A Fatal Distraction from Federalism

Religious Conflict in Rakhine

Prepared for

Proximity Designs | Myanmar

Revised October 2014

This research paper was written by David Dapice (David_Dapice@harvard.edu) following a trip to Rakhine state in January 2014. The views expressed herein are the author’s alone and do not necessarily reflect those of Proximity, the Government of the Union of Myanmar, or Harvard University. This study, along with other recent Ash-Proximity reports on Myanmar, is posted at http://www.ash.harvard.edu/Home/Programs/Institute-for-Asia/Publications/Occasional-Papers
## Contents

Background ......................................................................................................................................... 4

Population........................................................................................................................................... 5

History................................................................................................................................................. 6

The Economy....................................................................................................................................... 7

Promoting Reconciliation.................................................................................................................... 9

Federalism and Occupied Land – How Much is Enough? ................................................................. 11

Federalism, Foreign Neighbors and 969 ........................................................................................... 11

Appendix I: Income and Living Conditions in Bangladesh and Myanmar ................................. 13

Appendix II: Do Muslim Nations Have More Children? ............................................................... 14
Background

A three-day trip was made to the Sittwe area of Rakhine state in January 2014 by a group including Harvard and Proximity observers. The purpose of the trip was to evaluate the prospects of accelerating economic development as a way of reducing tensions between Muslim and Buddhist groups. Conversations were conducted with a variety of Rakhine (Buddhist) business, civil society, political and government people but time and other constraints did not allow discussions with Muslims. There has been significant conflict in recent years which has continued sporadically into 2014. Homes and mosques have been burned and about 140,000 Muslims (more than 10% of the entire Muslim population in Rakhine state) are living in guarded temporary camps away from their old neighborhoods. This conflict has damaged the local economy as labor is now costly relative to the pre-conflict situation. Tensions remain rather high, and subject to flare ups, though lower than when large scale violence first broke out in 2012.

Rakhine state is interesting not only in its own right, but also because it represents a challenge to the idea and the practice of federalism. If a state will become inflamed with conflict if allowed a degree of autonomy, what possibility is there for self-government? If minorities cannot live with reasonable security, the argument for extending self-rule would be severely weakened. Thus, Rakhine could prove to be a barrier to a nation-wide peace settlement, if it provides fodder for those in the security forces that see their continued presence as a necessity and if that presence prevents ethnic peace agreements.

Rakhine state is somewhat isolated from the rest of Myanmar by its mountains and is adjacent to Bangladesh on the Bay of Bengal. It has extremely poor infrastructure, though there has been development around Kyaukphyu where the Chinese oil and gas pipelines have been built, accompanied by promises to improve the port and electricity supply. Other investments in hydroelectricity, transmission and distribution lines, and roads should further if gradually improve the state’s infrastructure. Several industrial zones have also been proposed. However, the state is starting from a very low point. In 2010, when Yangon had 562 kWh of grid electricity per capita, Rakhine had 3. (The national per capita level was 121.) This means that most electricity is provided by diesel generators and costs about K 500 per kWh – far too expensive to allow the development of much cold storage, ice for fish, or agro-processing. This has meant little economic activity. Many younger Rakhine workers have left, with estimates ranging as high as three-quarters of those adult workers under thirty years of age. (Most Muslims in Rakhine state are not allowed to migrate out of the state, or even their township, without permission.)

---

1 Recent reports by various groups, such as Human Rights Watch, have described acts of violence in Rakhine. See, for example, “All You Can Do is Pray” by Human Rights Watch, 2013.
2 It is a bit confusing in that Rakhine refers to the state of Rakhine but also refers to the ethnic group of Buddhist Rakhine. When “Rakhine” is used and refers to a community, it means Buddhists from Rakhine state.
3 There was not time to visit distant Muslim majority townships bordering Bangladesh and conditions in the Muslim camps in Sittwe were not conducive to interviews.
Population

Population growth, as estimated in the Central Statistical Organization’s Statistical Yearbook is slow. Table 1 shows population according to official sources. They show population of 1.1 million in 1973; 2.05 million in 1983 and 3.3 million in 2010, a growth of 61% since 1983, slower than the national growth rate of 75%. The Rakhine share of national population fell from 5.9% in 1973 to 5.5% in 2010. Since no Census has been conducted since 1983, these are only estimates. Popular belief is that there have been high levels of migration from Bangladesh and very high birth rates among the Muslim population, which is estimated in 2013 to number about 1.2 million, or roughly 40% of the total state population. However, if the official population estimates are correct, any such recent movements – if they exist – have been more than counterbalanced by the movement of Buddhist youth out of Rakhine to find work elsewhere. One informant estimated that one million people (mainly Buddhist) had left the state. A new Census has been conducted and should provide more reliable data in 2015.

