Quarterly

Research . & News

Centre for Public Policy & Governance

Forman Christian College (A Chartered University)

Number 04 January 2009

> Special Issue on Population

From the Director's Desk

Demographic Change particularly shifting Age Structures is pivotal for understanding socio-political aspects influencing growth and development. With 69% of its population under the age of 29 years, Pakistan has a tremendous opportunity only if major investments are made in our youth and citizens, otherwise the same youth could be the most serious threat to itself, society and the state. This demographic trend demands that population be recognized as a core national issue and budgetary priorities reoriented from defense & security to population welfare & investment in our youth for securing Pakistan's future.

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Editorial Board

Dr. Saeed Shafqat Raheem ul Haque





Faculty Seminar Series

: Dr. Saeed Shafqat,

Director Centre for Public Policy & Governance gave a presentation on *Demography, Security and Governance: Implications and Future Directions for Pakistan* at the CPPG Faculty Seminar Series on September 11, 2008.



Dr. Shafqat began by stating that population is a core national issue of Pakistan. He argued that it has been trivialized as a family planning and reproductive health issue. In the rural and cultural setting of the country, contraceptive usage and Intrauterine Devices (IUD) have not been welcomed. After over 40 years of family planning programs the Contraceptive Prevalence Rate (CPR) stands at a dismal 30%. Nor has the maternal mortality rate (MMR) (which stands at 276 per 100,000) or infant mortality rate (IMR) (which stands at 78 per 1000) significantly improved in the past two decades, and this is attributed to prevailing religious beliefs and cultural practices. This raises a critical question; was the family planning program properly conceived and implemented? Part of the answer is available in the above mentioned indicators and the other attested by the Pakistani public's perception of family planning programs as a population control mechanism rather than a population welfare choice. Resultantly, it has not received the kind of attention that it deserves from political leaders, policy makers and even those (media, civil society advocates) who could influence the policy process.

Today Pakistan has a population of 170 million (estimated) and in the past three decades (1972–2002) it grew at the rate of 2.45 – 3% per annum, its only recently

that the growth rate has declined to 1.86%. Out of the total population, children aged 5-14 comprise 38 million, youth aged between 15-24, 36 million, totaling 74 million strong which is 45 % of the country's population. In Pakistan fertility is still high (declining from 5.6% in 1992 to 4.1 % in 2006) and life expectancy is also improving (from 58 years in 1972 to 64 years in 2006). Thus, Pakistan does have a reservoir of youthful and productive age population. This demands that family planning and reproductive health should be a priority, however, the critical issue is what is being done or can be done to enhance the educational capacity, technical know how and civic quality of our population? That implies examining cultural practices related to family planning and healthcare, and seeking solutions in changing attitudes and improvising the practices, second recognizing that current and changing age structures demand that population be taken up as a quality and manpower concern. While in the past little effort has been made to link human capital and family planning programs, it is now time to integrate the two and improve indicators of education and health. We need to think of population as a potential source of national power (an asset) or weakness (a liability). It merits attention that managing the largest youth cohort (69% of the population under 29 years of age) in our history offers us a tremendous opportunity. This means that Youth is our strategic asset. Unless we invest in reform and modernization of public sector education, health and skill development, reformulate family planning and healthcare, population indicators are not likely to improve. Therefore, it is imperative that population is treated as the core national issue of strategic importance, where discarding primitive tribal and feudal practices should be part of the cultural reform agenda, where improving quality of our population would mean enhancing our security and national sustainability. Ironically, it is not a coincidence that in contemporary Pakistan, governance is being equated with ensuring citizen and state security rather than working for citizen welfare or developing of state institutions. Shafqat thus called for devising strategies that would help remove cultural impediments to family planning and raise the level of awareness on how and why effective methods and practices were good for an healthy family.

He explored the nature of the debate on population by highlighting two schools of thought by referring to studies put out by the Club of Rome in 1970's. The Alarmists argument links increase in population with the depletion of resources, ecological disaster & conflicts and disruptions of civil order. The first book The limits to Growth made a strong case for lowering human population growth rates arguing that while population grows at an exponential rate, resources increase only at an arithmetic rate. Thus highlighting the un-sustainability of the current development paradigm in which accelerated population growth and high human consumption leads to resource depletion.

The second study, Mankind at Turning Point took an optimist position. It argues that population growth is manageable because man has the capacity to innovate, produce efficient technology, use renewable energy and manage resources efficiently to stem the tide of resource depletion. Thus the real issue is not population growth rate but investing in improving the quality of population; there is no need to be alarmed and instead concentration should be on the capacity of population.

Shafqat then formulated two scenarios based on the alarmists and optimists arguments. The first sounds an alarming note because of the increase in population while the second instead concentrates on Human Capital to manage the implications of population increase. He mentioned Malaysia, Singapore and China as examples fitting optimists because they had invested heavily in education, health and human skills development while Pakistan had not imaginatively planned investment in Human Capital, in fact the country seemed to be on a path to resistance and that was alarming.

Unless we invest in reform and modernization of public sector education, health and skill development, reformulate family planning and healthcare, population indicators are not likely to improve.

Exploring the history of population planning, Shafqat hypothesized the impact of the Cold War on family planning programs. He argued that following World War II, the advanced industrial states saw rising populations in the Third World as a threat and thus provided extensive help to formulate family planning policies. India was the first nation to introduce family planning policy while in Pakistan, President Ayub Khan's era (1959-69) was both hey day of family planning as well as Pakistan's alliance with the US. In the 1960's the US linked foreign aid with adoption of family planning/population control programs in the developing countries. Shafqat argued that such externally influenced population policy formulation did not take into account the cultural context and existing indigenous value structures resultantly the emphasis on contraceptive use and controlling birth rates was resisted. During the 1970's problems of the State and break up of Pakistan had overwhelming social and political consequences and managing population growth rates remained a low priority, however, gender mainstreaming, women representation and social permissiveness made women more visible.

During General Zia-ul- Haq's era (1977-88), there was a benign neglect of population issues as the regime strengthened by the heightened Cold War and alliance with the US, patronized conservative religious forces domestically and went through an orgy of 'Islamization' that showed contemptuous disregard for family planning issues. Unfortunately the promoted brand of Islamization was averse to gender mainstreaming, population welfare and respect for human rights. While the 1990s saw a battle for survival between the dominant political parties (PPP and PML-N); who indulged in outbidding each other rather than devising a coherent population policy.

In the post 9–11 scenarios, the situation has all together changed because governance in Pakistan is no longer an internal issue and claims about upholding sovereignty is only organized hypocrisy. Governance has been redefined in the post 9–11 scenario as international collaboration and funding support have been dominated by US – Pakistan strategic partnership. Being faced with challenges

including territorial integrity and blowback of being the frontline state against the 'war on terror', the role of the military has changed from Huntingtonian model of professionalism to Janowitzian model of Constabulary functions including policing and counter insurgency. The out come has been that concerns about citizen security, law and order and establishing the writ of state gained urgency while policies related to citizen welfare—small healthy family, poverty alleviation, investment in education and skill development continue to be treated as low priority areas. The challenge is to restore a balance between the security needs of the state and welfare demands of the population.

Though there has been collaboration in professional skills development, governance & legal capacity building and education reform & youth through US Aid programs, still the dominant areas of partnership have been security oriented such as counter narcotics, terrorism, money laundering, human trafficking, police and legal reforms. Institutional linkages remain concentrated in military establishments, US State Department Joint Working Group on terrorism, the US Bureau of International Narcotics & Law Enforcement as bilateral agreements between US and Pakistani ministries.

Shafqat then shifted his analysis to the current demographic reality of the country. Illustrating the case of education and health, Shafqat took an Alarmist position and said it is imperative that by 2010 Pakistan add 155,000 extra teachers in the elementary sub-sector and 20,000 each in the secondary and higher secondary sectors. Similarly 175,000 additional doctors, 40,000 nurses and 35,000 hospital beds costing to the tune of Rs 14 billion are required. These are but requisite needs for generating the Human Capital required to manage the demographic transition, not to talk of employment generation to provide a source of livelihood to millions joining the work force every year. Shafgat argued that unnecessary attention has been placed on the less than 5% minority, either the Geeks – the extremely small, bright and privileged who go to top private universities (LUMS, FAST, GIK etc.) predominantly ending up in the global market or the noisy Madrassa educated - a segment of which supposedly adopts a militant route. Instead, the real challenge lies with the 80% (public sector education) who

go to government schools and continue to make up the backbone of the governance structure of the country. If the State does not provide the necessary skills to this bulk of youth, citizen and state security will most definitely become a cause of concern.

This demands investment in improving the quality of manpower to promote conditions that in turn lead to equity, justice and empowerment. If this opportunity is missed the countervailing forces will gain momentum and keep our focus on the issues of security. It merits attention that Pakistan military is the largest state employer (600,000 employees) and not educators and healthcare providers. This needs to change. It demands a clear and sharper focus on employment generation strategies for youth, whereby the State and private sector could develop a shared vision on youth employment and voluntary social services.

66 The real challenge lies with the 80% (public sector education) who go to government schools and continue to make up the backbone of the governance structure of the country.

Falling fertility and rising longevity of life is a global trend. This trend is a cause of concern for the advanced industrial states, where it is projected that in the next 50 years aging of population could create geopolitical implications. As population decline and aging emerge as dominant trends in the advanced industrial states and huge youth bulges in the developing countries, they offer an opportunity for both. In Pakistan where fertility is still high (declining from 5.6% in 1992 to 4.1 % in 2006) and life expectancy is also improving, it is the emerging youth bulge that is likely to create new opportunities and challenges. Currently newspaper headlines of illegally migrating Pakistanis being deported from across Europe and Gulf States is a stark reminder of the challenge; it is now time to invest in improving the skills of our youth to cash upon the opportunity offered by aging in advanced industrial states. The aging population in the West provides tremendous employment opportunities in nursing, health technologies and other service industries. But availing this opportunity requires planning and heavy investment in selected sectors as currently being done by Costa Rica and the Philippines. Similarly skills up-gradation of large sections of service industry including carpenters, mechanics and others would also relieve some stress on internal resources through jobs in developing economies of the Gulf. As a global power US is increasingly realizing that waging a war against global terrorism also means combating a prolonged insurgency. It demands large troop deployment (youth manpower). Similarly occupation of a territory also demands troop deployment, and the entire nation building and re-construction project means large manpower availability. NATO countries faced with declining population can not afford to deploy their troops and get them killed (earlier this year when 10 French soldiers were killed in Afghanistan, the French president Sarkozy rushed to Kabul to show solidarity and share grief). While in the case of US, disengaging from combat in Iraq to focus on Afghanistan demands more troops and manpower. If one makes a count of US deaths in Iraq and Afghanistan, besides the Blacks there is a significant number of Latinos among the troops. These Latino youth (Mexico, Nicaragua, and other Latin American countries) migrants to the US, in some cases opted for military as GI's for a better life. There are reports that some were awarded citizenship posthumously. Global terrorism and US response has radicalized a small segment of Pakistani youth who are becoming increasingly vulnerable to religious militants. This vulnerability can be converted into an opportunity, if adopting a pragmatic approach, Pakistan were to train and export its manpower for employment opportunities in the American defense industry, thus linking the prospects of youth immigration with skill development, vocational and civic education and better economic prospects.

