Technical Notes

There are many technical terms used throughout these dossiers. These brief notes explain how these are used and the data source. While some terms and statistics might be interpreted differently according to tradition, denomination, or Christian worldview, our approach is a social scientific one. This allows our research to be globally accessible and intentionally neutral on some highly disputed theological fronts.

Quick Facts

Population: Size of the country's population in 2020 according to the United Nations *World Population Prospects*: The 2017 Revision.

Christians: Size of the country's Christian population in 2020 according to the World Christian Database.

Religion: Religious makeup of the country in 2020 according to the World Christian Database.

Gospel access: Access to the Christian message ranked as the following (percentage of the population):

0-20	Very low
20-40	Low
40-60	Medium
60-80	High
80-100	Very high

Peoples: Number of ethno-linguistic people groups in this country (see definition below).

Least gospel access: Number of peoples where less than half the population has gospel access (least-evangelized peoples).

Development: Human development index (HDI), 2017. A higher value represents greater human development in this country. Primary source: UN Development Programme: Human Development Report 2018.

GDP per capita: Gross Domestic Product per year per person in 2017, expressed as 2011 purchasing power parity (PPP) dollars. The GDP is the total value of the goods and services produced in a nation during a specific period, and also comprising the total of expenditures by consumers and government plus gross private investment. Primary source: World Bank 2018 (in HDR 2018).

Gender Inequality: A low value indicates low inequality between women and men based on a combination of indicators: maternal mortality, adolescent birth rate, share of parliamentary seats, share of secondary education, and participation in the labor force. Primary source: UN Development Programme: Human Development Report 2018.

Country context graphs

Population: Size of the country's population in 2020 according to the United Nations *World Population Prospects*: The 2017 Revision.

Religion: Religious makeup of the country in 2020 according to the World Christian Database.

Human need:

- Development (HDI): Human development index, 2017. A higher value represents greater human development in this country. Primary source: UN Development Programme: Human Development Report 2018.

- Gender Inequality: A low value indicates low inequality between women and men based on a combination of indicators: maternal mortality, adolescent birth rate, share of

parliamentary seats, share of secondary education, and participation in the labor force. Primary source: UN Development Programme: Human Development Report 2018. Corruption Index: Transparency International's "Corruption Perceptions Index" (CPI) measures the perceived levels of public-sector corruption in a given country. Expressed here in reverse so that higher values indicate higher levels of corruption. Primary source: Transparency International, 2017.

- Education %: Population with at least some secondary education (% aged 25 and above). Primary source: UNESCO Institute for Statistics (2018) or Barro and Lee (2016) (in HDR 2018: most recent year in the period 2006-2017).

- Internet users %: Internet users in 2016 as a percentage of population. Primary source: ITU (2018) (in HDR 2018).

- Water Access%: Percentage of the country's population using improved drinking-water sources. Primary source: World Health Organization 2018 (in HDR 2018).

Christian context graphs

Christianity by region: Comparison of the country's Christian population to its wider region, continent, and the world.

Christian change over time: Percent of the country that is Christian from 1900 to projections for 2050.

Christian traditions: The makeup of the country's Christian population by its four major traditions, Catholics, Orthodox, Independents, and Protestants.

Mission context graphs

Gospel access: The percent of the country that has access to the Christian message from 1900 to projections to 2050.

Bible translation: The proportion of the country that has available to them a full Bible, New Testament only, and scripture portions.

Personnel: The number of missionaries received in the country, missionaries sent from the country, and national workers within the country (see definitions below).

Peoples

A problem for social science research is the lack of available survey and polling data in non-Western countries. While the United States and many European countries have a long history of engaging in this kind of research, many often more underdeveloped countries can be difficult to access and/or speak languages difficult for Western researchers. The *World Christian Database*'s method directly addresses this methodological challenge through its additional taxonomy of the world's ethnic groups, which are paired with religious statistics.

A "peoples" taxonomy must take into account both ethnicity and language. The approach taken in "Ethnosphere" in Part 8 of the *World Christian Encyclopedia* was to match ethnic codes with language codes, which produced over 13,700 distinct ethno-linguistic peoples. Not all combinations of ethnicity and language are possible, but nevertheless every person in the world can be categorized as belonging to an ethno-linguistic people (mutually exclusive). For example, there are ethnic Kazaks who speak Kazak as their mother tongue and ethnic Kazaks who speak Russian as their mother tongue. These, then, are two separate ethno-linguistic peoples. The work of determining the religious breakdown of ethno-linguistic peoples was begun in the 1970s in Africa, where many Christian churches reported the ethnic breakdown of their

congregations. Utilizing data gathered by religious bodies and in government censuses, estimates of religious affiliation for all peoples was completed in the mid-1990s and published in the second edition of the *World Christian Encyclopedia*. These data continue to be updated and published in the *World Christian Database* and *World Religion Database*.