<table>
<thead>
<tr>
<th>Table 1: Population Growth in Rakhine and Myanmar, 1973-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (millions)</td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td>Rakhine</td>
</tr>
<tr>
<td>Myanmar</td>
</tr>
</tbody>
</table>

A recent survey of most of the Muslim Rakhine state population in 2012 found 27% were less than ten years old. The age estimate for all of Myanmar put the 0-9 year old share at 19.7% in 2010, suggesting that the Rakhine Muslims had 37% more children per family than the national average. These data roughly support the casual observations from interviews that a typical Muslim family had 4-5 surviving children per household while Buddhist households more often had 2-3 children.

Of course, religion is not the only variable that typically influences fertility. If a population is more urbanized, healthier, has better educated women, and has work for young women outside of the home, it typically reduces its fertility. Indonesia, which is predominantly Muslim, has a crude birth rate of 19 per 1000, nearly equivalent to Myanmar. Similarly, Bangladesh and Myanmar have nearly equal total fertility rates, a measure of children per woman of child bearing age. The ratio of 0-9 year olds to total

---

4 The population in Rakhine in 1973 was 1.71 million and it rose 19.6% from 1973-83, while the national increase was 18%. This suggests “extra” Rakhine growth in that decade of three thousand a year due to higher birth rates and/or more migration. Even if it were mostly migration, it would be a modest amount.

5 There has been debate about what questions should be included in the new Census. We agree with the International Crisis Group that “national races” should not be included but disagree and think religion should be included as a question. It is important to resolve the question of what fraction of Muslims live in the country.

6 Thus, if there is concern with the high fertility rate of Muslims, the sensible response would be to raise their health, education, and vocational levels to those of the general population, including access to voluntary family
population in Bangladesh is 21.2%, close to that in Myanmar. Sri Lanka, a largely Buddhist nation, has a fertility rate that is higher than that of Bangladesh. (See Appendix II.) Holding down the Muslims socially and economically increases their birth rate, causing faster population growth. The restriction on movement out of Rakhine state for Muslims but not Buddhists virtually ensures a rising share of Muslim population in the state, exactly what Buddhists fear!

**History**

The history of Rakhine state goes back many centuries, but for the purposes of this paper, it may be best to start during World War II. The Burmese Army initially supported Japan while elements of the population in Bengal (now Bangladesh) and Muslims living in Rakhine state were armed by retreating British troops. Armed groups on both sides, including Japanese troops, attacked towns and people in what is now Rakhine state and caused the local population to withdraw from the border – Buddhists into the interior of Rakhine and Muslims to Chittagong in what is now Bangladesh. Memories of outrages on both sides are still strong. It is said there was an influx of Muslims into Rakhine after 1948, especially into the vacated townships adjoining Bangladesh, though the numbers are uncertain. From 1950 to 1962, the net national migration by sea to India and Pakistan shows 25 thousand for all years leaving Myanmar (then Burma), while the national net flow by land also shows a small net outflow. While some Indian and Pakistani nationals left from Yangon during 1950-62, these migration data would not support a large movement into Rakhine – at least if all migration were measured.

