

## The Six Questions that Do Not Go Away

KAROL J. KROTKI

### THE SIX QUESTIONS IN THE SOCIETY

To any observer of Pakistani society and economy over the last 40 years four questions pose themselves with repeated persistence year after year, survey after survey, census after census, decade after decade. They are: the proportion aged less than 15 years of age, the reported age group 5–9, the masculinity ratio, female illiteracy and innumeracy.

There are two other features of the Pakistani data situation that ought to be taken into account during any consideration of these data and their collection. They are: the innocence of vital registration systems, and the ineffectiveness of family planning programmes.

The first four questions received little attention through the backstopping offered by international agencies, from the subject-matter units in the Federal Bureau of Statistics (FBS), and from the analysts in such research institutions as the PIDE. There seems to be no awareness of the critical role of women's literacy and numeracy in the reorganization plans of the Ministry of Women's Development [MWD (1989, 1989a)]. The relevant concerns in WD publications are modest [e.g., WD (1980)].

The last two questions (vital registration and family planning), longterm in themselves were ill served in short-term programmes of national and international agencies. The endeavours were numerous, their history checkered and the assessment difficult at any moment of time, but easy when looked at from the perspective of 40 years.

Karol J. Krotki is Professor at the Department of Sociology, University of Alberta, Edmonton, Alberta, Canada.

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This data situation has to be put against developments, close to magnificent, in the area of demographic analysis and statistical sampling (but the two, with one exception, never met). One walks nowadays in the corridors and offices of Pakistani institutions dealing with demographic analysis and statistical sampling like among equals or betters. Yet, abstracting from good sampling, the quality of the data and action based on data remained problematic all the 40 years.

### PROPORTIONS UNDER 15

This large proportion spreading over three five-year age groups has several methodological advantages: it steps over the boundaries at age one and at age five, difficult boundaries in Pakistan (see next section); it ends around what for both sexes is an age near to puberty, meaningful to most; the almost conversational habit of describing populations by their proportion under 15.<sup>1</sup> We feel intuitively that a population with 45 percent under 15 has high fertility [e.g., NIPS (1988), p. 38]. Where do all these children come from asked travellers in tropical Africa in mid-nineteenth century? From high fertility was the obvious answer [Krotki (1979)]. We feel intuitively that a population with 20 percent under 15 has low fertility.

In Table 1 proportions under 15 reported from the four censuses since independence and several surveys have been assembled. Proportions under 15 remain fairly constant over the years; if anything, they suggest an increase from 42 percent to 46 percent. This mild increase over 40 years could be due to slight increases in fertility or marked decreases in mortality.

Table 1 contains one set of entries, out of many possibilities, from stable populations to show what proportions under 15 are compatible with what fertility and mortality values. The hypothetical populations are spread over mortality levels 9 through 19 for females and 11 through 22 for males [Coale and Demeny (1983)]. The two extremes at each end of the spread are not readily applicable to Pakistan: death rates of 6 through 10, and birth rates of 47 through 54. Within the narrow limits prescribed by the proportion under 15, we pick row (v) on grounds of plausibility. In this row proportions under 15 equal to 45 and 46 require birth rates of 44 and 47, and death rates of 14 and 17, respectively for males and for females. The entire exercise is predicated on a growth rate of 3

<sup>1</sup>The greater the proportion under 15 the smaller must be the other proportions in the same age distribution. The area under the curve of the age pyramid must continue adding up to 100 percent. The children under age 15 have been born by women aged 15-44; the more children under age 15 the fewer mothers aged 15-44 (Fig. 1).

Table 1  
*Proportions Under 15 in Pakistan at Various Times Illustrated by  
 Stable Populations*

Source and Times		Both Sexes	Males	Females
(1)		(2)	(3)	(4)
(a)	Census 1951		42.0	44.5
(b)	Census 1961		41.8	43.2
(c)	Census 1972		43.1	44.6
(d)	Census 1981		44.5	45.8
(e)	PGE 1962	43.0	42.6	43.4
(f)	PGE 1963	43.2	42.8	43.6
(g)	PGE 1964	42.9	42.2	43.7
(h)	PGE 1965	43.5	43.4	43.8
(i)	HED 1973	43	43	44
(j)	PFS 1975	44	44	44
(k)	PGS 1976-79		45.4	44.6
(l)	NHS 1982-83	44.95	44.90	44.98
(m)	PDS 1984		45.6	45.5
(n)	PDS 1985		46.3	45.5
(o)	PDS 1986		46.2	45.3
(p)	PDS 1987		46.5	45.5

