

New Population Projection of Saudi Arabia

Mehtab S. Karim* and Sadeem Alhosian**

Saudi Arabia recorded an increase in its population by three-folds from 9.4 million in 1980 to 26.3 million in 2010. Today 9.4 million (about one-third of the population) consists of expatriates, who are expected to leave the country once their contract expires. According to the Saudi law, expatriates and their Saudi born children can not acquire permanent residency nor become citizens. Thus, only till these workers have a gainful employment in the country they and their dependents can live there. Although, by definition a large percentage of the population is temporary migrant, but in all the population projections of Saudi Arabia, made by the United Nations, non-citizens are also included, which provides an over-estimate of the projected population of the country. To overcome this discrepancy, a new population projection of Saudi Arabia is made. We use the cohort-component method --the standard method of making population projections- where the initial baseline population is carried into the future by adding likely population gains– and subtracting population losses in view of the prevailing age structure. We use the Demographic (DemProj) module of the Spectrum Policy Modeling System developed by USAID. For inputs, we use only data pertaining to Saudi citizens, their TFR and life expectancy at birth, both calculated from the raw data provided by the Central Department of Statistics & Information of Saudi Arabia. Then, the specific age and sex structure of population are incorporated into the projection models. We assume that both emigration and immigration of Saudi citizens are negligible.

Our analysis suggest, that it may not be appropriate to include the expatriates in projecting the population in a situation when about one-third of the population is living there temporarily. With a high proportion of young population of Saudi Arabia in the labor market, and a high rate of educated unemployment (particularly among females) coupled with changing economic situation, it is highly likely that in the coming decades, a large number of expatriate workers (particularly in white collar and technical fields) may not be required. Thus, the projected population of Saudi Arabia needs to be revised. For example, our projections indicate, that based on 18.7 million population of citizens in 2010, the projected population of Saudi Arabia (excluding the expatriates) will be 28.4 million in 2030 and 35.3 million in 2050. Whereas, United Nations projections (including the expatriates) suggest that it will increase from 26.3 in 2010 to 36.5 in 2030 and 43.6 in 2050. Besides, due to the presence of a large percentage of expatriates, the age distribution of the total population is quite distorted (see tables 1 and 2). Thus, the UN projections in the long run seems to be on substantially higher side.

This paper, after taking into account the number of expatriates in Saudi Arabia since 1970, due to rising oil prices, forecasts the expected number of expatriates in the coming decades along with TFR for Saudi women and life expectancy at birth of the native population (based on the new life table using age-specific death rates of the Saudi population). Further, age-sex pyramids of the native population in 2010 and expected shapes based on the projected population of the native population are presented and discussed.

* Research Professor, Center for Global Policy , School of Public Policy, George Mason University and Demographic Consultant King Abdullah Petroleum Studies and Research Centre (KAPSARC)

** Data Analyst, King Abdullah Petroleum Studies and Research Centre (KAPSARC)

Table 1

Percentage distribution by major age-groups, based on projected population of Saudi Arabia by the United Nations (including expatriates)

Year	Age-group			
	0-4	5 - 14	15 - 64	65+
2010	11.0%	21.0%	65.1%	3.0%
2015	10.3%	19.6%	66.8%	3.4%
2020	9.6%	18.4%	67.9%	4.1%
2025	8.9%	17.5%	68.5%	5.2%
2030	8.1%	16.5%	68.7%	6.7%
2035	7.3%	15.4%	68.7%	8.6%
2040	6.8%	14.2%	68.7%	10.3%
2045	6.6%	13.1%	68.1%	12.1%
2050	6.4%	12.6%	67.6%	13.4%

Table 2

Percentage distribution by major age-groups, based on projected population of Saudi Arabia by the Authors (excluding expatriates)

Year	Age-group			
	0-4	5 - 14	15 - 64	65+
2010	13.0%	24.2%	59.3%	3.5%
2015	10.5%	22.1%	63.4%	3.9%
2020	10.6%	19.4%	65.6%	4.4%
2025	10.5%	17.7%	67.2%	4.6%
2030	8.3%	18.4%	69.0%	4.4%
2035	7.2%	16.8%	72.0%	4.0%
2040	6.5%	14.0%	75.4%	4.1%
2045	6.2%	12.5%	75.6%	5.8%
2050	6.0%	11.7%	72.7%	9.7%