Towards conclusion, Shafqat stated that demographic changes, particularly in age structures, could cause or support violence, security threats and crises of governance. But in a society like ours, territorial disputes (with India and now Afghanistan), ethnic contest (the Pushtoon, Baluch, Sindhi, Mohajir & Punjabi), competing visions about the very basis of Pakistani state and absence of consensus on the nature and direction of political system could exacerbate existing tensions, thus increasing prob-

ability of violence, security threats and conditions that permeate corruption and mismanagement. Adding another hypothesis, he argued that the basis of discourse within a society also affects the way it responds to challenges of population growth. He drew a distinction between belief and knowledge based societies. To a considerable degree he argued that there is an overlap of belief and knowledge base in most societies, but he was emphatic in suggesting that increasingly Pakistan has drifted towards a belief based society. And this has constricted the development of rational thinking and consciousness. He provided an example of the destruction caused by the October 2005 earthquake in the northern areas of the country when innumerable voices explained it as the wrath of God rather than an outcome of ecological destruction, underdeveloped and unregulated infrastructure, and lack of calamity preparedness. This demands not only reform of Madrassa curricula but also focusing on the training of Imam of the Mosque (prayer leader) so that he is able to educate, inform and reassure the grief stricken and the shocked, rather than to aggravate their fears.

It is thus necessary to evaluate demographic change in the context of these political and socio-cultural concerns where it resonates as a governance and security issue deserving policy makers' attention. Doctors and demographers have contributed enormously towards enhancing our understanding about family planning and reproductive health concerns. Now changing age structure and emerging youth bulge demand a paradigm shift in reframing of population issues so that they encompass broader quality of life concerns. Bluntly put a population laden with human capital would be considered an asset while that producing suicide bombers and Jehadis would be a liability deepening reputation crises for the Pakistani State and society. If we miss this decade, we could miss the 21st Century!



Participants at the seminar

Population Dynamics and Security: Public Policy Challenges Ninth Annual Research Conference of the Population Association of Pakistan

: Brief Report on Conference Proceedings

The Ninth Annual Research Conference of Population Association of Pakistan (PAP) was held in collaboration with the Centre for Public Policy and Governance (CPPG), at the Forman Christian College (A Chartered University) Lahore under the theme of *Population Dynamics and Security:* Public Policy Challenges from December 2 - 4, 2008. The previous eight conferences had been held in premier universities and institutions in the major cities of Pakistan that included the Agha Khan University, Karachi, Pakistan Institute of Medical Sciences, Islamabad, University of the Punjab, Lahore, the Agriculture University of Faisalabad, the University of Karachi, the Quaid-e-Azam University, Islamabad and University of Peshawar. The conference was co-sponsored by UNFPA, USAID FALAH project and JSI- PAIMAN project, The David & Lucile Packard Foundation and other International social sector development partners.

The primary focus of the conference was to share knowledge and research that explored the linkages between population growth and security ramifications. In Pakistan, like many developing countries, population growth has led to an array of issues as diverse as poor social outcomes in education and employment, environmental degradation, food scarcity, unbalanced migration, social conflicts, etc. In the three days the conference held eight sessions in which 40 papers were presented followed by heated and stimulating discussions. Hopefully new research, fresh evidence and recommendations presented by the participants will help in informing future policy decisions.

The conference was inaugurated by Dr. M. Owais Farooqui, Chairman, Punjab Chief Minster's Task Force for Environment and was concluded by Honorable Mrs. Neelam Jabbar, Provincial Minister Population Welfare Department Punjab.

In her opening remarks, Dr. Naushin Mahmood, President PAP informed that since its establishment in year 2000, PAP had held 14 regional seminars on different population issues in all provinces of the country and had eight successful annual conferences in collaboration with major universities in different cities of Pakistan. Over these years, she said, PAP has emerged as a strong and effective professional organization to take forward the population agenda. According to her, this year the theme of the conference Population Dynamics and Security: Public *Policy Challenges* was much broader in scope and complex in essence than what it appeared to be. Until recently, attention to population dynamics and related issues has primarily focused on studying the trends, consequences and reduction strategies of high fertility and mortality in terms of widening economic disparities, worsening environmental conditions, depleting natural resources and increasing conflict behavior within and between nations.

She argued the fact that demographic factors have far greater socio-economic and political implications than previously envisaged by either policy makers or academicians. It is thus increasingly becoming evident that investments made in population programs which go beyond immediate interventions in fertility and mortality have in fact enhanced prospects for sustainable human security, particularly with reference to mitigating poverty and im-

Guests of Honor at the Inauguration



Opening remarks by president of PAP



The Chief Guest Dr. M. Owais Farooqui



proving food, health, education and livelihood security. Dr. Amy Coen, CEO & President, Population Action International, USA was especially invited as the Distinguished Key Note Speaker and she did set the tone of the conference. In her address, she highlighted world population trends, association of demographic trends and conflict, demographic security and the complex relations among urbanization, population growth and environment. She also emphasized the importance of education for girls, economic opportunities for women, and access to reproductive health for women.

Dr. Hafeez Pasha was the Guest of Honor. He focused on two areas of concern: the relationship of population dynamics and food security, and overall security in Pakistan in the context of militancy and adverse law and order situations. He appreciated the fact that the present government was cognizant of the situations and was providing agricultural incentives to improve agriculture yield in the country. On behalf of Dr. Peter Armacost, Rector, FC College (who was indisposed) the Welcome address was presented by Dr. Mary Lynda Armacost, wife of the Rector. The representatives of development partners (UNFPA, USAID, Packard Foundation) also spoke on the occasion.

The Closing session was chaired by Mrs. Neelam Jabbar, Minister for Population Welfare, Government of the Punjab. In her remarks she said that in order to provide civic amenities to every citizen, we needed to control the rapidly growing population and a comprehensive awareness campaign would be launched in the province soon. She was emphatic in pointing out the link between data collection and meaningful analysis, and suggested that the Population Department as well as NGOs must be trained in data collection and in conducting actionable policy research. Mrs. Jabbar went on to say that increas-

ing population affected our socio-economic conditions; as 40 million people were living below the poverty line, 58 million people had no access to safe & clean drinking water, 59 million people were living in one room house units whereas only 20% of the population had the facility of trained birth attendant.

She informed the participants that the provincial and federal governments were conscious about the implications of population growth and had launched programs with specific objectives that aimed to reduce the under five mortality rate to less than 65 per thousand live births by the year 2011 target 2015: 45/1000, to reduce the newborn mortality rate to less than 40 per thousand live births target 2015: 40/1000, to reduce maternal mortality ratio to 200 per hundred thousand live births by the year 2011 target 2015: 140/100,000 and to increase the proportion of deliveries attended by skilled birth attendants to 90% by 2015.

The excellent arrangements made by the FC College administration, support staff, student volunteers and most importantly the enthusiastic participation by the faculty and students of the University played a pivotal role in making the conference a resounding success. Over 600 participants from across the country participated in the conference, the sessions were very well attended and the discussions were lively. CPPG along with PAP remains indebted to all those individuals and institutions who contributed towards the success of the conference. A new beginning has been made at the University that clearly demonstrates that FC College has the human capital, managerial capacity and infrastructure to successfully hold international conferences.

Conference Participants



The Chief Guest Mrs. Neelam Jabbar



Guests of Honor at the Concluding Session



: Population Age Structures and their Link to Civil Conflicts and the Environment

Dr. Amy Coen, CEO & President of Population Action International (PAI), Washington, DC delivered the Keynote at the inaugural session of the conference.

Dr. Coen began by describing the world population trends; she drew attention to the fact that though the world population growth rate is slowing, yet 78 million humans are added every year. Thus world population is projected to increase from 6.5 billion to 9.2 billion people by 2050, assuming that the birth rates decline. She observed with current birth rates, however, the World population is projected to increase to 12 billion. Most of this population growth is concentrated in developing countries that would triple (Yemen, Palestinian Territories etc.) or double (Pakistan, Ethiopia etc.) in population by 2050.

Though population growth by itself is a cause of alarm, she pointed out that it is important to explore potential connections between demographic trends, development, governance and security to substantiate claims towards building a political will to counter both population growth and its implications. To reinforce her point Coen drew the attention of the participants to The Demographic Security research study, which explored potential connections between demographic trends and conflict from 1970-1999 specifically exploring the association of high proportions of young adults ("youth bulge"), rapid urban population growth, diminishing supplies of cropland & fresh water and HIV/AIDS-related demographic changes with conflict. Thus, suggesting that very youthful populations are highly vulnerable to civil conflict. The study noted that countries with high percentage of children and youth were 21/2 times as likely to experience conflict during the 1990s.



Distinguished Keynote Speaker Dr. Amy Coen

To elaborate her argument Coen cited another research study *The Shape of Things to Come*, which explores age structures' relation to civil conflicts, economic development and governance. It takes into account all new civil conflicts with state as a party between 1970 and 2000 with a casualty figure of 25. The research categorized countries according to their corresponding age structure as Very Young, Youthful, Transitional and Mature and found that population age structure is a key link between states that are "healthy", in the sense of being more peaceful, democratic, and better able to provide for the needs of their citizens. Age structure also provides insights into the current and future political, economic and security challenges of a country.

Many factors are involved in the relationship between age structure and development and their interaction can't be fully disentangled. Although it is difficult to ascertain a direct causal relationship between age structure and development, however, there is considerable research that claims that countries with a Very Young and Youthful population have historically faced the greatest challenges to their development. But more importantly, age structures are dynamic. The Very Young countries are at the beginning of a demographic transition, with high mortality and fertility rates. At least two-thirds of their population is under age 30. Growing cohorts of young people in conjunction with competition for university seats and jobs; a weak or autocratic government; and declining natural resources generate an environment that ignites civil unrest rather than promote development. In the past three decades, countries with this Very Young age structure have been 2-4 times more likely to experience civil conflict than countries with Mature structures. It is also worth noting that only 13 percent of these countries have had fully democratic governments.

The Youthful countries have the demographic transition well within reach, even with political and economic challenges. Though fertility rates have declined, they are still well above two children per woman and could be as high as eight. Thus these countries are likely to experience continued population growth for the foreseeable future.

In order to achieve a more balanced age structure, access to family planning and reproductive health programs must

be widespread allowing women to fulfill their desired family size. Girls' education is also critical as research shows that each year of girl's education can reduce fertility by 10 percent. Additionally reducing inequalities in education and healthcare access among the poorest, by ensuring that corruption does not siphon away spending on social well-being is critical. Policy recommendations for countries with Very Young and Youthful age structures are similar and Pakistan with 67% of its population under 30 fits in the Very Young age structure.

: Country Based Statistics (according to age structures)

Age Structure	% Population under 30	Likelihood of Conflict	GDP Growth	Fully Democratic
Very Young	> 67%	16%	3.6%	13%
Youthful	60-67%	13%	3.1%	21%
Transitional	45-60%	10%	3.6%	74%
Mature	< 45%	6%	2.4%	83%

Possibly, the key age structure is Transitional with countries in the midst of a demographic transition. Assuming there are enough jobs, with a greater share of people working, governments are able to spend more per capita on social services and thus make great strides in developing a healthy, better educated, more technologically advanced and economically competitive population. But in order for this to happen, the right policies fully integrating women and youth have to be in place for healthcare, education and employment.

