the latter part of the nineteenth century fuelled interest in the study of morbidity and mortality and gave impetus to the improvement of analytical techniques in this regard. The scientific study of fertility emerged with the observed transition in Europe and America of declining mortality and declining fertility. Academics warned against the threat of population decline in the more developed world regions, the resultant intellectual and moral impoverishment and deterioration in the quality of genetic stock. The reason for the alarm can be attributed to faulty demographic calculations. Demographers had based all their predictions regarding fertility trends on the extrapolation of age-specific fertility rates and marital fertility and paid little attention to the total fertility rates or to general cohort fertility (Grebenik, 1989; Hodgson, 1988). Fertility trends had changed to such an extent that the major transition in a woman's life was not the transition from being single to being married, but rather the transition from being childless to being a parent. This was especially applicable to women in Africa although it was also becoming more evident in the more developed countries. Discussions on motherhood cohort and parity progression ratios (measures described by Henry many years ago but afforded little attention at the time) were once again appearing in demographic literature (Grebenik, 1989; Hodgson, 1988).

The formulation of the transition theory in the mid-forties was the first attempt at a unified theory apparently capable of explaining global demographic trends. All demographic trends (but most specifically fertility decline) were seen as the response to a variety of structural changes associated with the development of a mature industrial society. Very soon, however, demographic realities of the years 1945 to 1955 seriously questioned the adequacy of the transition theory. A baby boom occurred in industrialised countries, presenting a theoretical problem for the assumption that no significant fertility changes would occur after the birth rate reached low levels in response to "modernisation." Furthermore, the 1950s witnessed continuing declines in mortality rates - declines that were not dependent on general economic development (Grebenik, 1989; Hodgson, 1988).

The former gloomy predictions regarding the consequences of fertility decline (depopulation) were largely abandoned as mortality declines lead to accelerated population growth. In the less developed countries, growing numbers of people living in abject poverty made economic development, which was seen as the precursor of fertility decline, highly improbable. In the more developed countries, the postwar baby boom coupled with the higher life expectancy meant that the proportion of elderly people in the population would continue to increase, until the changes in mortality and fertility became stabilised. Be that as it may, the population structure was altered and this had definite consequences for social policy and social spending. The transition theorists now faced a crisis: the rapid population growth was not only forestalling the economic transformation that could bring about fertility decline in the less developed countries, it was also bringing new challenges to the fore in the more developed countries (Grebenik, 1989; Hodgson, 1988).

The colonial system collapsed during this time and, with the onset of the cold war, the question was which model of development the new (uncommitted) nations should follow - the socialist or capitalist model. Traditional transition theory favoured capitalist industrialisation. It also placed the notion of voluntarism in family planning on the demographic agenda as well as the idea of democratic rights, which would rule out totalitarian population control as a structural adjustment precipitating development (Grebenik, 1989; Hodgson, 1988).
In strong contrast to the population-as-a-threat approach (or the Neo-Malthusian theory), is the population-as-a-resource approach, which regards population growth as extra people and a wealth of human potential and resources. Large numbers of young people provide the vitality required for continued progress. While the Neo-Malthusian theory stresses the oversupply of labour as the most critical developmental problem and regards population growth as an independent variable that determines economic growth, the materialistic approach sees population primarily as a dependent variable that has an impact on the growth of production. This approach views production forces as expanding due to the influence of factors other than population growth, and population trends as changing primarily in response to material conditions (Gregory & Piche, 1982; Weeks, 1994).

The materialistic explanation of high fertility in Africa moves away from the demographic transition model and focuses on the historical forces that drew African people into an economic lifestyle that entailed a movement between capitalist wage labour and non-capitalist production. Colonialism meant that the family and its dependants sold part of their labour to emerging capitalism. This slowly eroded the domestic economy and the absence of part of the labour force during part or the hole year caused a decrease in craft and agricultural production. This, in turn, accelerated the development of a market for manufactured consumer goods and created a need for cash to buy these goods. As an alternative, or besides labour migration, the household produced crops for own consumption. Fertility therefore had to remain high and even increase to cope with the dual necessity of supplying migrant labour to the capitalist sector and for the domestic subsistence economy. It can therefore be said that this approach views population growth (more specifically high fertility) as a survival strategy in the face of exploitation (Gregory & Piche, 1982).