The period of 1963-70 probably saw few Bengalis migrating into Burma as changes in citizenship laws and policy reduced arrivals and in fact led to significant net outflows. During the violent separation of East Pakistan from West Pakistan in 1971 there was a further exodus of refugees into Rakhine. When they stayed in spite of requests to the UN to repatriate them, there was a large military operation (“King Dragon”) which in 1978 drove out the refugees and many Rohingya (including some militant rebels) to Bangladesh. The numbers driven out are uncertain but are generally put in the range of 150 to 200 thousand people. After negotiations with the UN, many of these were allowed to return in the early 1980’s, though Rakhine people argue that many more “returned” than left. Although many in Rakhine hold contrary views, there is little evidence of considerable in-migration to Rakhine in the last three decades. [See Box 1.] Most Muslims living in Rakhine have been there for some time, though only a low percentage could prove that they, their parents and their grandparents were born in what is now Myanmar. That is one test of citizenship under the 1982 citizenship law.

planning services. This indirect approach would work better with less conflict than imposed fertility limits or state-issued marriage permission which singles out a minority.

It is important to note that some Muslims in Rakhine, the Kaman, are a recognized ethnic group and have citizenship status. They were said to have been invited by the king of Arakan in the 17th century and served as archers in his palace guard. It is the Bengalis, many of whom came during or just after the period of British colonial rule starting in the 1820’s, who are now excluded from being an official ethnic group and thus are not citizens unless they can prove three generations of birth in Burma. Under the 1947 Constitution, anyone living in Burma was a citizen, but this was changed under Ne Win and Bengalis were excluded. However, there is a provision in the 1982 law for local councils to consider applications for citizenship among those who have lived for a long time in the country and are accepted by their citizen-neighbors. However, most in Rakhine believe that very few Bengalis are proper citizens.

The term Rohingya is very controversial. A reference in the late 18th century referred to well-established Muslim residents of Arakan (the older name for Rakhine) who called themselves “Rooinga” but this could simply refer to the people living there rather than being a political or cultural term. The term was not used in the British census of 1824 and may have acquired a new meaning after 1950. There are now some Muslims living in Rakhine or migrants from there that steadfastly maintain that they are a proper cultural and ethnic group, similar to the Kaman. Most Buddhists do not credit this view and say most “Bengalis” are simply illegal migrants, even if they and their parents were born in Myanmar. Because the citizenship status of most Muslims living in Rakhine is disputed, they are not allowed to move within Myanmar, and even need permission to move across township lines. If the full logic of the 1982 Ne Win citizenship law were followed, over one million refugees would be created with no country willing to take them. This decision about citizenship status, which will almost certainly be deferred until after the 2015 elections, will be taken at a national level and not a state level.

The Economy

With almost no grid electricity, poor roads and inadequate ports, it is not surprising that Rakhine is poor, or that young people who can leave for more promising places do so. The Chinese pipelines are providing a new port and gas for new electricity generation, and transmission lines should provide some

---

8 The Integrated Household Living Conditions Survey, 2009-2010 had a “Poverty Profile” which reported Rakhine had poverty incidence rise from 38.1% in 2005 to 43.5% in 2010, while the reported national poverty rate fell from 32.1% to 25.6%. Thus, poverty started higher in Rakhine and rose while the national level fell sharply.
possible openings for investment. However, with ethnic tensions simmering and most Rakhine youth having left, it is not clear how secure the labor supply would be for new factories. A real peace would help the economy as much as new infrastructure, though both are essential.

Not all Rakhine people realize how important the Muslim workforce was for the local economy. They provided a low cost and hard working labor supply for construction and farming. Now that many are confined to camps or fearful of leaving their villages, wages have risen sharply and some land is not even being farmed due to shortages of labor. If factories opened near Kyaukphyu or Sittwe, the extra demand for labor might make shortages even worse and wages even higher (and thus less competitive) unless:

1. Muslims were able to work in the factories without fear of violence
2. Rakhine youth who had migrated elsewhere returned
3. Other Myanmar citizens moved to Rakhine

All three outcomes are possible, unless of course there is a draconian decision to expel one million people who cannot prove they are citizens under current law. As previously mentioned, the national-level decision about how to handle citizenship questions will likely be made after the 2015 elections. But even if it were a moderate policy, how it would be applied in Rakhine would determine the effective labor supply from workers currently living in the state.