**Stable Populations with Annual Growth Rate 3%**

	Mortality									
	Level		br		dr		Life Exp			
	m	f	m	f	m	f	m	f		
(q)	22	19	36	38	6	8	68.570	65	42	42
(r)	20	17	38	40	8	10	63.637	60	43	43
(s)	18	15	40	43	10	13	58.828	55	44	44
(t)	17	14	41	44	11	14	56.460	52.5	44	45
(u)	16	13	43	46	13	16	54.122	50	44	45
(v)	15	12	44	47	14	17	51.816	47.5	45	46
(w)	13	10	47	52	17	22	47.082	42.5	46	47
(x)	11	9	52	54	22	24	42.100	40	47	49

Note: Sources for each cell are available from the author.

percent over the last 40 years and such a rate is suggested by [Alam and Shah (1986), p. 57 ].

To choose between fertility increases and mortality decreases another set of entries from stable populations can be used (not shown in Table 1). To throw the entire burden of the explanation on fertility increases, stay at male mortality level 12 [Coale and Demeny (1983), p. 458]. Then, to obtain an increase in proportions under 15 from 42 to 46, the birth rate must rise from 45 to 50. To throw the entire burden of explanation on mortality declines, stay at GRR = 3.000 (constant fertility) and move from mortality level 12 to 22 (*ibid*: 483 and 493). Then to obtain an increase in proportions under 15 from 42 to 46, the death rate must decline from 20 to 7! Whatever our feelings for plausibility there is no room for fertility *decline*!

The National Institute of Population Studies (NIPS), quite rightly, does not take the reported age distributions [NIPS (1988), p. 34] for Pakistan seriously. This writer was puzzled by it for thirty years [Krotki (1961, 1961a, 1963)]. When NIPS made a presentation to the then Prime Minister, a hypothetical distribution has been shown instead [NIPS (1989), pp. 9–10]. Such a theoretical age distribution was most probably closer to reality than the reported age distribution.

The remarkable steadiness of the proportion under 15 is like a rock and every analyst is bound to rest on it. When speculating, whether fertility changed, he/she is bound to ask whether the proportion under 15 changed. If not, the analyst must report that 'there is no evidence of any decline in Pakistan's fertility since the mid-70s' [World Bank (1989), p. xviii].

### THE PROBLEM OF AGE GROUP 5–9

Within the satisfying situation created by the steadiness of the proportion under 15, there is an ugly duckling, the age group 5–9.

In a population which grows fast due to high fertility, such as that of Pakistan, age group 5–9 must be markedly smaller than 0–4, and markedly larger than 10–14. Table 2 gathered age groups 0–4 and 5–9 from the four censuses conducted since independence and several surveys. The overall message is that reported age group 5–9 is impossible. In six instances it is larger than 0–4. In instances when it is somewhat smaller than 0–4, it is smaller by an impossibly small fraction.

Line (m) in Table 2 suggests that age group 0–4 should be larger than age group 5–9 by well over one-fifth. In Pakistan the reported numbers are larger, if at all, by hardly more than one-twentieth. The steadiness of this phenomenon

Table 2

*Proportions and Numbers Aged 5-9 in Pakistan at Various Times*

Source and Time	Both Sexes	Males	Females
(1)	(2)	(3)	(4)
(a) Census 1951	0-4	2,174	2,079
(b)	5-9	2,149	1,919
(c)	(0-4)/(5-9)	1.01	1.08
(d) Census 1961	0-4	3,301	3,157
(e)	5-9	3,456	3,016
(f)	(0-4)/5-9)	0.96	1.05
(g) Census 1972	0-4	4,725	4,668
(h)	5-9	5,317	4,815
(i)	(0-4)/(5-9)	0.89	0.97
(j) Census 1981	0-4	6,469	6,624
(k)	5-9	6,865	6,334
(l)	(0-4)/(5-9)	0.94	1.05
(m) (0-4)/(5-9) from Stable Populations West, Type r, Mortality Levels 16m 13f, Line (t) from Table 1		1.23	1.21
(n) PGE 1962	0-4	6,688	3,422
(o)	5-9	6,104	3,205
(p)	(0-4)/(5-9)	1.10	1.07
(q) PGE 1963	0-4	6,659	3,450
(r)	5-9	6,235	3,255
(s)	(0-4)/(5-9)	1.07	1.06
(t) PGE 1964	0-4	6,941	3,604
(u)	5-9	6,595	3,382
(v)	(0-4)/(5-9)	1.05	1.07
(w) PGE 1965	0-4	7,183	3,746
(x)	5-9	6,881	3,649
(y)	(0-4)/(5-9)	1.04	1.03
(z) PDS 1985	0-4	24,427	12,335
(i)	5-9	24,271	12,632
(ii)	(0-4)/(5-9)	1.01	0.98
(iii) PDS 1987	0-4	12,821	6,481
(iv)	5-9	12,855	6,670
(v)	(0-4)/(5-9)	1.00	0.97