These developments in the ontology and epistemology of demography had a definite influence on its contribution to population fact finding and policy formulation.

"Problems for investigation": demography as a research endeavour

The most dramatic societal manifestation of how demography is being practised is the population policies that are being implemented in various societies. During the 1960s and 1970s great concern was expressed about the high rate of population growth in the Third World - this was seen as the major obstacle in the socioeconomic development of these countries. Demographic trends were seen as determinants of economic trends and rapid population growth as a cause of persistent low levels of socioeconomic development (Weeks, 1994). In demographic literature, the reader was often presented with the caricature of an ever-pregnant mother Africa whose poverty stems from high fertility.

The transition theory still had a great influence, although demographic realities were challenging it. During the late 1960s Knowledge, Attitude and Practice-surveys were undertaken in developing countries to convince often-sceptical leaders that effective family-planning programmes were possible (Hodgson, 1988). Foundations were established and universities started focusing on developing countries. Funds were made available for students from Third World countries to study demography at universities in America, Europe and Australia (Freedman, 1987). This reinforced the tendency to neglect the local context when dissecting the demographic and socioeconomic problems of less developed countries.

The 1974 World Population Plan of Action, drafted at the United Nations’ World Population Conference held in Bucharest and approved by 136 national delegations, proposed steps to curb rapid population growth. Although the Plan did not suggest aggressive antinatalist policies, but reaffirmed the view that all couples and individuals had the right to choose the number and spacing of their children freely and responsibly, it was not well-received by the developing countries. The Plan of Action was wide-ranging in its coverage, but particularly emphasised that population policies and programmes should be pursued in the context of development. Although it was recognised that population control was not the panacea for development problems, population growth was seen an integral part of development. For most of the sixties and seventies, however, socialist governments believed that reducing the rate of population growth was neither necessary for nor beneficial to economic growth. In China the Maoist slogan held sway "A country’s wealth is its people". There was deep-rooted concern that a fear of majority in numbers was the real motive behind the population control propaganda of the West (Grebenik, 1989; Roberts, 1990).

At the next United Nations’ World Population Conference, held in Mexico City in 1984, attitudes had however, changed considerably. China, so vehemently pronatalist ten years previously, had resorted to an antinatalist policy. In strong contradiction to this, the developed countries now emphasised that population policies should note the fact that human populations are self-regulating systems. The policy of the United States under the Reagan administration was reiterated: the United States would withdraw funding from countries or organisations that promoted (or permitted) abortion (Grebenik 1989; Roberts, 1990). This raised suspicion against population control programmes.

Again the perceptions of politicians were strongly influenced by statistical extrapolations of perceived population trends.
instead of a deeper understanding of the conditions surrounding fertility decision-making (Grebenik, 1989; Hodgson, 1988). In 1986 Bongaarts remarked that demographers should not be overconfident in their predictions of continued fertility decline in the developing countries, warning that, unless the family size drops well below prevailing levels, population growth rates in the Third World could well exceed prevailing expectations in the future (Bongaarts, 1986).

In many democratic countries today the policy in respect of population is non-interventionist, or, as Grebenik (1989) puts it, one of _studied neutrality_. This is based on the belief that individuals will maximise collective welfare if they are left to their own devices. For those in power in the First World countries, interest in the effect of pronatalist interventions in their own countries is of academic interest only, as it would take about a generation before the consequences of such interventions became visible - a time-limit beyond the life expectancies of those politicians (Grebenik, 1989).

Since the beginning of the nineties it has become customary for developing countries to regard population policies as components of socioeconomic policies and not as their substitutes. Any socioeconomic policy should note its responsiveness to future changes in the size, composition and distribution of the population. It should, for example, take into account that whatever the trend in fertility, the population momentum will cause the adult populations in the developing countries to increase by 90% or more over two decades. A population continues to grow for fifty to sixty years after its fertility rate has declined.