While the plans for a hydroelectric dam and gas-fired generator, improved roads, more extensive transmission and distribution lines for electricity and better ports are all necessary, there is also a need for confidence building measures to encourage a more “normal” environment. If there are indeed 1.2 million Muslims out of roughly 3.3 million total people, the state is paying and would pay a very high price to bottle up or expel a large fraction of its workforce. A significant fraction of the Muslim population is living in townships adjacent to Bangladesh where they are predominant and more secure. It is unlikely that many factories will be built in those remote townships, so if the workers in those townships cannot move to industrial zones around Sittwe or Kyaukphyu, they will be unavailable. With wages already relatively high, the prospects for investment are poor without most of the Muslim workforce. In short, the people of Rakhine state will determine if they get rich together or stay poor together.  

The addition of significant amounts of infrastructure gives Rakhine the possibility of attracting factories and better paying jobs, but the state will have to provide the environment that would make investment attractive. For example, there is the issue of training workers – the average level of education in Rakhine is low. In 2008-09, the national ratio of middle to primary school children\(^{10}\) was 40%, but in Rakhine it was only 23%. The high school to primary pupil ratio was 13% at a national level and only 8% in Rakhine.

---

\(^9\) There is an interesting parallel with the United States. The southern states kept a sizeable minority, the black population, down and had unusually high poverty rates. It was only after civil rights opened up those societies that economic development began to close the income gap with the rest of the country.

\(^{10}\) In the 2009-10 IHLCS, the net primary enrollment for Rakhine was 71.5% while nationally it was 87.7%. (p. 92). So there are a lower fraction of middle and high school students as well as a lower fraction of primary students.
Since educated Buddhist workers often leave, the supply of educated workers is very short. This could be dealt with through special training programs if conditions are peaceful and all potential workers could be trained. If only one part of the population has training accessible, the net supply is not likely to be enough to prevent sharp jumps in wages with any significant expansion in demand for labor. This shows, yet again, why cooperation is necessary for success.\textsuperscript{11}

There can, of course, be some investment in fishing and fish processing, rice and tourism. However, these will not provide enough new activity to employ many workers, nor would these jobs be plentiful if wages remained so high – about $4 a day. A promising future for Rakhine has to include factories and not many factories will come, even with better infrastructure, if things remain as they now are.

**Promoting Reconciliation**

In the relatively peaceful past, the relations of the Muslim and Buddhist communities were not close. There was almost no intermarriage and few social contacts except for work. There was more toleration than friendship at a personal level. As one Rakhine (Buddhist) who was not antagonistic to Muslims said, “You know, they are funny people. When you give them food, they thank Allah, not you.” In addition, the Muslims who have been burned out of their homes understandably say what they think a surveyor wants to hear or what will help them rather than what has happened. So, if asked if they participate in the (Buddhist) water festival or national patriotic days, they will often say yes, even if they have not.

With a lack of many close links, the recent violence has further frayed any trust. It is important to be clear. There have been acts of violence by each side against the other, but they are not equal. There are many more Muslims in camps who have lost their homes than there are Buddhists who were burned or pushed out, with a ratio of 10-20 Muslims in camps to every Rakhine Buddhist displaced. This is not an equal or even nearly equal situation – nor is either side without guilt. It is difficult on the Burmese side to fully recognize this lack of parity of damage. It is difficult for the Muslim side to admit that their actions have, at times, also inflamed the situation.\textsuperscript{12}

What are the options going forward? Basically, there are two paths – if complete expulsion and ethnic cleansing of a million or more Muslims is ruled out. One is to try to promote reconciliation and integration and the other is to have separatism by township or village. The second option is perhaps the more likely one at this point, though it is a dead end. As one business man said, “If you tried to get people to cooperate, 95% would not – only 5% would agree. Things need to cool down.” Separatism would keep in place the lack of trust and understanding that gave rise to the recent troubles and set up a cycle of recurring conflict that would make Rakhine a risky place to invest in. Those wishing to stir up conflict would find fertile ground.

\textsuperscript{11} One simple step would be to allow Muslims in Rakhine to move around within Myanmar. This would reduce their numbers in Rakhine state and make Rakhine more nearly resemble other states and divisions in Myanmar.