Note: Sources for each cell are available from the author.

causes anxiety contrary to the feelings of satisfaction we had in the previous section on proportion under 15.

Figure 1 shows graphically that age group 5–9 must ordinarily be smaller than 0–4. It takes an extraordinary situation depicted in Figure 2 where 5–9 can be larger than 0–4. Such a situation might develop soon in Canada (and developed recently in, say, Germany), but is a far cry from anything one can reasonably consider for Pakistan.

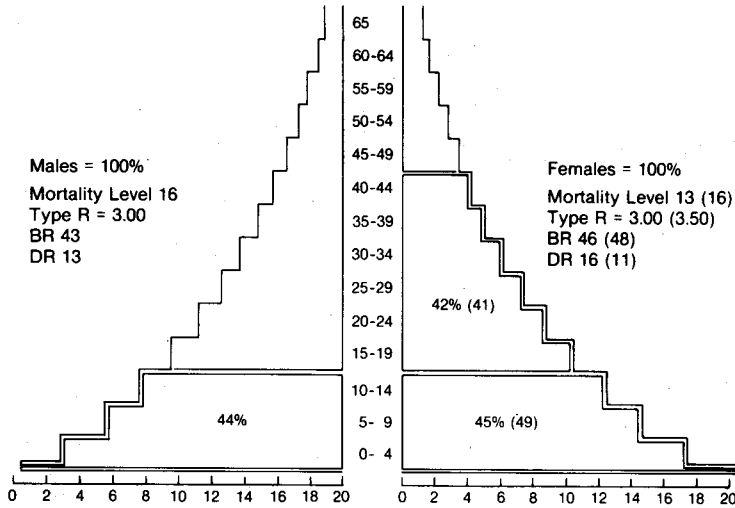
### THE WORLD LEADER IN THE MASCULINITY RATIO

Pakistan leads the world in masculinity ratio, yet the masculinity ratio at birth is the normal 105. Culturally related Bangladesh, India and Nepal also report high masculinity ratios, but lower than those in Pakistan. The age-specific mortality in Pakistan is female-selective [e.g., Sathar (1987)], but the nature of fluctuations in mortality by sex leaves the observer in uncertainty.

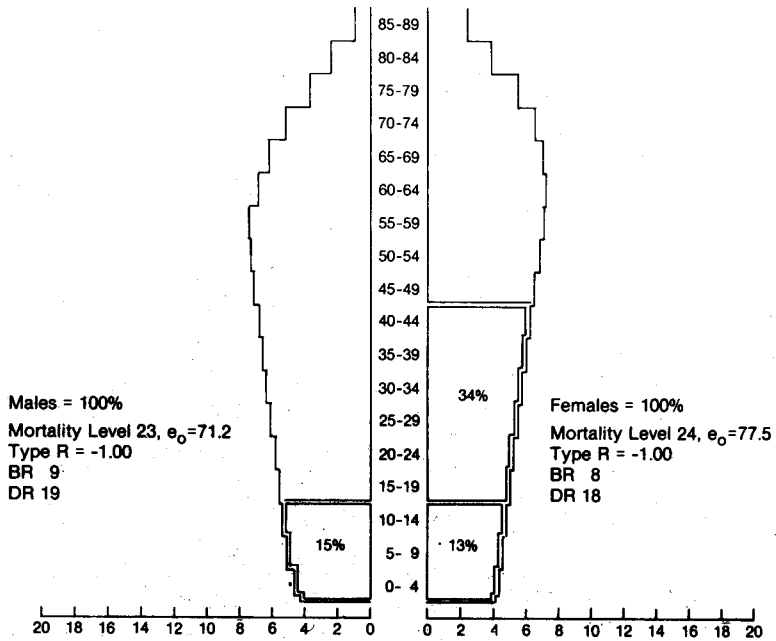
Why should the period 1968–71 have been particularly female-selective [NIPS (1988), p. 74]? And why would female life expectancy have been higher than that of males in the period 1881–1921 (Kingsley Davis's pencil of European origin while smoothing?), in 1950–52 (MKH Khan's Western ethnocentricity?), and in 1976–79? By the time the four Pakistan Demographic Surveys were held in 1984–87 female age-specific death rates were holding their own against male rates, except for some of the maternal ages [PDS (1987), p. xxxvii, t. 4.18]. So, is it sociobiology or enumeration biases?