Countries with Mature age structures are at the end of the demographic transition. With good overall health, high life expectancy and low fertility rates, these countries are experiencing population aging to varying degrees and in many a decline in overall population. More than 80% of these countries have been full democracies. Additionally they have also been the most peaceful, stable, and wealthiest with only a small percentage 6% (Northern Ireland etc.) that have experienced civil conflict, though these countries have experienced slowdowns in economic growth. Coen observed that through liberal immigration policies most of these countries have been able

to maintain the Immigrant–Mature age structure, thus supplementing their population with migrants. These crafty immigration policies have helped these countries to sustain working age populations for economic growth and reduced the stress on their social security systems.

In some countries, particularly in Africa age structures have changed because of AIDS, including reversal of the decline of death rates in the hardest-hit countries. 90% of fatalities associated with HIV infection occur among people of working age, with the largest concentration of death among the 25 to 39 year old. Economic impact has been pervasive and though greater availability of anti-retroviral drugs has lengthened life spans, mortality among working-age adults and high fertility rates have created an age structure heavily concentrated among children and adolescents, with fewer adults to care for them.

After explaining the analytical constructs, Dr. Coen summarized the findings stating that over the 30-year period analyzed, 80 percent of all outbreaks of conflict occurred in Very Young or Youthful countries, while during the 1990s, countries with a Very Young age structure were three times more likely to experience civil conflict than countries with a Mature age structure. From governance perspective, nearly 90% of Very Young countries had autocratic or weakly democratic governments compared to 80% of Mature countries with fully democratic governments. Though a direct cause and effect relationship is not established, the study argues that policy makers concerned about conflict, economics and governance should pay close attention to age structures.

Over the 30-year period analyzed, 80 percent of all outbreaks of conflict occurred in Very Young or Youthful countries.

Coen's presentation also highlighted the environmental concerns of population growth and its spatial division. She defined 2008 as year of the urban; this was the first year when majority of world's population lived in urban areas. She brought to the attention of the participants

that nearly 3.5 billion people are concentrated on 3% of the planet's land surface. Furthermore the urban population is projected to grow to 6.4 billion by 2050, 80% of which will be in developing countries. Therefore, it is imperative to understand the consequences of urbanization and population growth on Climate Change. She argued that though urbanized countries are in a better position to achieve low carbon intensity by adopting new energy technologies, relatively high urban growth rates in developing countries will increase their carbon emissions through increased energy use. Because most population growth is occurring in countries with low emissions per capita, the rise in population coupled with higher carbon emission per capita does not auger well. While accepting developed world's responsibility for Climate Change, she argued that rapid population growth rate only increases the vulnerability of the developing world to Climate Change impacts.

In conclusion Dr. Coen argued that though population age structure has significant impact on a country's stability, governance, economic development and social well-being, Analysis from mid-1950s through the mid-1990s found high rates of infant mortality as the best single predictor of state failure.

still demography is not destiny. Pakistan has 67% of its population under 30 years of age but only 20% married women use contraceptives and 32% of married couples lack access to it. Room for change is tremendous but only government's political commitment can influence age structures through policies that address the key demographic forces of fertility, mortality and migration. She left the audience with a note of caution stating that the State Failure Task Force's (a consultative group of academics & statistical analysts) analysis from mid-1950s through the mid-1990s found high rates of infant mortality as the best single predictor of state failure.

: World Age Structure 2005



Source: Population Action International

: Migration and Security: Context, Issues and People Trafficking

The session was chaired by Mr. Hasan Mustafa Regional Director, International Organization for Migration Islamabad while Mr. S. M. Khalid Senior Executive Director Planning and Research ADBP acted as the discussant.

Dr. Sabiha H.Syed Director Migration Research Center both moderated as well as provided an overview of the topic at hand. Additionally papers were presented by Dr. Mussarat Jabeen on Managing Migration trends in Balochistan and Mr. Humayun Khan on Forced Migration and its Impact on the Mehsud Tribes.

Syed provided an overview of migration dividing it into Internal and International based on the current nation state system. According to her, though 'Rural To Urban' migration was the predominant and most discussed Internal Migration, it also included 'Urban to Urban' people moving from smaller cities to a larger ones or vice versa and 'Urban to Rural' & 'Rural to Rural' which were limited in Pakistan. She went on to categorize International migration between Regular and Irregular. Regular migrants had proper documentation. They either became Resident migrants of the new country or conducted Seasonal migration, spending only part of the year working there. Irregular migration included Smuggled Persons who invariably gave all their life savings to be smuggled to their destination or Trafficked Persons who were trapped or forced to migrate because of an existing demand at the destination, an example being the camel jockeys sent to the Middle East. Exposing yet another facet of migration, she mentioned individuals or groups that have been forced to flee their homes to escape armed conflict, generalized violence, human rights abuses or natural or man-made disasters. In case of Internal Migration, this is termed 'Internally Displaced Persons (IDPs)' while for International Migration they are called 'Asylum Seekers' and 'Refugees'. She observed that Internal and International Migration have both positive and negative implications. Citing the example of Pakistan, she pointed out that the country has received remittances to the tune of \$ 6 billion a year, but also suffered from 'brain drain' and witnessed social turbulence in regions that were affected by migration. Given this evidence, she pleaded that migration issues need better attention from demographers and policy makers

for improving citizen and state security in the developing states.

Analyzing the impact of Forced Migration on the Mehsud Tribe, Humayun Khan stated that 2.5 – 3 million people have been displaced as the result of military operation in South Waziristan affecting both North Waziristan as well as settled districts such as Tank and Bannu. The study collected data from 100 households (886 members) of Mehsud tribe of South Waziristan displaced to Sarangzona village near Gomal River in the vicinity of Tank. The IDPs had left their homes, closed their shops, selling their livestock while they made their way on foot through tedious mountain routes as regular routes were closed taking 2–3 days in the bitter cold of January.

Economic consequences of military operations were devastating for the Households under study. Out of the 886 members, 245 earned their living through occupational jobs and 51 out of the 60 interviewed had lost their jobs. Livestock was killed during military operation due to shelling or disease while most had left their livestock in the region or sold it at very low prices because of the unstable economic condition and non-availability of shelter and fodder in recipient area. 215 livestock had died among the 100 households interviewed. The property losses were heavy, 26 households had their moveable property completely destroyed, 15 had stuff stolen while 5 had partial destruction. The study estimated that about 400 houses were demolished during the military operation in the Sinkarzai bazaar of South Waziristan alone.

Discussing effects on other aspects of life, Khan stated that although existing educational facilities were bad in Waziristan, the military operation led to the closing of almost all educational institutions. The schools did not have

The session panel



Humayun Khan presenting



the capacity to accommodate the children of migrant families. While the migrants in alien environment suffering from economic and psychological distresses were not ready to send their children to school. In total 58 students were affected but given the low literacy rate, the impact was enormous as only 133 out of the 886 migrants were literate.

The property losses were heavy, 26 households had their moveable property completely destroyed, 15 had stuff stolen while 5 had partial destruction. 77

The trauma of displacement and insecurity had severely affected the health of the community and also created social adjustment problems. The migrants lived a precarious life as 95% of them faced difficulty adjusting to the new culture of the recipient area, while hostile environmental conditions made life equally miserable. Migration which started in the extremely cold weather of January was hard especially on pregnant women, children and the elderly causing deaths. In total 7 deaths occurred during migration while 8 members of the 60 households interviewed suffered injuries. The government had failed to provide free medical camps or health services. A private medical service provider was treating 6-7 migrants' patients daily.

In her presentation on Managing Migration Trends in Balochistan, Dr. Mussarrat Jabeen took a different take and argued that migration patterns are influenced by the nation state systems based on regional relationships and the status of a state in this system. International interests either worked with national power structures or local politicians. She observed that Baluchistan was of vital significance in the regional-international vision of great powers and that the centre-province disharmony made it vulnerable to outside influence.

Jabeen argued that Balochistan's ancient history showed contacts with Egyptian civilization and with Central Asia but the topography and weather of Balochistan kept it as a seasonal migratory destination. It had usually been used as a passage or marginalized land for migrants from neighboring empires because of limited agricultural and food resources. Until recently, the nomad communities moved to and fro across state borders but because of the conflict in Afghanistan and associated state policies, this population has become confined to Balochistan leading to a change in their livelihoods as well as a greater stress on resources.

Jabeen considered geo-strategic valuation of Balochistan because of its confluence of South Asia, Central Asia and Middle East especially the Gulf as its strength. She considered the economic development of Balochistan as a key to progress for South Asia because of it's untapped natural resources and as a bridge for energy development of the region. The weakness lay in the brain drain, lack of local human resources and thus a dependency on outsiders for development, while the disintegration of USSR leading to economic independence of Central Asian States had created a huge economic opportunity for Balochistan as a gateway to Central Asia. Discussing threats, Jabeen stated the recurrent conflict in Afghanistan, center province disharmony, law and order situation, regional policies of the nation state system and passive globalization. In her view, the contemporary politics of Balochistan was defined by the fight for Baluch identity and a struggle for appropriate and just allocation of resources between federation and the province; the critical question being who should get what and how from the resource rich province?

The discussion that followed raised the issue that Western analysts look at in-migration as a security threat, not giving adequate attention to the positive aspects of in-migration. Participants observed that Pakistan should develop a comprehensive migration policy encompassing both Internal and International Migration. Pakistan had 2 million migrants in the Gulf while 33% remittances came from the US. In addition to Iranian and Nepali refugees, it was host to 3 million Afghans and 1 million Bangladeshis, out of which 2 million resided in Karachi.

66 Weakness lay in the brain drain, lack of local human resources and ... a dependency on outsiders for development. 9 9

: Urban Growth, Environment and Security

The technical session was chaired by Dr. Iqrar Ahmad Khan Vice Chancellor University of Faisalabad. Dr. Durr-e-Nayab Senior Research Anthropologist PIDE was the discussant while Dr. Mohammad Hafeez Director Institute of Social and Cultural Studies, Punjab University acted as the moderator. Dr. Reza Ali presented his paper Urbanization and Urban Growth in Pakistan: An Overview. Dr. S. M Taha & Ms. Suraiya Khwajazada presented their paper Policy Intervention for Managing Population Proliferation for Politically and Environmentally Sustainable Urban Development in Karachi while Mr. Adeel Riaz & Mr. Romman James, both students at the Department of Economics, FC College presented on Urban Growth Environment and Security: A Case Study of Lahore.

Dr. Taha started his presentation by describing the importance of Karachi both for the province of Sindh and for Pakistan. It is the largest city with a population of 9.8 million according to the 1998 Census but today its population is estimated to be around 20 million. Until recently it was the only trading port of the country. Karachi plays a pivotal role in the country's economy; the city contributes 25% to federal revenues, 15% to the GDP, holds 50% of the country's bank deposits and 72% of all issued capital. It employs 71.6% of total employed labor force of Sindh and contains 32% of the total industrial assets of the country. Karachi manifests the multicultural and pluralist spirit of Pakistan; it is cosmopolitan and melting pot of Pakistani ethno-lingual identities. The 1998 Census catalogued that the city comprised of -- Urdu Speaking - 48.52%, Punjabi - 13.94%, Sindhi - 7.22%, Pashto - 11.42%, Balochi - 4.34%, Seraiki - 2.11 and others - 12.44%. Despite serious challenges of governance and infrastructural development, Karachi remains the most dynamic and vibrant city of Pakistan.