Each distinct ethno-linguistic group in a country is assigned varying shares of the 18 categories of religion. For example, the Japanese in Japan are reported as 56% Mahayana Buddhist, 23% various New religionist, 10% agnostic, 3% atheist, 2% Shinto and 1% Christian. Each group is traced throughout the world with the assumption that whatever their religious breakdown is in their home country will be the same abroad. This allows researchers to locate Christian people in predominantly non-Christian countries. For example, the *WCD* reports that Pakistan – a majority-Muslim country – is also home to over 2 million Christians. While Christians are found among Muslim-majority people groups (for example, Punjabi at 4% Christian), they are also present in the country as ex-pats, such as French (65% Christian) and British (70% Christian).

Country human need tables

Life expectancy: The number of years individuals born "this year" in the country's population that are expected to live, based on statistical probability. Primary source: United Nations 2017.

Physicians per K: Number of physicians per thousand of the country's population. Primary source: World Health Organization (2017) (in HDR 2018: most recent year in the period 2007-2017).

Infant mortality: Infant deaths, per 1,000 live births in the country; probability of dying between birth and age one. Primary source: United Nations 2017.

Malaria cases per K: Number of malaria cases in 2016 per thousand of the country's population. Primary source: World Health Organization, World Malaria Report 2017 (in HDR 2018).

HIV Adults per K: Number of adults living with HIV per thousand of the country's population in 2016. Primary source: UNAIDS (in HDR 2018).

GDP per capita: Gross Domestic Product per year per person in 2017, expressed as 2011 purchasing power parity (PPP) dollars. The GDP is the total value of the goods and services produced in a nation during a specific period, and also comprising the total of expenditures by consumers and government plus gross private investment. Primary source: World Bank 2018 (in HDR 2018).

Net worth PC: Individual net worth, per person in 2018, expressed in US dollars (official exchange rates). Defined as "the marketable value of financial assets plus non-financial assets (principally housing and land) less debts". Primary source: Credit Suisse Global Wealth Report 2018.

Internet users %: Internet users in 2016 as a percentage of population. Primary source: ITU (2018) (in HDR 2018).

Religious liberty: Pew Research Center 2017, range from 0 (least restrictions) to 1 (most restrictions). Data can be accessed at www.pewforum.org/dataset/global-restrictions-on-religion-2007-2016.

Gender Inequality: A low value indicates low inequality between women and men based on a combination of indicators: maternal mortality, adolescent birth rate, share of parliamentary seats, share of secondary education, and participation in the labor force. Primary source: UN Development Programme: Human Development Report 2018.

Gender table

% female: The percentage of females and percentage of males in the population. Primary source: United Nations 2017.

Gender Gap %: The gap between female Human Development Index (HDI) and male HDI (as a percentage of male HDI). Primary source: UN Development Programme: Human Development Report 2018.

Gender Inequality: A low value indicates low inequality between women and men based on a combination of indicators: maternal mortality, adolescent birth rate, share of parliamentary seats, share of secondary education, and participation in the labor force. Primary source: UN Development Programme: Human Development Report 2018.

Mission table

% Christian: The percent of the country that is Christian in 2020 according to the World Christian Database.

Christian gain p.a.: Projected gain in the number of Christians each year for this country by 2025. The formula used to arrive at this is: Christian births + converts in this country.

Christian growth %: The average annual growth rate of the Christian population in this country from 2000 to 2025.

% gospel access: The percent of the country that has access to the Christian message in 2020.

Baptisms per annum: The number of new baptisms in this country in the year 2020.

Missionaries received: The number of foreigners in this country working as long-term missionaries (2+ years) in 2020.

Christian broadcasting %: The extent of broadcasting reaching peoples groups in this country in 2020.

Personal evangelism (all): The number of non-Christians in 2020 who know a Christian well enough for that person to have personal access to the gospel.

Priority peoples: The total of the top priority target peoples for this country; i.e., ethnolinguistic peoples that are the focus of Christian workers or missionaries.

Bible translation and distribution

Documentation of scripture language names by Bible societies had a long history well before the landmark publication of the *Book of a Thousand Tongues* in 1938 and effectively its online update with 1996 data in WorldScriptures.org (no longer available). Subsequently, United Bible Societies annual reports meticulously tracked the first publication dates of books of scripture as they were catalogued in Bible Society libraries, until 2013 when the nature of the annual reporting changed. Currently, monthly statistical updates on language numbers are published by *progress.Bible* but not a complete public listing of scripture names and publication dates. Counts in this table are from languages documented in the World Christian Database with dates from public sources.