In Table 3 masculinity ratios have been assembled for the four censuses and for several surveys. There is the steady decline in the ratio for all ages from census to census, a crude indication of an improvement in the position of women. For older ages the ratio remains high and steady; no improvement, but no deterioration: a constant sociopsychological situation? Our confidence built up on the basis of the ratio for all ages together, and for the older ages separately, is shaken by declines in the ratio for 0–4 in the most recent censuses. Did parents suddenly reverse their attitude to boys and girls? Not likely, but why are the data jumping around all over the place?

The question is: is the slight decline in the masculinity ratio in recent years a reflection of parents beginning to behave in a manner similar to the community of nations or are the data uncertainties still so great that no firm conclusions can be drawn?



**Fig. 1. Hypothetical Age Pyramid with Proportions under 15 and Female Proportions 15-44.**



**Fig. 2. Hypothetical Age Vase with Proportions under 15 and Female Proportions 15-44.**

Table 3

*Masculinity Ratios in Pakistan for Various Age Groups at Various Times*

Source (1)	All Ages at Birth		0 - 4	5 - 9	10 - 14
	(2)	(3)	(4)	(5)	(6)
(a) Census 1951	116.8		104.5	112.0	114.4
(b) Highest Ratio	135.1		in Age Group 25-29		
(c) Census 1961	115.8		104.6	114.6	122.6
(d) Highest Ratio	129.4		in Age Group 50-54		
(e) Census 1972	114.9(*)		100.8	110.4	127.0
(f) Highest Ratio	142.5		in Age Group 60-64		
(g) Census 1981	110.4		97.7	108.4	119.3
(h) Highest Ratio	138.5		in Age Group 60-64		
(i) NIS 1960-62		102.0			
(j) 1963-65		107.5			
(k) 1966-68		113.0			
(l) PFS 1975	109		108.4	109.3	108.7
(m) PGS 1976	108.7				
(n) PDS 1984	105.7				
(o) PDS 1985	105.6		102.0	108.5	186.2
(p) PDS 1986	106.5				
(q) PDS 1987	105.6		102.2	107.9	115.9

*Note:* Highest ratio = highest masculinity ratio in the age group indicated in same row, excluding the oldest age group.

(\*) cited as 112.9 in [PFS (1975), p. 58].

Sources for each cell are available from the author.

### FEMALE ILLITERACY AND INNUMERACY

In Table 4 data on illiteracy and innumeracy have been assembled.<sup>2</sup> According to the annual review from ESCAP 1989 "The absolute number of illiterates

<sup>2</sup>Data on numeracy in Pakistan have not yet been collected, but there is no harm in staking out the claim for such data. For literacy Shah (1986) made a comparison of definitions used.



Table 4  
*Age Specific Female Literacy and Numeracy  
 in Pakistan at Various Times*

Source	Both Sexes	Males	Females
(1)	(2)	(3)	(4)
<b>Percentage Literate According to the 1972 Census Definition</b>			
(a) Census 1951	13.2	17.0	8.6
(b) Census 1961	18.4	26.9	8.2
(c) Census 1972	21.7	30.2	11.6
(d) Census 1981 <sup>1</sup>	26.2	35.1	16.0
(e) NIS 1968		37	7
(f) PFS 1975 <sup>2</sup>			9.9 <sup>3</sup>

Sources: Rows a through c: [Shah (1986), p. 208, Table 6.1].

Row d: [Pocketbook (1986), p. 60, Table 2.7].

Row e: [NIS (1986) p. 33, Table 2.4].

Row f: [Casterline (1987), p. 100, Table 6.7].