Demographic research in South Africa must therefore be able to relate to socioeconomic changes. If population information is not made public, how can the people be convinced that the statements made by the policy makers about the nation's desired future are, in fact, true?

A radical change in population policy occurred in China after a census that gave population figures new meaning and relevance. The Communist regime initially supported the orthodox Marxist view that population size was a problem only for capitalist regimes - under a socialist regime population growth was an asset. A census in the fifties revealed that the population was much larger than suggested by prior estimates. The "Great Leap Forward" also failed dismally and a devastating famine followed (Roberts, 1990; Weeks, 1994). Some leaders then began to see population as a problem and a dramatic shift in policy followed. However, most social demographers view the adoption of the one child-policy in China as a short-sighted overreaction to the situation. Bongaarts and Greenhalg (1985) have shown that encouragement of entry into parenthood at a much later age and larger birth-spacing can produce total population projections not too different from a one-child-policy, without the disruption in family and kinship relations and the care of the aged.

Good quality population data is therefore needed to understand the country's developmental problems, assess how to use limited resources in an equitable way, improve policies that influence living standards and provide the foundation for a strong voice as a developing country when setting international developmental priorities (Cassen, 1994).

Despite this, the aforementioned problem of population being approached with "studied neutrality" seems to remain. Comments following the International Conference on Development and Population (ICDP) held in Cairo in 1994 seem to suggest concern by some demographers that the "political sensibilities" at the Conference that split over reports and recommendations stemming from this meeting "denigrate the whole subject of population growth and subordinate it to other issues" (Westoff, 1994) (the "other issues" being reproductive health, the empowerment of women, environmental protection and the rights of migrants). This is a new challenge for demography to deal with, both in its research agenda and its approaches to analyse the interaction between social and demographic developments and to investigate how social and demographic changes relate to the way in which both present and future society is organised.

It seems as if whenever developments in population policy presents greater freedom of choice for the individual (for example reproductive issues or migration and family reunification) and places stronger emphasis on emancipation (such as the empowerment of women) there is a challenge to balance individual rights and social solidarity and the future welfare of the society.

**The role of demography in population programmes and policy in South Africa**

To evaluate the role of demography in South Africa, the implementation and development of the family-planning
programme and the population development programme (PDP) should be considered. Much of South African
demography evidently became a subsidiary of a larger governmental enterprise that sought to assign to social scientific
research on population issues the role of handmaiden in family-planning programmes.

The first formal population programme, the family-planning programme (which was antinatalist in its conceptualisation
and approach) was introduced in 1974. The aim of this programme was to lower fertility by establishing clinics to
facilitate access to contraceptives. Although initially confined to the urban areas, access to government funded
contraceptive services was later extended to the peri-urban and some rural areas. This programme’s main limitations
were: the lack of privacy and confidentiality in mobile units, limited counselling services to go with the distribution of
contraceptive methods and the absence of a public marketing campaign.

The true characteristics of black fertility, in which the male and his family play a dominant role in the decision-making
process, were neither considered nor accommodated in the development of the service. Couple counselling was seldom
given, and the programme was mainly directed at women. The apparent popularity of injectable contraceptives can also
partly be attributed to the women’s expressed desire (and this is by their OWN admission) to keep their contraceptive
use secret from their male partners. Consequently the process of discussing sexual matters and contraception on an equal
footing with males and females were never instituted in counselling sessions, a tragic fact that leaves HIV/AIDS
Information, Education and Communication-programmes in this country with a difficult obstacle.

Some observers also remarked on the coercive attitudes of family planning nurses and their reluctance to inform women
about the broad range of contraceptives available to them. The family-planning programme offered no recourse to
women with unwanted pregnancies after contraceptive failure (or other unwanted pregnancies for that matter).