\textsuperscript{12} It is alleged that external extremist Islamic groups have pushed local Muslims to be more radical and separatist. This is possible, but we were unable to determine the extent of such activities.
Promoting reconciliation is difficult and takes time. It starts with schools that have all students in them, even if time is taken out for religious instruction separately. The equivalent of Boy Scouts or Girl Scouts could also be integrated rather than organized on religious lines. It has sports teams that are integrated and leads to local candidates that fashion coalitions across religious lines. It might eventually end up with integrated villages and townships where the different communities can live closer to each other and have more chances to relate to each other on a personal rather than a communal level.\textsuperscript{13} Given concerns about large Muslim families, it would be well to reflect that when young women work outside the home (as in factories), their birth rates tend to drop noticeably, and this effect is larger if modern family planning services are also available.\textsuperscript{14} Lower birth rates and an ability to move within Myanmar would lower the share of Muslims in Rakhine and reduce the appeal of extremist rhetoric.

For those who reject the possibility of such reconciliation, it is perhaps best to consider and act upon the well-founded cynicism of many in Rakhine towards national-level politicians. They feel, not without reason, that central politicians use the Muslim minority for electoral purposes at will and do not respond to their legitimate concerns. These politicians keep the conflicts simmering, and sometimes boiling over, so there is never a real resolution of the tensions. If both sides in Rakhine state could get together and vote for politicians that did solve problems that both sides face, they would be more likely to get things they need rather than rhetoric, empty promises or temporary voting cards. If a united Rakhine state could get electricity, roads, ports, schools and industrial zones that worked, they would look back and wonder why they did not try to cooperate sooner.

This brings up the issue of aid. A common complaint is that aid is aimed unfairly at the Muslim minority and is not extended to poor Rakhine. At one level, this is misplaced. If many more Muslims have their homes and businesses burned or spurned and are forced into isolated camps, it is no wonder that emergency aid goes to them. Nor is it curious if Muslims are recruited to work for those aid agencies, since “969” Buddhists mobs have caused the damage and prevented local food being brought to the camps. Muslim feelings towards Rakhine Buddhists will be raw. On the other hand, it is correct to argue that aid has not benefitted many Buddhists and that they are poor. If more aid can be economic and social and less aid is needed for emergency purposes, then a more balanced approach should be possible and would be desirable. Likewise, many more Rakhine Buddhists could then be employed by the aid agencies. Emphasizing aid that benefits all sides is sensible and is a good strategy going forward, if the numbers in camps can be reduced. Higher levels of aid could be a reward for peace. With peace and better infrastructure, more investment would follow.

\textsuperscript{13} If there were subsidized housing near to industrial zones, cheaper rents could be charged to villages where there was not segregation by religion. Even a small difference might entice some to accept “different” neighbors, so long as neither side was a tiny minority.

\textsuperscript{14} The fertility decline in Sri Lanka, from a crude birth rate of 28.1 in 1976-80 to 17.7 in 1996-2000 was driven by rising education, use of contraception, and higher age of marriage – which is often influenced by work availability outside of the home. By changing the socio-economic situation, family sizes can be reduced without coercion; See: http://www.unescap.org/esid/psis/meetings/FertilityTransition/Abeykoon-Sri%20Lanka%20_SFTA5.pdf
Federalism and Occupied Land – How Much is Enough?

There is now a need for security forces in Rakhine to prevent violence. These forces and their families need somewhere to live. This is beyond dispute. What is disputed is the extent of land taken by the army. There are very large swaths of land including 1000 acres in the Sittwe area alone and more near Ann township (we were told) taken when the army used Ann as its central base. They have since moved their central base. However, little land has been returned, though some has been given to connected business people or sometimes rented back to their original owners for annual farming. It is unlikely that much progress will be made in Rakhine state if some resolution and future certainty concerning land is not set in place. This conflict alone gives or should give both sides in Rakhine state an interest in federalism, so long as it is accompanied by a rule of law. This should be a part of negotiation – the Muslims would need a real rule of law and the Rakhine Buddhists would get some of their land back. However, if a state government could not ensure safety for all and prevent mob violence there will remain a need for central security forces. If both sides would like to see fewer battalions located in the state, they would have yet another reason to cooperate.

Any semi-autonomous state government would need meaningful revenues to govern. Currently, there is not much revenue available to the state due to the low level of economic development. Some modest share of the transit payments on the oil pipeline could reasonably be claimed, but the prize that many hope for is a share of the offshore oil and gas revenues. This is problematic, since few nations give localities revenue from such deposits if they are far offshore. More promising would be a national level agreement among all ethnic groups to share all raw material revenues. The ethnic states have in common a long period of resistance to the Burmese military and the experience of having land and resources taken. If they worked together to negotiate a better deal and to give some portion of their resource rents to fellow ethnic minorities, they would have much more chance of success.

