The Global Fertility Transition and Nepal

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Our knowledge of the global fertility transition has increased greatly in recent times. There are three major sources which compare fertility movements across a range of countries. The first was the European Project of Princeton University's Office of Population Research, reported in a range of papers and books and summarized in Coale and Watkins (1986). The second has been the inclusion in the various revisions of *World Population Prospects*, brought out by the United Nations Population Division of demographic estimates for each country beginning with the quinquennium 1950-55 (United Nations, Various dates). The third is a recent attempt by Bongaarts and Watkins (1996) to use both these United Nations data and others on human development to analyze the timing of the onset of fertility decline.

We now have a panorama of these onsets as they occurred in nearly every country of the world outside sub-Saharan Africa. Even in the latter, fertility is now falling through the whole of Southern Africa and Kenya, while such declines may be incipient in many other countries. This panorama covers two centuries from the first onset of fertility decline in France in the late eighteenth century to the Nepalese transition which dates only to the last few years. Nepal, as measured by per capita income, is the poorest country in the world where fertility is now falling, although it is probably no poorer than Bangladesh was

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when the decline began there and perhaps little different from France when its fertility began to fall.

The onset of fertility declines seems to be partly a diffusion process, especially within countries where rural birth rates often begin to decline not long after the urban decline begins but in social and economic conditions that are usually very different.

The discontinuities in the spread of fertility variations are equally interesting. There is still no satisfactory explanation why France's fertility decline began so early and why no other European country followed for generations. The answer may lie more in the realm of ideas than in socio-economic indices, and may be mostly concerned with the battering that orthodox religion and morality experienced in the revolutionary years. There is also a gap between the onset of most Western fertility transitions, the majority of which had begun by the beginning of the present century, and those of the Third World which were delayed until the 1960s. The exception here is Japan, where a decline was under way by 1930, thus giving support to socio-economic, rather than cultural, theories of fertility decline.

Before turning to Nepal, it is pertinent to examine certain general propositions regarding the fertility transition.

Diffusion

In the European fertility transition, diffusion clearly occurred from town to city and from the Northwest to the Southeast. What was diffused may have been contraception or the justification of its use, or it may have been the idea of the small family and its justification. Alternatively it may have been, more broadly, ways of living and attitudes towards life. This issue has emerged recently in the demonstration by Bongaarts and Watkins (1996) that the onset of the Asian transition spread across Asia, progressively affecting countries with ever-lower socio-economic levels (as measured by the Human Development Index). Their explanation is that this occurred basically because of grass-roots communication, especially between women.

We attempted to discover how Bangladesh was affected by other countries in Asia (Khuda et al., In press). It became clear that women had not talked to women across Bangladesh's international borders. Indeed, because of *purdah* in rural areas, few had discussed family planning with anyone but their sisters and sisters-in-law. Most had learnt of these matters from family planning workers or health center staff. The question, therefore, resolved itself into the sources of

knowledge and the inspiration for action of these people. The answer was that the phenomenon had been driven by a fairly efficient bureaucratic machine where the members were increasingly convinced about the truth of the message they were promulgating.

How, then, had this message entered Bangladesh and how had it been reinforced? It appeared from interviews with men, now old, who had been involved from the start, that the attitudes of the old colonial British Indian Civil Service were never pro-growth and, indeed, had a Malthusian tinge. After partition, both India and Pakistan moved towards national family planning programs and President Ayub Khan laid the groundwork for a more efficient family planning program in the late 1960s. Aspiring senior public servants were trained to believe in family planning in administrative colleges. The East Pakistan college was at Comilla which ran its own family planning program. The public servants from that era survived the independence struggle and subsequent disorders and changes of government. Indeed, these disorders hid the essential cultural unity of the new Bengali state and the lack of major ideological differences between the various governments. The public service developed the family planning program on the basis of an assumed national consensus and politicians were pleased to let them do so. The ideological base for this came partly from the recurrent crises and the awareness of the country's population densities. But diffusion was all-important. It took the form of politicians and public servants attending international meetings on the subject, learning of successes in other Asian countries, and absorbing messages and funding from the international community and from American foundations. The domino effect of the onset of Asian fertility declines has to be seen in terms of the region as a whole and in terms of comparisons between different national efforts. It also has to be seen in terms of the willingness of Asian governments to take on moral leadership in the family planning area and the lack of strong religious or cultural resistance (Caldwell, 1993).

Myths and Facts about the Global Demographic Transition

The new data bases have allowed us to test generalizations which have been made about the course of the global fertility transition (Caldwell and Caldwell, 1998).