In 1983 the Science Committee of the President's Council into Demographic trends in South Africa proposed that a
Population Development Programme (PDP) be instituted to ensure that population numbers be brought in line with the
availability of resources. To effect this, the PDP had to ensure intersectoral collaboration with other governmental
departments to reach a demographic target of a total fertility rate of 2.1 by the year 2010 (Board of Population Growth

The PDP had some serious inadequacies. Ideologically it was rooted in the neo-Malthusian approach and argued that
the natural resources of South Africa (in particular water) had a limited carrying capacity of a population of eighty
million people. The problems of equity, maldistribution and inadequate management of resources were not considered.
The following was stated in a marketing brochure:

"Scientific research indicates that in view of socioeconomic factors and the availability and
renewability of natural sources of subsistence, South Africa cannot provide meaningful housing,
education, employment and medical care for more than approximately 80 million people." (Board of
Population Growth Development, nd.: 2).

In another brochure an appeal was made to every woman to limit childbearing to prevent South Africa from slipping
into a Malthusian trap:

"When a teenage girl falls pregnant, it causes tremendous problems within family life. It disrupts her future
and sometimes brings an end to her education and her opportunities to develop skills eventually to get a
good job. It also places a heavy financial burden on the family and contributes substantially towards infant

The “problems” of fertility and poverty were squarely placed on what was perceived to be the irrational procreation
by young women. This statement clearly ignored the seminal work by Preston-Whyte, et al. (1990) on the complex
factors surrounding teenage pregnancy in South Africa.

The PDP did not challenge the obvious obstacles to development in the South African society, such as the migrant
labour system, inequity in access to training and employment, the artificial props for high fertility such as high infant
mortality, the breakdown in the family system, lack of recreation for teenagers or the problem of care for aged blacks.
Furthermore, although it widely advocated the strategy of self-help, it had very little resources at its disposal to finance
development programmes. These programmes were mostly instruments designed to fit the cause of the protagonists of

Given these inadequacies of past population-related policies, demography can play a very important part in a democratic
South Africa, provided those active in the discipline and those applying its methods, research findings and recommendations embrace the people-centred approach promulgated at the Cairo ICDP with its focus on protecting the rights of individuals (Toolan, 1994).

**Future challenges for demography in South Africa**

Research in demography and its related fields of specialisation (health demography, applied demography, economic demography, etc.) not only influences the emergence of strategies and policies aimed at translating certain demographic visions of those in power into reality, but it is also instrumental in assessing the success and merit of programmes and strategies. Tension is to be expected between 'research driven' and 'policy driven' appraisals - especially if it comes to the assessment of the cost-effectiveness of a particular intervention. However, researchers in France (Moutit, et. al. 1994) have come to the conclusion that the alleged existence of tension between evaluations inspired by policy and those inspired by research, is without proof, and proclaim that the real issue is the need for an intermediate group of experts to help bridge the gap between research and the decision-making processes. This is linked to a need for new research methodology that takes into account the decision maker’s specific constraints in the normative assessment tools applicable to programme evaluation.

Research during programme development can take three possible courses of action: a prospective assessment of the value of the programme’s activities, a retrospective assessment of the results of the activities or an active combination of prospective and retrospective assessments. The first research strategy requires the availability of at least some data on the scenarios in which the programme activities will unfold. This, of course, carries with it the all too familiar pattern where research regarding a particular problem is commissioned but the recommendations of the research are never followed up. The second strategy - the ‘hindsight one’ - can quite easily be abused to justify a badly planned and/or badly implemented programme by finding some unrelated causes for its failure (as has happened with some AIDS education and information strategies in South Africa and elsewhere). The third approach makes action research possible, allowing for opinion leaders and research and policy experts to contribute towards the planned strategies of an intervention, for the community to comment on the activities and make them their own and finally, allowing for goals and strategies to be assessed and adjusted at different stages of the programme's development.

In 1978, Stanley (as quoted in HSRC, nd.) commented as follows: "The pragmatist, impatient with theories and muddling through the political process, takes what he can get by way of achieving policies. To the theorist, the result is a patchwork quilt, promising much and delivering little, while exhausting the public’s will to believe in rational progress."