<sup>1</sup>Applicability of the 1972 definition subject to confirmation, quoted in [World Bank (1989), p. 39].

<sup>2</sup>Percentage of PFS respondents who attended school.

<sup>3</sup>Given as 10.7 with school attainment in [PFS (1975), p. 62, Table 3.4].

increased during the period 1970 to 1985 by over 80 million, bringing the total number in 1985 to 618 million".

Pakistan made its contribution to the increase in the number of illiterates and innumerates in Asia, because the increase in numbers literate and numerate was not enough to overtake the natural increase in population size.

The issue here for forty years has been the insufficient national effort in the field of education.<sup>3</sup> Methodologically, there are two points. First is the difficulty of defining and measuring illiteracy and innumeracy. Second is the confusion between the methods required for the education of adults and that of school-age children. The former is probably the enemy of the latter, at least in

<sup>3</sup>A demographic angle on education has been presented at a previous annual conference of the PSDE [Krotki (1985)] and received with approval by the discussant [Hussain (1985)].

successfully confusing the issues. The two types of clientele require different programmes, probably different ministries, certainly personnel with entirely different training and outlook. If a choice must be made, schooling of school-age children should win over adult education. After all, most of the illiterate and innumerate adults of today, are the children who did not go to school since independence.

Pakistani organizations might like to look analytically into the low correlation between financial disbursements for education and changes in the incidence of literacy and numeracy.

Pakistani concerns have been well-articulated [e.g., Mirza (n.d.); WD (1980)].<sup>4</sup> Our view about the society not breathing with both lungs is supported by the reminder, cited with obvious approval, by David McClelland of Harvard, 'that it is impossible to name even a single country in which the economy has developed rapidly over a long period without women having been to some extent liberated from the traditional domestic tasks and without their having been permitted to play an important role in society, particularly in the labour market, and economic development' [WD (1980), p. 5]; see also Sathar *et al.* (1988); Sathar and Kazi (1989).

### VITAL REGISTRATION

There exist three large, expensive, and by now long standing organizations with their own extensive machinery and field tentacles. All three thrive on the margin of the demographic world and yet make no contribution to our understanding of society. In fact, disknowledge is created. The registration of vital events continues to be a provincial responsibility and has never become a source of information about the society. The Registration Organization contrary to promises made at its inauguration [Ahmed (1977)] gave up since then attempts to become relevant statistically.

There seems to be confusion between the use of vital registration for statistical purposes and its legal and public order purposes. The two require different programmes, probably different ministries, certainly personnel with different training and outlook, just as was the case between adult education and the school-age children.

<sup>4</sup>Though my feminist colleagues in Canada would have a different expression for the recommendation that 'women's advice bureau should be... *manned* by women' [WD (1980), p. 283], emphasis added.

## FAMILY PLANNING AND POPULATION POLICIES

The family planning network, in its various guises, continues keeping up the suggestion that it influences fertility. It is no surprise against the three expensive worlds of unreality (provincial vital registration, federal registration organization, federal population welfare network) that no meaningful data, succeed in being collected.

In Table 5 such limited data of the traditional KAP type available for Pakistan have been put together. We ignore the types of data available on 'knowledge' (K, the first letter in the abbreviation KAP). We are equally sceptical about the meaning of attitudes (A). We limit observations to practices (P). In

Table 5  
*Past and Current Contraceptive Use in Pakistan*

	NIS 1968 %	PFS 1975 %	PLM 1979-80 %	PCPS 1984-85 %
<b>Ever Used</b>				
Any Method	12.1(3)	10.5	4.9	11.8
Programme Method(1)	8.5(4)	8.7	4.3(?)	10.3(?)
<b>Currently Using</b>				
Any Method(2)	5.5(5)	5.2	3.3	9.1
Efficient Method(2)	3.8(6)	3.8	3.2	7.6
Future Use	31.5	57.4	?	?

(1) Condom, diaphragm, foam, jelly or cream, iud, pill, male or female sterilization.

(2) Includes sterilization.

(3) Given as 9 for rural and 19 for Urban in [NIS (1968), p. 63, Table 3.9].

(4) 7 15

(5) 3.7 7.7

(6) 2.2 4.2

Sources: [Shah and Shah (1984), p. 150, Table 9.1] for NIS (1968) and PFS (1975).  
[PCPS (1984-85), pp. 76, 84] for PLM (1979-80) and PCPS (1984-85).