Describing the reasons for 4.8% growth of Karachi compared to 2.9% for the country, Taha listed two factors: 1) continuous in-migration beginning with 600,000 refugees at the time of independence; 2) availability of relatively better economic opportunities compared to other parts of the country. The late 60s and 70s saw the green revolution's mechanization of farming creating excess rural labor, industrialization started apace with construction of

Steel Mill and Export Promotion Zone supported by Port Qasim. The magnitude of employment opportunities could be assessed by the expansion of trade as the Karachi port handled 26 million tons of cargo in 1991 compared to just 2.8 million in 1951. Karachi continues to reinforce the linkage between migration and opportunity. Iranian Revolution and Soviet intervention in Afghanistan (1979) pushed another wave of migrants. More recently displaced people from FATA and other tribal areas of the country have also poured into Karachi.

Taha threw light on another facet of Migration—the illegal settlements which have made Karachi home to thousands of migrants since 2002. His study specifies economic hardship - 60%, forced migration -15%, natural disaster - 5%, conscious decision - 5%, social connection - 12% and seasonal migration - 3% as the migratory reasons. But these numbers underplay social connection with existing residents, a factor that encourages people in distress from all across the country to move towards Karachi. This very interplay of social connection, lack of existing housing facilities has led to the city's ethnic segregation and thus a lack of bridging social capital among communities, creating potential conditions for social conflict. This demographic dynamic, Taha observed led to unplanned illegal settlements reinforcing separation of communities and political reinforcement of ethnic based identity that eventually gave rise to conflicts in Karachi. Demographic factors also have a bearing on electoral politics; for example, until the 1977 elections, Karachi voted across ethnic lines returning nine opposition leaders to the national assembly. It was only the 1988 elections held at the heels of 1984 and 1986 conflicts between the Urdu speaking and Pathan communities that saw the rise of ethnicity based politics in Karachi. Due to paucity of quality research on the nature and number of emerging social/political conflicts in Karachi, researchers and policy analysts frame these conflicts by focusing on Mohajir and Pathan communities who interestingly are neither competitor in business; have no competing electoral constituency, no cultural conflict or a majority-minority issue. Thus, Taha asserts that the clashes were politically motivated for ulterior designs of the military-civil bureaucracy and the political leadership.

Poor urban planning is another issue that Taha raises while tracing the woes of Karachi. He explores the various city plans over the country's history. The Merz Ren-

dall Vatten (MRV) plan of the 1950s was designed by a Swedish firm which proposed a road network and a mass transit rail system keeping in view of the future expansion of the city. It envisaged refugee settlements in high rise apartment buildings in the city centre along with the university and government buildings. But its population growth projections of 3 million by year 2000 were grossly underestimated. A major reason for its lack of implementation was the 1953 anti-government student protests which convinced the then government to keep the students and the general population away from one another and also from the center city.

It's no surprise that the next Greater Karachi Resettlement Plan (GKRP) proposed creating new townships in the outskirts of the city, in the East – Korangi and North - New Karachi Township. It envisaged accommodating 119,000 homeless in the short term and developing housing for 300,000 families over twenty years. The plan included developing large industrial areas for employment opportunities in the vicinity of new townships to make them self contained. Though the plan facilitated removal of slums from inner city, the failure to meet the target of constructing 45,000 one room houses as only 10,000 units were built until 1964, of establishing a working public transport system or even a road network to planned sites instead led to the development of squatter settlements along the road linking new townships to the city centre. Still the plan had long term influence on city's development as the direction of city growth continues towards the North-east.

The Karachi Master Plan (KMP) of 1974–85 was the first indigenous attempt to develop an integrated plan with a Land use strategy identifying areas for institutional development, recreation, environment enhancement and industrial growth. It included 590,000 new houses for 1.5 million people, improvement and regularization of Katchi Abadies (slums) and new support schemes for low to moderate income households. It planned for a city bus system,

extension of circular railway, and bridges on the Lyari River. But again this Plan could not be fully implemented as it regularized only 18,000 of the 223,000 informal houses. Similarly lack of technical & social services and most importantly credit kept low income groups from making use of government schemes leading to further growth of the informal housing sector. The provision of land and credit at subsidized rates to large private developers instead saw the development of luxury high rise apartment buildings in the West of the city along Clifton Beach leading to a class based demographic divide of the city. During this period Taha notes that the dynamics of squatter settlement and the building mafia had become so powerful that the Karachi Master Plan 1986-2000 did not even consider the informal sector because the strength of entrenched vested interests (mafia and their links in the administration) was far greater than the institutional capacity of the Karachi Development Authority (KDA).

Analyzing the four urban development plans for Karachi, Taha argued for an efficient and effective land development control system integrating both negative (zoning, building permits, vacant land taxation and use of leases) and positive (development of urbanized land, regularization of Katchi Abadis and provision of infrastructure for new projects) control functions. Though he mentioned inadequacies of the legal framework composed of various ordinances, inequities in taxes leading to revenue shortage for city administration, more importantly it was the fragmentation of municipal laws, decision making bodies and various municipal service providers that were at the root of the problem. As KDA controlled only 29.3% of the area of Karachi, it was no surprise that Karachi presented a picture of one of the most unplanned cities of the world. Life in Karachi had become an increasingly un-regulated affair with informal housing dominating the city and the population of Katchi Abadis increasing from 2 million in 1978 to 3.4 million in 1988. Taha articulated how lack of public services provision to the informal sector including a





FC College students Adeel Riaz and Romman James presenting their paper

public transport system lack of coordination among various city administration departments and service providers had only led to un-sustainability of the current services infrastructure, an outcome of rising electrical line losses and the entrenchment of building mafias. He argued that only a strong city government could create coherence in policy making by bringing together the various agencies but this required a strong political will.

Discussing Lahore, the second largest city and the provincial capital of Punjab, Riaz and James concentrated on environmental aspects of population growth; analyzing air and drinking water pollution and the decrease of tree plantations in the city. The growth of Lahore had proceeded South and Southwest because of the Indian border in the East and flood conditions in the North. The population of the district stood at 8.2 million according to Punjab Development Report 2008 increasing from 0.85 million in 1951 and 6.32 million in 1998, at the growth rate of 3.5%. The in-migration to Lahore was lower and different from Karachi as 70.5% of migrants were from the same province compared to 12.1% from the rest of the country and 17.4% from other countries (predominantly Afghans). Thus Lahore was culturally much more homogenous which encouraged minority ethnic groups to assimilate rather than assert for a separate identity.

Raising pollution as a major health and life hazard for the city, they pointed out that 1.9% of city residents die because of air pollution every year. The main source is vehicular pollution, which is directly linked to population of the city. Further more the study noted that Punjab government's water sample testing of 222 locations across the city indicated contamination in 80% samples. In another study, the Pakistan Council for Research in Water Resources found all 16 samples from Lahore to be unsafe for the last four consecutive years owing to presence of arsenic, iron and fecal coli form bacteria. The microbial contaminants cause cholera, diarrhea, dysentery, hepatitis and typhoid while arsenic causes cancer, hypertension, heart and kidney diseases.

The other casualty of urban sprawl and population growth is forest covered area which allows the concrete built city to breathe. But horizontal rather than vertical expansion of Lahore has led to suburbanization with the poor living on the periphery without proper infrastructural facilities and the rich moving into gated communities at city out-

skirts. Suffering from a decaying public transport system while encouraging citizens' personalized transport, the city has witnessed mushrooming of CNG gas stations and petrol pumps in addition to road widening causing further de-plantation of trees and decrease of open spaces. But city authorities have not even planted all available area as out of the total area of 9,706 acres, 5,011 are cropped while 4,695 acres still remain available.

Urbanization demands urban planning to manage excessive population growth of large urban centers. However, it is equally important to understand that mega cities are an outcome of a skewed national development strategy which concentrates and limits employment creation, infrastructural and social sector development to only a select few large cities. This momentum is carried by the private sector which invests based on its infrastructural and human resource needs requiring good quality schools and hospitals for employee retention, while the media only covers and caters to large urban and political centers dictated by its advertisers' marketing needs. This leaves no option for rural migrants (elite or underprivileged) but to move to the mega city by passing the underdeveloped mid sized town.

: Government Institutions in Karachi

Institution	Area Controlled	% of Total
Karachi Development Authority	124,676	29.3
Cantonment Board	18,596	4.4
Karachi Municipal Corp.	24,189	5.7
Defense Housing Society	16,567	3.9
Steel Mill	19,461	4.6
Port Qasim	12,961	3.0
Port Trust	25,259	3.6
Railways	3,119	0.7
Private	27,862	6.5
Government of Sindh	137,687	32.4
Government of Pakistan	4,051	1.0
Cooperate Housing Societies	15,721	3.7
Sindh Industrial Trade Estate	5,380	1.3
Total	173,166	100

Source: S. M. Taha

: Population and Food Security Linkages

The technical session was chaired by Dr. Mohammed Burale Farah Representative Food and Agriculture Organization, Islamabad. It was moderated by Dr. Ali M. Mir Director Program Population Council, Islamabad while Mr. Mehboob Sultan Former Director National Institute of Population Studies acted as the discussant. Dr. Razaque Rukanuddin & Dr Akhter Hassan Khan presented their paper on Food Security Prospects for Pakistan. Dr. A. R. Chaudhry & Ms. Shehr Bano presented on Low Agriculture Productivity with Rising Population & Food Insecurity Linkages in Pakistan while Mr. Ahmed Rafay Alam discussed Urban Demand and Rural Supply: The Nexus between Climate Change, Population Dynamics and Food Security. Dr. Umer Farooq and Mr. Munir Ahmad presented on Feeding a Growing Population: Prospects and Challenges.



Session Chair Dr. Mohammed Burale Farah



The session speakers

The session started with a general overview of food security in Pakistan. Dr. Chaudhry began by articulating that food and safe drinking water were first among the needs of human beings. Though Malthusian prediction of famines had not come to pass, the impact of increased population on the environment and food viability was

severe. According to the 2007–08 Economic Survey, while a decline in GDP share of agriculture from 24% to 21% by itself was not a cause of concern, the implication of low agricultural productivity especially when population was projected to reach 295 million by 2050 only heightened food security concerns.

Dr. Rukanuddin defined Food Security as access of all people to food needed for a healthy life. This required food 'Availability' through adequate production and trade; 'Accessibility' to citizens at the remotest periphery; 'Affordability' for the poorest households irrespective of market prices; 'Utilization' to meet essential nutritional requirements and 'Sustainability' to manage all above listed requirements through demographic, economic and environmental changes. Dr. Ahmed stated that Pakistan's food security policy was aimed at attaining and maintaining food self-sufficiency by making basic food grains (mainly wheat) available to all citizens at affordable prices.

It was pointed out that overall crop production, average yield, average per capita calorie intake and per capita availability of food items including wheat, rice, milk and meat had slightly increased over time; instead it was the deficiency in meeting overall food requirements of the population that had increased insecurity. During 1970-71, Pakistan's food trade (including wheat, rice, edible oil, tea, pulses, fish & milk products, vegetables and fruits etc.) had a net-gain of nearly 50 million rupees, which changed to a net deficit of 4 billion rupees in 1985-86, further increasing to 20 billion rupees in 2006-07. Today, as a consequence of population increase, urbanization, change in consumption patterns and family structures, the national production of sugarcane has to increase by 1.4% while that of fruits and vegetables by 79.7% just to fulfill these items' needs by 2015.