Has demographic research in this country exhausted the public’s will to believe in rational progress? Are population issues still central to the agenda of policy making in the new South Africa? It certainly seems to be the case, judging from the lengthy process of the population green paper tabled as forerunner to a white paper on population policy. Sceptics could however level the same kind of criticism against it as was levied against the Cairo Programme of Action.

If the different models of research implementation are considered, it seems as if the political model described by Weiss (1977, 1980) has been operative in South Africa in the past. This has given rise to demography being labelled as the practice of political arithmetic. Yet, it is only when research findings are distorted and misinterpreted, regarded as clandestine and recommendations disregarded because it does not fit the political vision of the policy makers that the process can be called an illegitimate application of the research process. A challenge facing demography in South Africa today is the need to educate consumers (of demographic data) and specifically draw attention to the fact that interventions normally take generations to exhibit measurable changes. In South Africa, with its pressing need for change, reconstruction and reconciliation, one can expect a social climate in which short-term payoffs will become major criteria for research funding. Political decision-making is often an impatient process - not able or willing to wait for scientists to rectify the lag in social fact finding.

A second major challenge is to build on the positive contributions of this science and to develop a sensitivity for and to encourage the advocacy by researchers, academics and consumers of research to redress the wrongs. This will entail policy research in respect of population dynamics, reconstruction and development to advise government, the private sector and development agencies regarding population and developmental issues.

The third challenge relates to training in demography. University centres offer settings for a relatively close interaction of people trained in and interested in population issues. Many are, however, internationally oriented with curricula focusing on the problem children in global population trends. Even local tertiary centres have demographers who have either been trained at American or European universities or who have adopted the paradigms which dominate the thinking in those institutions. What is called for is a science that is receptive of and able to deal with local research.
needs and problems. An illustration of the possible misinterpretation of local demographic trends by European-oriented demographers is the debate between Cleland (1993) and Thomas (1993) regarding Mead Cain's theory of children as a source of insurance against risk in developing countries. Cleland (1993) dispelled the relevancy of Cain's propositions, because he found the key elements of social security (pensions, sickness and unemployment benefits) to be absent in countries such as Taiwan and South Korea, yet these are low-fertility countries. These benefits are, however, hardly ever found in Third World countries. The kind of economic security to be found in these countries relates more to landownership and access to credit and health services. Even before the fertility rates started to decline, inequality was already low in both Taiwan and South Korea (Thomas, 1993). Cleland (1993) therefore bases his dismissal of Mead Cain's theory on his perception of what economic security entails and displays a poor understanding of the real vulnerability of the economic environment in developing countries (Thomas, 1993).

The fourth and most pressing challenge is to establish if the current diversity of the South African population poses a problem in terms of the continuation of the old and/or the emergence of new forms of social inequality (in terms of subgroups according to gender, ethnicity and country of origin, younger and older people, nuclear families as opposed to other lifestyles and in terms of region). South African demography is charged with the daunting task of investigating and offering a theory regarding the extent to which demographic trends will influence the content and impact of those social processes that shape the redistribution of access to socioeconomic opportunity and resources. Although the nineties has seen victories in terms of human rights issues (of which the abolishment of apartheid in South Africa is one example), groups of people are marginalised, exploited and abused because of class, gender or ethnicity (Heggenhougen, 1995). A new definition of the transition theorists' notion of "moderisation" is called for - one that would also encompass individual- and community-level developmental goals. It is up to demography as a social science to challenge the accepted notions of social equity by pointing out vulnerable groups concerning the differentials described above. It means that finding the culturally relevant or politically correct buttons to push to market preconceived ideas about ideal demographic and developmental targets can no longer be acceptable for practitioners in this discipline in South Africa. Demographers should act as interpreters and intermediaries, ensuring that population policy and programmes are mutually agreed upon, culturally appropriate and focused on sustained development (Heggenhougen, 1995).

To face these challenges, a multi-disciplinary approach to population issues needs to be strengthened. This is, of course, dependent upon funding for research into population issues of a multi-disciplinary and multi-sectoral nature. The linkages between demographic research, policy formulation and strategy implementation needs to be strengthened through the creation of forums for the deliberation of population issues as well as through the professionalisation of demography as a social science.

References


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