Federalism, Foreign Neighbors and 969

Burma/Myanmar has been at war with ethnic groups for over a half-century, with the conflict still flaring in Kachin and Shan states. There is a possibility, though only that, of a real peace agreement that would finally build a united nation by allowing the ethnic states a degree of limited autonomy and some share in their resources. This would have to coincide with a further movement to democratic governance. However, if the largely imaginary threat of Muslim expansionism is allowed to enflame hatreds, the chances for federalism and democracy will diminish and may disappear. It is unclear if the Muslim population in Myanmar is currently 6-7% of the population as some estimate (it was 4.5% in 1881) and

---

15 We were told that most Rakhine Buddhists wanted federalism and most Muslims did not, fearing even worse treatment by the local Buddhist majority.
16 There have been large land takings of “vacant” lands in many places in Myanmar for large companies, both domestic and foreign. This policy needs evaluation since most of the land has not been planted and should actually be returned to the government (or those who had used it previously).
the 2014 Census should show the actual percentage. It will also make it clear that there is no threat to the Buddhists from a small and persecuted minority. The activities of “969” – a Buddhist organization that says it is only protecting Buddhism – has doubtless encouraged others and its own followers to boycott and attack Muslims, and not only in Rakhine state. While Wirathu, its leader, had been jailed for inflammatory speech, he is now abbot of a major monastery. He seems to have tacit support of parts of the government, in spite of strong statements by President Thein Sein in favor of the rule of law. Dr. Maung Zarni has asserted that in a 2013 interview, General Khin Nyunt said that “shadowy groups made up of non-uniformed officers and hired thugs” had been set up under SLORC/SPDC and these groups are still active, stirring up communal violence. While it is hard to corroborate these assertions, it is at least curious that so few of the Buddhist instigators of violence have faced justice or that steps to control anti-Muslim violence take so long to be ordered.

Given that there are a quarter-billion largely Muslim Indonesians just south of Myanmar and 150 million in neighboring Bangladesh, it might seem foolhardy to pick on a tiny minority that could spark some kind of response from nearby nations. In addition, once the Syrian conflict is resolved, extremist Muslims would logically intensify efforts to champion the cause of persecuted Muslims in Myanmar. Explosions and random shootings in tourist spots, schools, electric generators and transmission lines and other sensitive choke points could make Myanmar a dangerous and high-risk place, shunned by investors. In short, this line of extremist religious rhetoric and violence is not only foolishly misplaced, it is also dangerous. It is a massive diversion from the problems of continuing oppression, poverty, unequal access to land and capital, and monopolizing of resources by narrow elites. It will weaken Myanmar and could threaten its very existence as a viable state, much less a prosperous, united and democratic nation that could fulfill its long-delayed promise.

There is a fundamental choice for the Rakhine Buddhists. They can continue to persecute and exclude the Muslims, or even try to expel them, and continue to remain a poor, violent place from which their young will flee. Or they can begin the slow, difficult process of finding common interests with their long-time neighbors and attract investment, improve education and infrastructure, and create joint progress. If the forces of separatism and even expulsion win, the prospect for ethnic peace and federalism as a way to bind the nation of Myanmar together will suffer a severe and probably fatal blow. With a lack of political agreement with ethnic groups, the prospects for a democratic and independent nation are dim. At the very least, Christians will wonder if they are not next. Thus, the outcomes in Rakhine state are of national importance and should be seen as such by all who want the future of Myanmar to look different from its past.