The discussion primarily was about wheat, the main staple crop whose production was 10% less than the 24 million required targets of 21.8 million tons (MT). While Punjab remained a wheat surplus province, all other provinces ran a deficit with even Sindh 1.35 MT short of its wheat requirements. The district level data showed further granularity with only 8 out of the 17 Sindh districts sufficient in wheat production while the rest were in deficit. The other main point highlighted was food inflation which

increased poverty by 14% to 77 million, while citizens with serious food deficiency (1700 calories/day) went up from 35 million to 45 million, a 29% increase. This had led the poorest two quintiles to increase their share of income spending on atta (wheat) to around 70%.

Wheat support price should be fixed according to an informed process rather than an arbitrary political whim. ??

In discussing the reasons for such drastic food insecurity in a country with the largest contiguous canal network in the world, Farooq mentioned a plethora of reasons including fluctuating wheat production. He argued that wheat support price should be fixed according to an informed process rather than an arbitrary political whim. 86% of all farmers owned less than 12.5 acres covering 48% of all cultivable area. These farmers did not produce any wheat surplus and thus a higher wheat support price only benefited large farmers at the expense of rural landless and the urban poor. Instead the presenters argued for subsidized inputs to improve the production function of all farmers. Dr. Rukanuddin further presented input price comparison between India and Pakistan to drill the point home.

: Agriculture Input Price Comparison in Pak Rupees

	India	Pakistan
Power Tariff	0	3,28
Diesel	53	50,20
DAP	944	2800
Urea	480	608

Source: Rukanuddin & Khan

Concentrating on agricultural governance, Dr. Farooq argued for consistent planning through correct assessment of area under cultivation, measurement of yield per hectare and total production. He showed a static wheat yield graph spanning the last ten years. When compared with other countries, the wheat yield of Pakistan stood at 26 maunds/acre as compared to 28 for India and 43

for China. He articulated low genetic potential of varieties, slow varietals replacement of 12 years when world-wide average was 5, the lack of a seed marketing system especially of pulses and fodder crops, highly imbalanced use of inputs particularly fertilizer and inefficient food procurement & distribution systems as important governance issues. Giving an example, he submitted that wheat yield can be easily increased by 10% if certified seed was grown by all farmer compared to the current 30%.

For agriculture policy solutions, Faroog had four sets of recommendations. First, a clear differentiation between large and small farmers by promoting cash and marketable crops for resource rich large farmers and highly labor intensive food crops for small farmers. He further argued for rural labor absorption through improved and diversified rural livelihoods by promoting value added non-farm and high value farm sectors. Second, for factor productivity improvement, he suggested applicable research to produce seed strains for comparative advantage based on weather and soil conditions. Third, he suggested institutional reforms and capacity building for both the supply and demand side through adoption of better water harvesting measures, irrigation efficiency improvements, cropping management systems, natural resource rehabilitation & management, and strengthened input marketing & food procurement. His vision encompassed reforms of provincial agri-extension departments and Agriculture Policy Institute in addition to creation of Food and Nutritional Policy Research Institute (FNPRI) and a National Commission on Farmers (NCF).

Farooq envisioned an integrated food management policy encompassing food security & nutrition policy informed by agriculture. He suggested that irrigation and rural development ministries maintain a reserve stock of 4 million tones of wheat which would remove quirks of same season import and export and most importantly provide a cushion from market driven global food price fluctuations.

The wheat yield of Pakistan stood at 26 maunds/acre as compared to 28 for India and 43 for China.

: Repositioning Family Planning as a Health Intervention

The panel discussion was chaired by Mr. Javed Jabbar, Former Minister for Information while Ms. Shahida Azfar Chief of Party FALAH Project, Population Council moderated it. Dr. Zeba Sathar Country Director Pakistan Population Council, Dr. Ghazala Mahmud Head of Department MCHC-PIMS, Ms. Katie McDonald Associate Mission Director Democracy & Health USAID and Ms. Khawar Mumtaz Advisor Shirkat Gah were the participants.

Dr. Zeba Sathar gave the initial presentation. She argued that Family Planning (FP) has been wrongly positioned as a stand alone effort and wrongly understood as a means for controlling numbers. Rather it is the cheapest and the most effective intervention for achieving Millennium Development Goals (MDG) 4 to reduce Under-five Mortality Rate (UMR) by 2/3 (between 1990 and 2015), a target figure of 40 per 1000 live births and also MDG 5 to reduce Maternal Mortality Rate (MMR) by ³/₅ (between 1990 and 2015), a target of 140 per 100,000 live births in addition to achieving universal access to reproductive health. She further argued that FP would also help in achieving MDG 1: eradicating extreme poverty and hunger and MDG 2: achieving universal primary education.

Her focus was to convince the audience of the dire need to mainstream FP as a health and development intervention. She first detailed the current reality based on the data from Pakistan Demographic Health Survey (PDHS) 2006–07. The present rate of MMR is 278 which given the current pace will decrease to 220 by 2015, eighty above the MDG 5 target of 140. Similarly the current Infant Mortality Rate (IMR) stands at 78 decreasing to 61

Katie McDonald & Khawar Mumtaz speaking





at current pace against the MDG 4 target of 40. Sather's proposed thesis was that high fertility was the biggest hurdle in achieving MDG 4 & 5 and FP was most effective in reducing unwanted fertility. Thus FP was the most needed health intervention in the country, but current FP programs concentrated too much on controlling numbers rather than on pregnancy spacing and healthy maternal and fetal outcomes.

Wanted Fertility has drastically decreased while Unwanted Fertility has increased over time creating a huge potential for decreasing fertility.

Arguing the first part of her thesis, Sathar presented data showing that Wanted Fertility had drastically decreased while Unwanted Fertility had increased over time creating a huge potential for decreasing fertility. In contrast to 1991 when Wanted & Unwanted Total Fertility Rates (TFR) were 4.7 and 0.7 respectively, in 2007 corresponding TFRs stood at 3.1 and 1.0. Further elaborating, she presented data showing how there was more demand for birth spacing at earlier births while mothers did not likely want more children at later births. After the first birth, 49.9% of women 'want more children later' and only 4.1% 'want no more children'. But after three births the numbers flip with 48.2% women wanting no more births while only 22.8% wanting more children later.

To further hit her point home about mothers not wanting more children, Sathar presented statistics on Unsafe Abortions and their consequences. Out of the total 5 million annual pregnancies in Pakistan, about 1 million (20%) are terminated through induced abortions usually taking place under unsafe conditions as abortion is illegal in the country. These abortions result in 250,000 complications, further leading to 1,500 deaths in addition to the known 11,000 maternal deaths from 4 million births. This provides enough evidence to suggest that there is a need among women to limit their fertility. Thus the question: Is this need being fulfilled and how can it be best met? With only 30% of parents using contraceptives and a Contraceptive Prevalence Rate (CPR) of 36, it can be convincingly stated that the need is not being met.

Specifically regarding mother's health, Sathar presented strong evidence that lowering fertility is the best means to reduce MMR. Basing scenarios on the current MMR of 276 with General Fertility Rate (GFR) at 135 and Skilled Birth Attendance (SBA) at 39%, she showed that by increasing SBA to 50% while keeping GFR constant, MMR would decrease to 237; by decreasing GFR to 100 while keeping SBA constant, MMR would decrease to 182; but with GFR at 100 and SBA at 50%, MMR would decrease to 156, slightly above the 140 MDG 5 target.

Sathar then shifted focus to IMR arguing that although IMR had decreased quite a bit from 1991 to 2007, IMR had not come down proportionally primarily because of a slight increase in Neonatal Mortality Rate (NMR) during the same time period. Thus stressing the need to concentrate on mother's health as neonatal mortality was directly linked to MMR. To substantiate her argument, she explained the statistics for NMR and Post-neonatal Mortality Rate based on Birth to Conception Interval (BCI). For BCI of less than 6 month, the rates were 103 and 44 respectively, decreasing to 26 and 22 as BCI increased to a 24–29 month period. Thus about 96,600 infant deaths could be limited if the minimum interval was greater than 24 months.

Further, research also indicated the affect of increased fertility on mother and child welfare as demonstrated by the following table.

: Maternal Health Outcomes

	<=3 Births	>=6 Births
Child Immunization	50%	37%
Skilled Antenatal Care	66%	50%
Pregnancy Complications	19%	29%
Skilled Birth Attendance	43%	25%

Source: PDHS 2007

One can also argue that factors including education and material resources affect fertility or have a bidirectional relationship. Education leads to lower fertility rates as indicated by Total Wanted Fertility and Unwanted Fertility

Dr. Zeba Sathar presenting



The audience



Rates for the uneducated at 3.7 and 1.1 as compared to 1.8 and 0.5 for the higher educated. Additionally children especially girls with fewer siblings are more likely to enter and stay in school as indicated by the enrollment rate of 77% for girls with 2 or less siblings compared to 58% with 5+ siblings. For boys the difference is much lower. Thus fertility even impacts MDG 2 and MDG 3: eliminating gender disparity in primary and secondary education.

Exploring ways to lower fertility, Sathar put greatest stress on the need to delay or curtail unwanted fertility to improve maternal & child health. She argued that babies born with less than an 18 month BCI were much more likely to be undernourished and thus more prone to mortality. Additionally shorter intervals in successive births lead to higher mistimed and unwanted births. For an interval of < 1 year, mistimed and unwanted births are 23% and 16% respectively, for 2 years they decrease to 17% and 17% while for a period of 3 years they further decrease to 9% and 16% respectively.

Maternal and child health implications of shorter intervals were further explored by Dr. Ghazala Mahmud, who argued that the main cause of maternal mortality was too many births, too short an intervals and the mother's age group- too young or too old. She suggested an "Optimal Birth Spacing Interval" (OBSI – time period between births associated with the healthiest outcomes for pregnancies, newborns and mothers) stating that World Health Organization (WHO) had suggested a birth spacing interval (interval from one birth to the next) of 2–3 years while US Aid recommends 3–5 years. Instead, in Pakistan

75.5% women gave birth in less than 36 months after the last birth. Though her chart reflected that mother morbidity (Third Trimester Bleeding, Anemia, Premature rupture of membranes, Puerperal Endometritis) and mortality drastically decreased by an 18 month birth to birth interval, perinatal outcomes presented a different picture as birth to pregnancy interval of < 18 months and > 59 months increased the risk of pre-term births and low birth weights. Data suggested that relative risk of dying (Adjusted Odds Ratio) decreased from 3.87 to 1 when the interval increased from < 24 months to a period of 36-47 months

She further quoted from research literature how pregnancy within 6 months of a live birth leads to 650% higher risk of induced abortion, 150% of maternal death, 70% of pre-term birth, 230% of miscarriage and 220% higher risk of infant mortality. Similarly pregnancy soon after miscarriage or abortion carries an increased risk.