1968, 32 percent of respondents declared their readiness to begin using contraceptives in the future. Seven years later the proportion of users, always very small, declined somewhat, but those who declared their future readiness increased to 57 percent!

In fertility analysis, there are the occasional findings that in the past contraceptive behaviour was overemphasized [Chowdhury (1990)]. This writer is on early record with doubts whether the mechanistic application of family planning programmes imported from Western anthropological cultures can at all be effective without changes in the deeper, underlying circumstances of the society [Krotki 1964)].

On the other hand, the opposite view prevails with considerable determination. For example, "Chesnais points to the lack of recognition of the successes achieved by the developing countries during the past decades. A factor analysis leads Cochrane to conclude that family planning programmes in developing countries are still the most-effective means of controlling fertility" [Steinmann *et al.* (1989)].

For Pakistan there are such reports as "a modest decline in total fertility has begun in recent years, mainly in response to rising age at marriage" [Alam (1984), p. 78]. Other analysts state emphatically "there is no evidence of any decline in Pakistan's fertility rate since the mid-70s" [World Bank (1989), p. xviii]. Conceivably, declines in breastfeeding overwhelmed the effects of delayed marriages.

Promises are made in each programme, in due course deliveries are reported, until demographic evidence surfaces again. We know and remember well the stages: *NIS*, *PFS*, *PLM*, *PCPS*, interspersed by action endeavours, often with fancy names. The most recent chapter in the 40 year old story does not mention family planning among its 13 short-term objectives and the four long-term objectives. Still, this particular responsibility is not forgotten and reemerges under 'population policies and measures'.

### COMMON AND UNCOMMON ELEMENTS AMONG THE SIX QUESTIONS

The principle issue for each of the six questions that do not go away can be summarized as follows. The 'steadiness' observed in the case of proportions under 15 was encouraging. Yet, the need to collect these easily collectable data is not always recognized by Pakistani analysts. For example, in Alam and Dinesen

(1984) there is no age distribution. In moving from the first question that does not go away to the second question, we felt that within the steadfastness of the proportion under 15, we found an ugly duckling in the shape of ages 5–9.

The 'sticking out' age group 5–9 is a puzzle and an impediment to orderly and effective data analysis: Pakistan Institute of Development Economics (PIDE), Pakistan Society of Development Economists (PSDE), National Institute of Population Studies (NIPS), Federal Bureau of Statistics (FBS), Pakistan Household Survey Capability Programme (PHSCP), should put their minds together to think up an investigation to locate the cause of this obvious misreporting.

The next two questions that do not go away have methodological dimensions: how to measure the masculinity ratio by age and how to measure literacy and numeracy. Both questions contain serious policy issues. How to bring women into the mainstream of the society?

The last two questions are so overwhelmingly substantive, that their methodological dimensions are in comparison slight. Should ever vital registration and family planning be treated as serious societal endeavours, the means of measuring the effort and the result will be found.

### THE 'SEVENTH' QUESTION

Something peculiar and unexpected happened to Pakistani censuses in 1972 and in 1981. The 'big' count on a so-called full-count basis was separated from the collection of numerous types of data on sampling basis. Instead of one supporting the other and becoming a source of strength to each other, a complete divorce took place and each part hangs now on its own.

The forthcoming census of 1991 will be arguably, the first truly unreliable population count in Pakistan. Preparations have been delayed longer than on earlier occasions. The British India tradition of leaving the entire task to generalists, must be less and less appropriate in the days of increasing technological dependence. Furthermore, there is politicisation of this far from straightforward national task. Ethnic rumblings are louder than they were in 1981, when impossible results were reported for two ethnicities.<sup>5</sup> The Nigerian model in Pakistan would result in the biggest white area on the demographic map of Asia, not unlike the white area produced by Nigeria on the map of Africa.<sup>6</sup>

<sup>5</sup>A Canadian writer is particularly sensitive to the influence of ethnic considerations on the design, conduct and outcome of a census.

<sup>6</sup>This paragraph was written before subsequent developments put it out-of-date and proved over-optimistic at the time.

## THE SIX QUESTIONS AND THE FUTURE OF SOCIAL SCIENCES

The first four questions received no effective attention through the monitoring and backstopping offered internationally, from the subject matter units in the FBS, and from analysis sections in research organizations.