---

17 The 1983 Census figure for the Muslim population was 3.9%. However some retired officials say that the real percentage was 5%, but a lower figure was published due to tensions at the time. Rumors of the current Muslim minority range up to 10-15% of population, but if the 2012 Rakhine data are correct, these would be too high.
18 Wirathu sponsored a visit from Galagoda Atte Gnanasara, a Sri Lankan monk known for his extremist views and support of punitive policies towards both Hindus and Muslims. He is associated with violent attacks on mosques and Muslims generally. There have been reports of links between Galagoda and retired Myanmar military leaders. See http://www.smh.com.au/world/the-bin-laden-of-buddhism-and-the-axis-of-hate-20140311-hvhh8.html:
19 http://www.maungzarni.net/2014/04/you-can-stop-slow-burning-genocide-of.html
20 These actions are what other extremist groups, such as Boko Haram in Nigeria, and sectarian groups in Iraq, Pakistan, China and India have practiced. It seems that “best practices” are shared by these groups.
Appendix I: Income and Living Conditions in Bangladesh and Myanmar

Electricity Consumption Per Capita in Myanmar and Bangladesh, 1980-2011

![Graph showing electricity consumption in Myanmar and Bangladesh, 1980-2011](image)


This graph shows that by 1988, average electricity consumption in Bangladesh was higher than in Myanmar. The consumption of electricity in Rakhine, even in 2010, was only three kWh of grid electricity, compared to 49 kWh in 1989 for all of Bangladesh. Since electricity, output and living standards tend to be correlated, it is not likely that large numbers of Bengalis would choose to migrate to a very poor region of Myanmar. According to UNDP surveys, poverty incidence in Rakhine rural areas was 49% in 2010, higher than in Bangladesh, where rural poverty was 35%.

Data from household surveys in both Bangladesh and Myanmar from around 2010 show overall living conditions to be better in Bangladesh than in Myanmar. There were 48% of rural Bangladesh households that had electricity compared to 11.5% of rural Rakhine households. (Chittagong, the area in Bangladesh next to Rakhine state, is above the national average.) Among health indicators, stunting is a measure of long-term malnutrition, and it measures unusually short stature (height) for age. Bangladesh had 43% stunting in 2010 while Rakhine had 49.9%. Weight for age, a measure of short term malnutrition was 52.8% in Rakhine and 41.3% in Bangladesh. Net enrollment in secondary schools was 68% in rural Bangladesh (55.6% in the lowest fifth) and 26% in rural Rakhine. As incomes rise, the share spent on food declines. The share spent on food in rural Bangladesh was 59% but it was 71.7% in rural Rakhine. Access to protected water supplies was 43.2% in rural Rakhine and 96% in rural Bangladesh. By any reasonable measure, the rural poor in Bangladesh were better off than the rural poor in Rakhine, or even an average rural person living in Rakhine state. It is not at all evident that a family would choose to move to a new country where they would become an endangered minority, more likely to get sick, eat poorly, and not have access to electricity or safe water or get their children educated. Fears of millions of Bangladeshis streaming into Rakhine do not appear to be based on any available data or logic.

---

21 Outside of the top fifth nationally, the food to total spending ratios by quintiles were 60-63% in Bangladesh and 69%- 74% in Myanmar. This strongly suggests that living standards in Bangladesh are generally higher than in Myanmar, even excluding the top fifth of the population.
Appendix II: Do Muslim Nations Have More Children?

The following graph shows the total fertility rate or number of children per fertile woman (15-45 years) in two mainly Muslim nations close to Myanmar, Indonesia and Bangladesh. It also shows the number of children per woman in Myanmar and Sri Lanka, two mainly Buddhist nations. The source is the book, published by the World Bank, *World Development Indicators 2012*, Table 2.19.

**Total Fertility Rates in Four Asian Nations**

Notice that all four nations have roughly the same fertility rate in 2010, with the largest drop from 1990 in Bangladesh. Buddhists are now 70% of the Sri Lankan population, up slightly from 67% in 1971. Muslims are just less than 10% of their total population. Myanmar was 89% Buddhist in the 1983 Census. Islam is similarly predominant in Indonesia and Bangladesh with 88% and 90% shares.

The fact that all four nations end up with 2.0-2.3 fertility rates (Sri Lanka is the highest and declined the least since 1990) is evidence for the widely accepted analysis that specific factors such as female education, work of women outside of the home, urbanization and availability of modern birth control influences family size. So long as religion accepts birth control (and often even when it does not, as in predominantly Catholic nations), religion does not, by itself, seem to play a major role. This suggests that a non-coercive solution to fear of “excessive” family size can be found by promoting the education, access to contraception and social equality of groups.