Katie McDonald while agreeing with Sathar on the need to curtail fertility furthered Mahmud's point by arguing for Healthy Timing and Spacing of Pregnancy (HTSP) strategy which goes beyond OBSI's fertility reduction focus, instead concentrating on the role of contraception for healthy pregnancy outcomes and healthy fertility. Quoting results of HTSP programs in Egypt (2003–2005), where CPR increased from around 50% to 80%, she articulated that family planning increased substantially in a relatively short period of time when families learnt of pregnancy delay and spacing being associated with greater health for the mother and infant

There was an overall consensus that limiting fertility by increasing birth intervals and fulfilling unwanted pregnancies was imperative to improve maternal and child health. In addition it improved outcomes for children education and gender equality. The suggested strategy of HTSP primarily reorients FP from a numbers game to a health intervention making it a need for a healthy mother and child. This could also be the only way to convince the recipient, the man and the family to decrease fertility. But it is not enough to counter societal pressures to have a child within three months of marriage or to require a boy child.

The suggested HTSP strategy should include advocacy,

Limiting fertility by increasing birth intervals and fulfilling unwanted pregnancies was imperative to improve maternal and child health. 29

training and counseling linking child spacing and fertility to maternal and child health. Awareness of these issues needs to be raised among policy makers, families, men, the recipient and the marriageable age group. The current Behaviour Change Communication (BCC) programs lack publicity of risks & benefits of pregnancy spacing, availability of HTSP training material and awareness of optimal family planning methods. Only by raising the service delivery's institutional capacity for antenatal counseling, postnatal clinic visits, evaluation & monitoring of birth spacing methods and knowledge collection around pregnancy & postnatal time period can family planning programs be transformed into the health intervention strategy required for better acceptability by communities.

: Optimal Contraceptive Methods

Method	Failure Rate %	Advantage
Natural Family Planning	25	No adverse effects, immediate return to fertility
Male Condom	3-14	Readily available, inexpensive, protection against STI's
Female Condom	15	Protection against STI's
Implants	0.2-1.1	No adverse effect on breast milk production
Breast Feeding	0.5-2	Involution occurs rapidly, suppresses menstruation
Combined Oral	0.1-5	Prevent against benign breast diseases, PID, & functional cysts
Protestogen Only Pill	7	Fertility restored after cessation, reduces risk of thromboembolism
Female Sterilization	0.8	Permanent form of contraception
Coitus Interruptus	4-19	Immediate availability, no devices, no cost

Source: Contraception e-medicine 2008

: Population and Health Policy Data for Policy Making

The panel discussion was chaired by Prof. Dr. Mohammad Nizammuddin Vice Chancellor, University of Gujrat and moderated by Dr. Arshad Mahmood Director Monitoring & Evaluation, Population Council. The panelists included Dr. Mehtab S. Karim Senior Research Advisor Pew Research Center, Dr. Inam ul Haq Senior Health Specialist The World Bank Islamabad and Mr. Mehboob Sultan Former Director National Institute of Population Studies.

Karim started his presentation by defining policy as a course of action adopted and pursued by a government, party, ruler or a statesman which has political implications and is thus constrained by both domestic and international political, socio-cultural and economic pressures. He considered policy making as a non-linear, complex and multifaceted process aimed at finding solutions to specific problems. Thus it ought to be evidenced based rather than being limited by the non-technical background of policy makers. Additionally the evidence needs to account for the interest of different stake holders who are affectees or sponsors but have to be a part of the solution.

However, in Pakistan instead the "Garbage Can" model is followed for policy making where problems, stake holder interests, bureaucracy's opinions and politician's stake are all put in a trash can and out comes a policy without any logical basis or reasoning usually ignoring an evidence based decision making process. Karim highlighted mutual stereotypes. While policymakers are considered uninterested having limited perspective, are distrustful of researchers and not inclined to draw implications from data, the researchers instead are thought to usually avoid policy implications of their findings, are incomprehensible by their use of excessive technical jargon and provide inconclusive generalizations about broad theoretical matters with little appreciation of real problems.

Karim examined both the theoretical as well as the practical aspects of policy making process. Theoretically, the decision-making process entails prioritizing goals and objectives, systematically examining alternative solutions, practicing rational decision-making and choosing alternatives that maximize benefits. Practically, policy making is

a political art form that creates a window of opportunity for policy development through the interplay of policy agenda setting and stake holders' coalition building to devise policy decisions. Policy agenda entails setting clear, measurable indicators, and attention-focusing milestones while providing feasible policy or program alternatives for discussion. Coalition Building requires linking together individuals from the government, academic community, NGOs, advocacy and citizen representative groups, commercial sector and other stakeholders such as the media. Their interplay involves utilizing research findings to explore implications of policy alternatives before formulating actual policy recommendations. Analyzing implications serves as a bridge between key research findings and policy recommendations by providing guidelines to policy makers in interpreting the findings and collectively critiquing the direction for alternative policy options. Thus helping formulate policy recommendations which are specific, measurable, action-oriented, realistic and time bound.

After discussing the conceptual definition of policy making, Karim posed the question 'Can this actually be done in Pakistan?' and proceeded to answer. He stated that the prerequisites were appropriate and accurate data in addition to a willingness to utilize this data for policy making. There were three sources of demographic and health data: the census, registration of vital events and sample surveys. But in Pakistan there was no registration system while the latest census had been delayed. Therefore, researchers could only rely on sample survey data.

66 ... unfortunately there was no integration of available data. More importantly this data had been used rarely for policy formulation.

Still there was no lack of data at least in population and health related issues as several national surveys had been conducted in Pakistan in the last two decades including Pakistan Demographic & Health Survey: (1990–91, 2006–07), National Health Survey of Pakistan: 1990–94,

Pakistan Family Planning & Fertility Survey: 1996-97, Pakistan Integrated Household Surveys (various years) and Pakistan Reproductive Health & Family Planning Survey: 2000-01. In addition, population and health related data was also routinely collected at the grass root level, at district and provincial levels through several small scale surveys confined to specific geographic areas/groups by the government, NGOs and other sources to address local population and health issues. But unfortunately there was no integration of available data. More importantly this data had been used rarely for policy formulation.

Haq raised other aspects of research data acquisition. He stressed the need for an organizational structure to collect data and considered institutionalization as the key difference between the health and population sectors. Population sector had an institutional structure for collecting, aggregating and analyzing data that was lacked by the health sector.

He stated that the following categories of data need to be collected for population and health: 1) Population & Health Outcomes 2) Services & Immunization Coverage 3) Human Resource, Financial and Infrastructural Outcomes 4) Disease Term & Epidemics and 5) Risk Factors & Behavior. More importantly the bigger picture needed to be kept in mind with a clear vision of the use of data before it's collected. Only then a proper assessment of the tradeoff between relevance and comparability could be made to identify items requiring measurement. Substantiating his argument with an example, he stated that although there was a mix of both public and private in population and health sectors, very little data was available for the private sector indicating a lack of vision and sector based holistic strategy.

The lack of results based culture at the root of Pakistan's governance problems as it limited the systems ability to deliver and did not allow for evolving a clear strategic vision to outline objectives and results.

Pakistan did not have real time information collection especially of infant and under five mortality rates. No system existed to track risk factors and behavior while disease surveillance mechanism only existed for Polio. There was no coordination in the functioning of various government departments and no integration among their various information systems. Instead, the predominantly used Sample Data was intermittent allowing analysis of early data sets while exploration of time series data and trends required extensive individual effort by researchers. Hag considered the lack of results based culture at the root of Pakistan's governance problems as it limited the systems ability to deliver and did not allow for evolving a clear strategic vision to outline objectives and results. It complemented the inadequate emphasis on the state to collect and analyze data, to monitor and conduct performance evaluation of various sectors and to improve the poor organizational capacity both at the provincial and federal level. Though policies existed, they were general, immeasurable leaving the state unaccountable with little emphasis on building institutional capacity for public sector appraisal. No wonder Pakistan had started to lag behind other South Asian countries in development indicators. Haq ended with a note of hope by providing an example of the initiative of the Pukhtoonkha government to measure disaggregated district level information in the health sector which would allow for performance analysis.

Sultan seconded Hag in putting the onus on the Pakistani State to fulfill its critical function of collecting data to track results of running policies arguing instead that it was lack of state's accountability towards the populace that had led to a lack of interest in funding data collection activities. When the motivation for policy making was other than benefiting the populace, there was no need to promote a results based culture or to formulate evidence based policy. While accepting differences in research capital between health and population sectors, he disagreed that organizational structure did not exist in the health department citing the example of Pakistan Medical Research Council (PMRC), which had a large budget but produced no results. Thus existence of a structure did not matter if there was a lack of political will and institutional capacity to deliver.

He suggested that the reason for uneven distribution of collected data in Pakistan was that most sample surveys

were a donor driven activity requiring large funding and professional capacity. Population just happened to be more important for international donors as compared to health while the actual responsible party; the State had no research agenda. Thus supporting the argument that family planning's domination of Population Policy is an outcome of donor bias, lack of evidence based analysis of family planning program constraints and of not exploring alternative options.

1t was lack of state's accountability towards the populace that had led to a lack of interest in funding data collection activities.

The overall consensus among the panel was the dire need to promote results based culture in policy making which required political will, institutional capacity building and closing the loop of data collection, analysis and evidence based policy making. Though enough data existed, it was not integrated like the Scandinavian 'Data Central' which linked together frequently acquired multiple data modules for near real time analysis. Additionally, there was a lack of data mining exercise even though it was cheaper than data collection. The recent PDHS data set which had sampled 100,000 households provided ample data for analysis such that no one person or even an institution could analyze the complete data set. It was thus suggested that a working group be established to serve as a bridge between researchers and policy makers with members drawn from key ministries, academics and NGOs to support evidence based policy making. But most importantly it was the state that had to support the development of a results based culture by facilitating this collaborative process.



The panel discussion participants



A student volunteer as Master of Ceremony



The audience



A member of the audience asks a question

: Education, Skill and Employment Challenges for Youth: Security Dimensions

The technical session was chaired by Dr. Naushin Mahmood, president of PAP. The session was moderated by Dr. Aliya H. Khan Chairperson Department of Economics Quaid-i-Azam University. Dr. Saeed Shafqat presented his paper on Demography, Security and Governance: Emerging Trends and Implications for Pakistan, Mr. Minhaj ul Haque on Tapping Potential in Youth: Policy Challenges and Prospects, Ms. Tayyaba Batool & Dr. Aliya H. Khan on Determinants of Female Labor Force Participation: A Case Study of District Khushab, Mr. Zafar Mueen Nasir on Human Resource Development and Employment, Mr. Ali Raza Khan on Transforming Youth from Victims to Social Entrepreneurs and Ms. Grace Clark on Older Persons in Pakistan: Budget Drain or Productive Asset. Dr. G. M. Arif Dean Faculty of Development Studies, PIDE acted as the discussant for the session

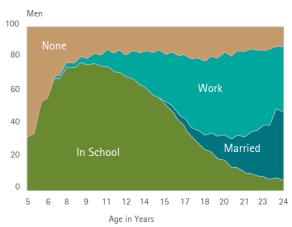
Haque describing the need for youth based analysis argued that managing the largest youth cohort (69% of the population under 29 years of age) in our history presented a tremendous challenge especially when no youth policy has been in affect for the last 8 years. Consequently, no informed debate on relevant programming and policy formation has taken place.