The first thesis is that, as fertility transitions begin in each major world region, they move through the regions at ever-greater speed. This proposition is now open to severe doubt. The impression

that the first transition, the European one, was so prolonged rests almost entirely on the early French transition. We measured the speed of transitions by determining the time period for each region between when 25 per cent of its countries had begun fertility decline and when 75 per cent had done so. This interquartile range was only 13 years in Europe, a similar period to that found in ESCAP Asia, North Africa and the Middle East. Exceptionally fast regional transitions were found only in Latin America, where there were fewer national family planning programs and massive opposition from the Catholic Church. In terms of comparisons with Asia, the onset of transition in Latin America was late as measured by socio-economic indices. There was, thus, a pent-up demand and, when the dam was breached, fertility decline was rapid.

The other general thesis is that over time national fertility declines have become more rapid. This generalization was tested for each region by measuring the average time that it took for fertility to fall from 10 to 40 per cent of its original level. In Europe, including France, the period was 29 years; without France it was 25 years. Later fertility transitions before the Second World War were somewhat faster: 17 years in English-speaking countries of overseas European settlement; 22 years for temperate Spanish-speaking countries of overseas European settlement; and 15 years for Japan. But, in the second half of the present century, fertility declines of this extent were accomplished in both ESCAP Asia and Latin America in only 12 years. This may not continue to be the situation. More recent declines of this magnitude have taken 15 years in both North Africa and the Middle East and fragmentary evidence suggests that they may take longer still in sub-Saharan Africa.

The Mechanics of Global Fertility Transition

The onset of fertility transition in each region generally has taken place over time from the more developed to the less developed countries. The exception is Latin America where most onsets occurred between 1965 and the early 1970s with little regard to the level of development.

The best examples of the largely spontaneous diffusion of new ideas and new behavioral practices within homogeneous culture areas is provided by long-distance diffusion across the face of the world. The prime example is probably that of the English-speaking countries where marital fertility decline began in the United States, English-speaking

Canada, Australia and New Zealand within a total span of three or four years and very soon after the first declines in Britain. Similarly, fertility decline in Argentina and Uruguay closely paralleled in time the transitions in Spain and Italy. In the 1950s, before the general Third World fertility transition began, fertility began to fall at similar times in a range of islands stretching from the Caribbean to the Indian and Pacific Oceans.

It is the ESCAP Asian fertility transition which fits the model outlined by Bongaarts and Watkins (1996). Here declines successively began later and at ever-lower socio-economic levels. Diffusion, at least at the levels of governments and the elites, was clearly important. As more countries exhibited fertility declines, international agencies, when dealing with the remaining countries, could take the need to begin such decline as a developmental priority. Where there were strong social hierarchies, as in Hindu South Asia, it was likely both that the higher socio-economic groups would adopt family planning earlier and that they would see it as a national necessity that the lower classes should follow suit.

Nepal

I have come here to learn about Nepal rather than to offer analysis. There are reasons why Nepal is of interest to the demographic theorist. The first reason is one we have already given, namely that it is the poorest country in the world that is now undergoing a fertility transition, and it is doing so with absolutely no pressure or coercion.

The second reason is Nepal's unique topography and hence social heterogeneity. The global fertility transition has been associated with the erection of a global economy and society. The onset of fertility transition has followed the conversion of economies into ones where practically all transactions are monetized, where children go to school, where modern medical facilities are easily available, where an increasing number of mothers receive trained health professional assistance when giving birth, and where infant and child mortality rates are falling to at least moderate levels. The global society is connected by trafficable roads along which trucks carry the goods that make the global economy possible and along which buses carry people seeking wage-paid work elsewhere. It is in this cost-accounting environment that children begin to become expensive and a matter requiring choice in the allocation of resources.

Nepal, perhaps more than any other country, is two societies, with the people of the valleys and the lesser slopes, where roads and schools have penetrated, being part of the global network. It is here that there should be a growing demand for fertility decline and a declining birth rate. The people of the still largely inaccessible hills almost certainly live in a society where there are still gains to be made from having large families. Fricke (1997) has presented evidence to show that this is indeed so, and we look forward to seeing fertility maps of the country at this conference which justify these conclusions nationwide.

The third aspect of Nepal's fertility transition that is noteworthy is the high level of dependence for fertility control placed upon sterilizing operations. If this really reflects demand, it supports the assertion often heard in India that sterilization largely meets the requirements of a predominantly rural, South Asian society. If it is policy choice, then it raises questions, especially ones about whether the Nepalese fertility decline is as steep as it might be. The experience of Bangladesh shows that every new contraceptive choice accelerates the fertility decline. There is a demand for reversible methods and there is a fear of operations. It might be argued that Bangladesh has benefited from a high level of per capita international aid for family planning. There seems to be no reason why Nepal, with its relatively small population, should not be able to obtain assistance of this magnitude.

Such assistance would certainly hasten fertility decline in those parts of Nepal which have become part of the global economy and society. But, for a nationwide fertility transition, the all-weather roads, the schools and the health centers will have to penetrate to every part of the country. This is a developmental challenge more extreme and expensive than is faced by most countries.

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