The last two questions, reinforced by the seventh, might switch attention to sampling surveys of households.

There is a host of topics, methodological and technical, from attention to which social sciences in Pakistan would benefit in the long run. There is the already mentioned advantage in strengthening the measurement of literacy with the measurement of numeracy. The added emphasis could reflect on the domestic and management role of women. There is the need to move away from the outdated concepts and definitions of labour force participation. Studies of time use must become an essential tool to measure contributions to the national income. There is the need to analyze the problems in sex ratio through either measure.

Examples from two countries somewhat removed from conditions of Pakistan point out to the universality of this concern. “. . . a detailed study of the present situation of women in Bahrain and an analysis of the social policies needed to facilitate women's entry into the labour force as an essential component of modern society. the author considers the many cultural, social and religious barriers that now keep women from joining the labour force, and outlines the public policies needed to implement their future participation through a package of programmes and legislation” [publisher's write-up of Fakhro (1990)].

In Canada a statistical report on women has been produced [Canada (1990)]. “The report has been updated and expanded to include additional information on child care costs, common-law union, female lone parents, female representation on teaching staff in universities and community colleges, low-income and part-time workers, and the earning gap between men and women”.

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**Comments on  
"The Six Questions that Do Not Go Away"**

This paper raises important questions about demographic data collection in Pakistan, in particular the inconsistencies and irregularities found in various demographic estimates of censuses and surveys undertaken during the past 40 years. These problems have been specified and discussed under six main headings. These include the steadiness of the proportion under 15 years of age in various censuses, the sticking-out of the proportions aged 5-9 from that aged 0-4 years, problems inherent in estimates of masculinity ratio, female literacy and numeracy, deficient vital registration systems and inadequate information on family planning.

First of all, I would like to appreciate Professor Krotki's efforts to put together relevant data and information from different censuses and surveys in a few tables. Most of us know that his keen interest and awareness about Pakistan's demographic situation and his earlier work on census data has contributed to an understanding of many issues in demographic data collection. I would also agree that the questions raised about data anomalies and fluctuations in the present paper are valid ones and need serious attention from researchers and analysts.

As for his questions about the irregularities in age distribution of population, a simple and logical explanation is the element of age misreporting and under- or over-enumeration in census counts and Pakistan is no exception to that. With an average annual growth rate of 3 percent, we would expect the proportion under 15 to be between the range of 42-45 percent. The problems of higher proportions in ages 5-9 than that of 0-4 are, of course, reflective of both age misreporting (or heaping) in the former and an under-coverage of children in the latter age group. Census counts, even in developed countries of the world with greater resources are subject to under- or over-enumeration. The difference is that they are able to rectify those omissions to some extent while we still remain behind. It is, however, important that we are aware of the inherent problems in our data and need to find ways and methods that could resolve the unusual outcomes.

The next question that the author has raised is related to the problem of using variable definitions for measuring literacy and education in different censuses that result in inconsistent estimates. Whatever the definition of literacy is, we all know that the majority of the population, females in particular, are not liter-

ate/educated as indicated by different estimates in Table 4 of the paper. Given this situation, the problem of measurement of literacy is not the issue, what is more important is to ask how to bring the majority of children not attending school into the education stream and how to improve upon the supply and demand-related issues in education?

The erratic and inconsistent information about family planning is the author's next concern, as shown in Table 5 of the paper. Despite all limitations in those data, we have been able to get a fairly good picture of high fertility levels and low contraceptive use in Pakistan through different fertility and KAP type surveys. In this context, it would be more important to address such questions as to why the fertility transition has been delayed and what has kept contraceptive levels very low among Pakistani women? Is it because of supply constraints, a high demand for children or lack of social readiness to adopt fertility control despite the fact that a substantial proportion of women express the desire for no more children.

Finally, his speculations about the dismal data situation, in particular the 1991 census, leads him to conclude that without PHSCP, there may not be much future for demographic data in Pakistan. This is again questionable because the author has not clearly spelled out in his paper that why and how the role of PHSCP will improve upon the previous situation. The point I would like to emphasize in the end is that errors and omissions are a part of the data gathering game. What is more important is to learn to minimize those errors and make further improvements in what has been done earlier. Professor Krotki's paper in this regard could provide usual guidelines for considering future improvements in the quality of demographic data in Pakistan.

**Naushin Mahmood**

Pakistan Institute of  
Development Economics,  
Islamabad.