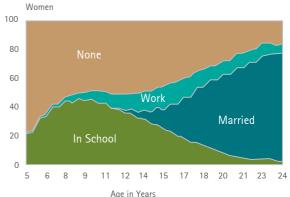
Haque began by presenting women as the hidden population of Pakistani society due to the great gender disparity in education and work (put graph) and described it as our great economic productivity loss. Poverty affected women disproportionately assessed by the fact that the mean educational achievement of the male child of the poorest quadrille was 4.2 years of education, while for the girls it stood at 0.6 years. Examining the factors behind high drop out rates, he observed that parental attitudes adversely affected girl's education and mobility. He observed pay ability and lack of interest ranked highest in male drop out rates at 39% and 33%. In case of girls, it was parent's disapproval at 24% that ranked highest; followed by pay ability, accessibility and family responsibilities at 23%, 22% and 21% respectively. The greatest disparity though lay in mobility with only 13% girls being able to go the health clinic alone compared to 95% boys. Unaccompanied female mobility stood at 26%, 39% and 57% for visiting

a shop, school or a neighbor compared to 99%, 99% and 94% for males.

Phrasing it as change as well as dexterity of Pakistani youth, Haque claimed that 50% of Pakistani boys in the age of 15–19 were already working while an additional 46% were willing to work if provided employment. For girls, the same numbers stood at 25% and 58% but a more interesting aspect was the generational shift with 83% girls between the ages of 15–19 wanting to work compared to 78% between the age of 20–24.

: Transition to Adulthood





Source: Batool & Khan

Tayyaba Batool further nuanced the determinants of Female Labor Force Participation (FLFP) in terms of spatial aspects. Batool presented a case study of Khushab district, interviewing 205 females from rural and urban sections of the district. She found that the FLFP of the district at 33.7% was much higher compared to 19% female national average.

Her multivariate analysis affecting female labor participation showed no significance for variables including

number of children and household members, husband education and region (urban/rural) while female education, skills, marital status and household income mattered most. The most interesting aspect of her findings was FLFP association with education as illiterate women, primary educated, matriculate, college and post-graduate women labor participation stood at 23.3%, 10.5%, 25.5%, 66.7% and 80% respectively. Thus indicating that labor participation decreased with education till a woman completed her matriculation. This phenomenon requires further analysis to understand the complete picture. Technical education stood out as the most significant educative factor for FLFP as 90.5% of women with technical education participated in the labor force compared to 27.2% with no technical education. Further generalized to skills, Batool's results showed that 40.2% of skilled women participated compared to the 24.1% unskilled.

Haque had earlier presented youth's distribution of paid work showing agriculture and livestock dominating at 39% for females and 30% for males, stitching and embroidery was significant for females at 33% while for males unskilled factory work stood at 27% followed by self employment at 18%. It needs to be highlighted that skilled labor only contributed to 18% of male and 9% of female employment. Batool's research seconded the impact of lack of skills on employment. Providing reasons for unemployment, she articulated that while women in rural areas specified non-availability of jobs (48.8%) and lack of qualified training (30.5%) for their lack of labor participation, the biggest reason in urban areas was a lack of desire and need (37%) followed by further studies (26%) and lack of qualified training (19%).

: Reasons for Female Umemployment: District of Khushab

Reasons	Urban	Rural
Non-availability of Jobs	5.6%	48,8%
Lack of Qualification / Training	19%	30,5%
No desire or Financial Pressure	37%	11%
Social Constraints	0%	2,44%
Household or Childcare Needs	13%	3,66%
Student	26%	3,66%

Source: Batool & Khan

Both studies thus recommended higher investments in human capital including general education, though more importantly skills provision through formal vocational training or informal apprenticeships was highlighted as a key but not a sufficient factor. Tying it with employment opportunities along with decent working conditions would complete the loop required for increased female labor market participation needed for a demographic lift off.

But Haque argued beyond delivery of employment skills stating puberty and later transition to adulthood as a crucial capacity building period for both livelihood as well as health life skills. Provision of technical skills for employment was vital to eliminate negative social behavior including the vast suicide bomber pool but as important was an awareness of health issues as only it could limit risky behavior in addition to increasing the current 1 year period between marriage and child birth.

Moving beyond analysis, Khan provided a working model for transforming youth from passive victims to a promising resource for the socio-economic development of a community. He called for a paradigm shift among supply side educationalists unaware of the term youth social entrepreneur lamenting that only 1 out of the 27 principals of technical institutes even knew of the term. Youth Engagement Services' (YES) model instead matched the huge unmet community services needs with the untapped talent of disadvantaged youth of the same community. It built youth confidence and assisted them though seed financing and incubation services to set up community based micro social enterprises. Concentrating on disadvantaged female youth, YES worked both at an individual level though provision of specific skills as well as at a collective level through youth service networks. Sustainability of the model lay in its community self reliance methodology as youth of the same community earned revenue by delivering need based services, while scalability depended on an organized youth community reaching out to the youth of other communities to join the YES Network.

With a lack of skills and services provision among most communities, YES promises to provide a plausible model for the delivery of education, health, emergency relief and skills development in communities. Developing, initiating and scaling of such self reliant community development models hold the key to the future of this youthful nation.

: Finding Solutions to Human Resource Crisis for Health

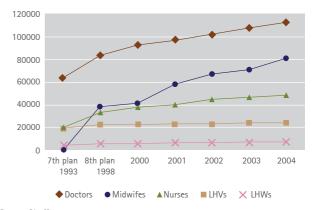
The technical session was chaired by Dr. Mushtaq A. Khan Chief National Health Policy Unit Islamabad. Dr. Nabeela Ali Chief of Party, John Snow Inc. moderated the session while Dr. Tauseef Ahmed Reproductive Health and Population Sector Specialist acted as the discussant. Dr. Abdul Ghaffar presented a paper on Human Resource Crises in Pakistan and its Implications on Health Systems. Dr. Sania Nishtar discussed Human Resource as a Critical Input into the Heath System. Dr. Abdul Wajid, Dr. Arshad Mahmood & Dr. Nabeela Ali presented their paper on Determinants of Utilization of an SBA at delivery in PAIMAN Districts while Dr. Ubaidur Rob & Md. Noorunnabi Talukder presented on Community Involvement to Improve Human Resources for Health: Lessons from Developing Countries.

Dr. Nabeela Ali, the moderator of the session began by defining the issue as multi-sectoral encompassing education, health and population, catering to the needs of a health-care delivery system. She argued that the main issue was a lack of evidence based strategy bringing together the supply and demand sides to cater for the existing and changing burden of disease. She exemplified it by stating that 8.7 million more women would be of reproductive age by 2015, but no coordinated strategy was either in place or being worked out to provide healthcare requirements through para-medical staff, Skilled Birth Attendants (SBA) and doctors to this effect.

Dr. Ghaffar started his presentation with the worldwide scenario, a global shortfall of 4.3 million healthcare workforce including 2.4 million healthcare workers (doctors, nurses, paramedical staff and SBAs) and 1.9 million management support staff. Pakistan was one of the 57 countries with a critical shortage. Where heathcare worker density exceeding 2.5 workers per 1,000 was considered adequate for achieving 80 percent coverage of measles immunization and attendance of SBA, in Pakistan, the physician density stood at 0.748 while of nurses at 0.319 per 1,000. By 2015 with Pakistan's population at 200 million, for a ratio of 1 doctor per 1,000 citizens, 200,000 doctors would be required while current production stood at 5,000 per annum. The nursing profession is even more

neglected as we are not at all equipped to fulfill our need of 60,000 nurses by 2015 as the annual production is even lower at 2,500 per annum. (put graph here)

: Pakistan Health HR Development



Source: Ghaffar

Ghaffar's research showed that maternal, infant and under-5 mortality decreased significantly with increase in healthcare worker density but the right mix of healthcare providers was as important if not more. Unfortunately in Pakistan, successive governments had equated healthcare workers with doctors, which was completely misplaced. In reproductive healthcare, the 1st three days after delivery were the most critical as 70-75% infant deaths took place during this period. Not only doctors but more importantly nurses, paramedical staff and SBAs were required to bring down Maternal (MMR) and Infant Mortality Rates (IMR) in this period. He corroborated it by showing a clear differentiation in use of family planning methods and antenatal services in areas served by Lady Health Workers (LHW). In areas served by LHW, the IMR was reduced to 50 per 1000 live births, compared to the national average of 77.9. But unfortunately the ratio between doctors and paramedical staff was divergent in Pakistan, with the focus still on producing doctors while the number of Lady Health Visitors (LHV), midwives and nurses was stagnant. Maldistribution is not just restricted to healthcare workers but extends spatially as well as to the very structure of the healthcare system. Past figures show that 80% doctors practiced in large or medium urban centers.

Dr. Wajid's study showed that SBA usage differed drastically between urban at 59.2% and rural at 32.3% even

though the SBA need perception differed little with 92% and 82% in urban and rural areas respectively highlighting both a general lack of access as well as an urban bias.

It is disturbing to note that, there has been no change in the distribution of health services for the last 20 years. It is noteworthy that 90%, 9% and 1% of the population is served by Primary, Secondary and Tertiary Healthcare respectively, while, their public expenditure share is 15%, 45% and 40% respectively. In Khan's opinion, even the existing first level care services are not necessarily based on the Primary Healthcare (PHC) spirit as they have a clinical bias with a doctor driven design and a patient doctor relationship orientation.

The panel also highlighted Knowledge as an important factor affecting Human Resources (HR) in health. They argued that awareness among married women was low with almost 29% having absolutely no knowledge of danger signs in a pregnancy. It is significant that SBA usage increased from 28.6% among illiterate women to 53.4% among women with 1-5 years of education. Thus knowledge was the answer not just for supply but also the demand side. Wajid though had a word of caution for researchers and policy makers to base their analysis on contemporary situations. Giving an example of district Jhelum, he stated that while original district boundary was based on the river, bridge building in recent times had changed usage patterns. Thus research and policy design based strictly on district boundaries would be wrong owing to facility usage in other districts just across the bridge. It is equally worrisome that the curriculum in medical institutions (nursing and doctors) has not kept pace with changing times. It remains technologically outdated with little relevance to domestic needs.

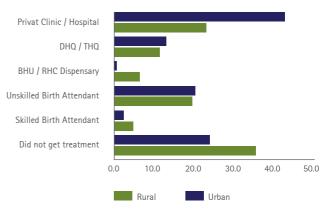
Khan argued that economic opportunity is now the biggest barrier in health provision due to a decreasing role of the Public Sector. Institutional distribution of patients seeking treatment attests to this thesis showing the dominance of Unskilled Birth Attendants and the private sector while 35.4% of rural residents go without any treatment at all. Ghaffar agreed arguing that while there is no lack of donor funds, the main cause of Health HR crises has been the lack of macro level policy planning which follows a coherent philosophy.

Participants collectively proposed a vision of transparent, inclusive and participatory policy based on long term population demographics and disease burden, worked out with the involvement of all stake holders including medical, nursing and health worker colleges, research bodies, service delivery NGOs and Ministries of Health, Population and Education at the federal, provincial and local level.

The general framework for designing and managing HR for Health is to assess the availability of healthcare workers by taking into account the inflow through education and in-migration and outflow through retirement, death and out-migration. Ghaffar put great stress on what he described as a Healthcare Management System which allows planning inclusive of Policy, Finance, Education, Leadership and Partnership. Additionally critical success factors based on a specific demographic reality and disease burden have to be defined.

Khan articulated that the current design of healthcare system was developed in the late 70s & early 80s and required a complete overhaul. There is no well defined HR Health policy. The Ministry of Health (MoH) does not have a single unit responsible for HR development which could design a HR Action Framework. He lamented that even the existing workforce is not being used properly because of faulty planning capacity and poor governance. Additionally Pakistan Medical and Dental Council (PMDC) has been totally politicized leading to its deterioration like most other institutions of the country. He argued that MoH's governance can be gauged simply by observing that it has had five secretaries transferred in the last 4 years.

: Treatment Seeking Behaviour: Facility Usage Percentage



Source: Wajid, Mahmood & Ali

Ghaffar stated that multiple strategies were present to adequately use the existing skill set. We gave an example of Task Shifting such that in the American Midwest, Physician Assistants rather than doctors took care of most medical needs. Similarly in the UK, the General Practitioner rather than a specialist doctor was the first point of contact while specialists usually had a long waiting period. Thus countries made the best use of available resources to construct their healthcare systems. For a new workforce, he suggested a general scale up in addition to forming multipurpose healthcare workers with extra attention to essential categories based on the disease burden.

Participants disagreed on whether retention was a big issue. Khan argued that the flow of HR was in the direction of countries with demand supported by financial incentives and an institutional infrastructure. Retention of the brightest doctors could only be restricted through coordination of regulatory framework with other states and provision of comparative incentives & rewards. Although the number of doctors registered with the Pakistan Medical Council (PMC) was 127,000, exact number of practicing doctors was unknown as no regulatory framework supported keeping a count of the outflow. He speculated that the actual number could actually be half the registered amount.

Another important need was coordination between federal and provincial ministries, development partners, and regulatory bodies such as PMC, Pakistan Dental Council, Nursing Council and the Higher Education Commission (HEC). Participants argued that civil society including research bodies like Population Association of Pakistan (PAP) had to now move beyond analysis and advocacy to action and seriously lobby the government for change.

Exploring elements of a new policy, participants suggested reorientation of investment in PHC, thus inverting the current investment pyramid. WHO suggests that half of all HR for health be focused on PHC. Working family health-care units are low cost filters that decrease the burden on high cost specialized care. Thus PHC reforms should focus health systems towards health for all, articulating universal primary coverage to improve health equity, service delivery reforms to make health systems people centered,

leadership reforms to make health authorities more reliable and accountable and policy reforms to promote community based health systems.

Mushtaq even suggested de-linking LHW from polio and TT vaccination campaigns which take a significant portion of their time and have greatly improved because of their involvement, in case of TT vaccination from 30% to 60% coverage. He argued that LHW should singularly concentrate on community and maternal healthcare at the PHC level, the Basic Health Unit (BHU) should be drastically improved allowing LHWs to link it to the community which currently bypasses it to go to a private clinic. His point was reinforced by Wajid's results indicating that family was the single most important deciding factor to use a midwife (Dai) at 34% while 35.4% used a Dai because of prior experience. Proximity, knowledge and cost were the other main reasons.

The results of Talukder's study comparing service delivery models from Pakistan, Bangladesh, Ghana and Cambodia recommended that community involvement was fundamental to effective and accessible PHC because it mobilized community leaders in local health service planning, development and management; trained community members to provide health education and basic health services building their skills for future interventions; delivered targeted services effectively through self selected female community health workers; and because it established linkages between community health workers and the functioning local health system. Most importantly a community based health system was best placed to meet the needs of the remotest segments of society.

Participants suggested reorientation of investment in PHC, thus inverting the current investment pyramid. WHO suggests that half of all HR for health be focused on PHC.

: Glossary		•	withermum beveropment doals.
		_	are based on 1990 figures while goals
BCC	Behaviour Change Communication	are set	for 2015
BCI	Birth to Conception Interval		
BHU	Basic Health Unit	MDG 1	Eradicate extreme poverty and hunger Half %
CPR	Contraceptive Prevalence Rate:		of people whose income is less than \$1 a day.
	% of married women age15-49 using		Half % of people who suffer from hunger.
	a contraceptive method		Achieve full and productive employment for all
FLFP	Female Labor Force Participation		including women and young people
FP	Family Planning	MDG 2	Achieve universal primary education: All boys
GFR	General Fertility Rate: # of births per	111102	Et girls alike complete full course of primary
OTT	year per 1,000 women aged 15-49		schooling
HR	Human Resources	MDG 3	_
		ט טעועו	Eliminate gender disparity in primary &
HTSP	Healthy Timing and Spacing of		secondary education by 2005; Eliminate
	Pregnancy		gender disparity at all levels by 2015
IDP	Internally Displaced Persons	MDG 4	Reduce under-five mortality rate (UMR)
IMR	Infant Mortality Rate: Deaths within		by 2/3
	1 year of birth per 1,000 live births	MDG 5	Reduce maternal mortality (MMR) rate by 3/4
LHW	Lady Health Worker		Achieve universal access to reproductive
LHV	Lady Health Visitor		health
MMR	Mother Mortality Rate: # of mothers	MDG 6	Combat HIV/AIDS, malaria, other diseases and
	dying per 100,000 live births		reverse their incidence; Achieve universal
MoH	Ministry of Health		access to HIV/AIDS treatment by 2010
MT	Million Tons	MDG 7	Ensure environmental sustainability; Integrate
NGO	Non-governmental organization		sustainable development principles in policies
NMR	Neonatal Mortality Rate: Deaths		and programmes. Reverse loss of environmen-
	within 28 days of birth per 1,000 live		tal resources. Reduce biodiversity loss and
	births		reduce rate of loss by 2010. Half % of people
OBSI	Optimal Birth Spacing Interval		without sustainable access to safe drinking
PAI	Population Action International		water and basic sanitation. Achieve significant
PAP	Population Association of Pakistan		improvement in the lives of slum-dwellers
PDHS	Pakistan Demographic Health Survey	MDG 8	Develop a global partnership for development.
	Death of a fetus in late pregnancy	ס טעועו	
Permatai Mortanty	, ,		Develop a rule-based, predictable and non-
DUO	(after 22 week gestation period)		discriminatory open trading and financial
PHC	Primary Healthcare		system. Deal comprehensively with debt
PMDC	Pakistan Medical and Dental Council		problems of developing countries. Enhance
Post-natal	Period after birth of a child extending		debt relief and provide more generous official
	for about six weeks		development assistance. Enhance new tech-
SBA	Skilled Birth Attendant		nology cooperation especially information
TFR	Total Fertility Rate for a woman ages		& communication and provide access to
	15-49: Avg # of children born to a		affordable drugs through cooperation with
	woman over her lifetime		pharmaceutical companies.
UMR	Under-five Mortality Rate: Deaths		
	within 5 years of birth per 1,000 live		
	births.		
YES	Youth Engagement Services		

: MDG / Millennium Development Goals:

: Glossary

Visitors and Activities

September 2, 2008

Mr. Andy Bethel, Head of Global Affairs, Quilliam Foundation visited the Centre and discussed *Dialog on Muslims in the West* with the CPPG faculty.

September 18, 2008

The Research Fellow, CPPG attended a talk on *Sustainable Urban Development & Transport* by Mr. Enrique Penalosa, former Mayor of Bogata, Colombia & Mr. Oscar Diaz, Sr. Director for the Institute for Transport & Development Policy (ITDP) at LUMS, Lahore.

September 25, 2008

The Director & Research Fellow, CPPG attended the first policy dialogue on *Review of Local Government System Functions and Responsibilities of Local Governments* organized by Districts That Work, a Project of USAID. CPPG faculty also participated in later dialogs on 20–22 Nov. and 18–19 Dec.

October 22-24, 2008

The Director participated in the 31st Fulbright Alumni Association Conference on *Inter Connected World* in Beijing and hosted a Roundtable on *Engaging Asia*.

October 23, 2008

The Director was Guest Speaker at the TICCS Academic Salon, School of Journalism and Communication, Tsinghua University, Beijing. He gave a talk on: *Future Direction of Pakistan China Relations*.

October 29, 2008

Director Programs, Dr. Ali M. Mir, Program Manager and Ms. Seemin Ashfaq from the Population Association of Pakistan visited the Centre to discuss for the forthcoming annual PAP conference on December 2–4, 2008.

November 6, 2008

The Director, CPPG was invited by The David and Lucile Packard Foundation and Heart file for a panel discussion regarding the draft of the report entitled *Institutional Integration of Population and Health in Pakistan – a Call to Action* at the Avari Hotel Lahore.

November 10, 2008

The Director, CPPG presented a paper on Social and Political Transformation of Pakistani Elite and Prospects of Democracy at the *Pakistan Stability Conference; Applying lessons of late being 20th century Revolutions* at Washington, D.C, USA.

November 11, 2008

The Director, CPPG gave a talk on *Demographic issues*, *Governance and Public Policy in Pakistan*, at Populati on Action International (PAI) Washington DC

November 12, 2008

The Director, CPPG was invited by the Asia Society, New York, USA to join a conversation with Mr. Nicholas Platt, President Emeritus, Asia Society and Former Ambassador of the U.S., on *Pakistan Outlook 2009: Continuing Crisis or Restoring Stability?*

The Director, CPPG was Guest Speaker along with Farida Nekzad (Pajhwok Afghan News) on the topic: *Afghanistan: Freedom of Press and the role of Women in Journalism* at Southern Asian Institute, organized by South Asia Association, School of International Affairs and Public Policy (SIPA), Columbia University in the city of New York.

November 26, 2008

CPPG in collaboration with SDPI conducted two independent consultative sessions with Administration and Student Representatives on the *Revival of Student Unions*. Faculty and students from various universities and colleges attended the session.

December 2 - 4, 2008

CPPG co-hosted the Population Association of Pakistan's (PAP) 9th Annual Research Conference on Population entitled *Population Dynamics and Security: Public Policy Challenges* at Forman Christian College, Lahore.

December 4, 2008

The Director, CPPG Dr. Saeed Shafqat was elected the President of Population Association of Pakistan (PAP).

December 22, 2008

Pakistan Institute of Legislative Development and Transparency (PILDAT) invited the Director, CPPG for a Round Table discussion on *Pakistan, Terrorism and the International Perspective* at the Pearl Continental Hotel, Lahore.

December 24, 2008

The Director, CPPG presented a paper at the National Conference on *Future Vision of Pakistan–Alternate Scenarios* organized by the Quaid–e–Azam University at Best Western Hotel, Islamabad.

December 30, 2008

Director and Research Fellow, CPPG participated in a discussion on *Cultural and Religious Heritage of Punjab* at the Department of History & Politics Society, the University of the Punjab.

Collaborative & Upcoming Research

December 2008

CPPG signed a collaborative research project: *The Challenge of Sustainable Well-Being; Development and Climate Change Adaptive in the Vulnerable Areas of Pakistan* with South Asian Network of Economic Research Institute (SANEI). The project is being pursued in partnership with; Rensselaer Polytechnic Institute Troy New York USA, University of Vermont Burlington Vermont USA, International Union for the Conservation of Nature Pakistan (IUCN) and World Wide Fund for Nature Pakistan (WWF-Pakistan). Aneel Salman, Associate Research Fellow CPPG and Lecturer Department of Economic is the Principle Research for the project.

December 2008

Raheem ul Haque, Research Fellow CPPG completed the research study *Rickshaws & Environmental Pollution:*Assessing Punjab Government's Rickshaw Policy. The study assesses the impact of the government's policy or lack of it on all stake holders in the rickshaw sub-sector. It further provides recommendations within the existing policy framework as well as suggests alternative policy options.

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