As with scripture translation, it is the United Bible Societies annual reports that provide the bulk of publicly available data on scripture distribution. To these data are added estimates of commercial or free distribution (such as Gideons International, who marked their two billionth distribution in 2015), by country, with missing countries estimated in proportion to the Christian population. These estimates, which could otherwise be commercially sensitive, are necessarily limited to an order of magnitude indication of actual distribution of printed (not digital)

scriptures versus goals. On this basis, the Bibles 'in place' data are the sum of all scriptures distributed over the last 20 years (the assumed longevity of a Bible or Testament), or 10 years for Portions. One subtle change from previous editions is to interpret the goal as 'A New Testament for every literate Christian' instead of 'At least a New Testament for every literate Christian': that is, as well as a Christian household having a Bible, every Christian in the household should also have a New Testament.

Religion table

The religion table gives an overview of religions in the years 1900, 1970, 2000, 2020 and 2050. Growth rates are given for 2000-2020. The table includes all of the major religions (as well as the nonreligious, including agnostics and atheists). It also includes more detail for Christians including the four traditions (Catholic, Independents, Orthodox and Protestants). Two additional lines are necessary for the lines to add up to 100% of the Christian total. These are (1) unaffiliated, those who consider themselves Christians but do not belong to any church or denomination; and (2) doubly-affiliated, a negative number, those who are affiliated with two or more churches or denominations. One can add Catholics, Independents, Orthodox, Protestants, unaffiliated, and doubly-affiliated and arrive at the total of Christians in the country. In addition, two movements within Christian traditions are also included, (1) Pentecostals and Charismatics, and (2) Evangelicals.

Measuring Growth Rates

The rates of growth, increase, decrease or decline of membership in many congregations can readily be measured from their annually reported statistics. This has been done by obtaining the

statistics for two different years, where possible five years apart (to minimise the effects of roll-cleaning and other annual irregularities), usually 2000–5 and 2005–10, and working out the average annual growth rate as a percentage. Great care must be taken in such computations to ensure that the statistics used are measuring exactly the same entity (especially geographically) for each of the two years concerned. Growth, as a percentage increase or decrease per year, must be measured by dividing any annual increase by the identical category of total. Thus a church, for example, in a particular country with 500,000 total adherents (including children) in 2005 which grows to 600,000 total adherents (including children) in 2010 shows an increase of 600,000 minus 500,000 = 100,000, which divided by 5 = 20,000 a year, which divided by the mean membership of 550,000 gives an increase rate of 3.64% per year. In practice, the methodology follows a more accurate method by using the 1970 to 2015 figures for each denomination to arrive at average annual growth rates.

There are different ways of measuring the growth of a religious body. First, one can measure either adults only, or total community including children. Secondly, the growth rate of a church or religious grouping can be measured over a single day, or a month, a year, a decade, or 50 years – and all will yield differing results. This survey is concerned primarily to measure long-term rates. A growth rate measured for a specific religious body over a two- or three-year period may not be sustained over a decade.

Measuring gospel access

It is apparent that Christians are involved in a wide-range of activities that can be construed as "gospel access" or "evangelization". These activities include, but are not limited to, evangelistic crusades, church planting, personal witnessing, sharing on social media, etc. Evangelism from

one person to another results in evangelisation, i.e. people encounter the gospel of Jesus Christ. Consequently, evangelisation is defined as (a) The whole process of spreading the good news of the Kingdom of God; (b) the extent to which the good news has been spread; (c) the extent of awareness of Christianity, Christ, and the gospel.

We estimate the percentage of a language or people that is evangelised by assessing Christian presence and evangelistic ministries at work among that language or people. Our basic instrument is a formula with 20 elements, each measuring a different aspect of evangelism. Each element has a code whose value represents the availability of a particular resource. The value is applied to the formula as a percentage of the population that is evangelised. The elements are as follows:

Positive factors (add to the total)

Intercessors (0–5)

Jesus film (0–2)

Audio scriptures (0–5)

New Reader scriptures (0–1)

Braille scriptures (0–1)

Signed/deaf scriptures (0–1)

Discipling/personal work (0–10)

Cross-cultural mission (0–16)

Mass evangelism (0–5)

Mission agencies at work (0–5)

Portions of scripture (0–1)

New Testaments (0–3)

Bibles (0–6)

Second-language scriptures (0–3)

Denominations (0–5)

Outside Christians (0–10)

Christian broadcasting (0–4)

Online scriptures (0–4)

Urban media (0–4)

Hindrances (subtract from the total)

Religious liberty (0–2.5)

Human development (0–2.5)

Literacy (0–2.5)

The initial assumption in constructing the estimate is that all Christians are already evangelised. Thus these 19 positive factors are added to the percentage Christian of a language or people. The final three elements are subtracted from the total at the end.[1]

Missionary Sending and Receiving

Over the past 120 years, as global Christianity has been shifting gradually to the South, the number of foreign missionaries sent from the South has been increasing. In 1900 the vast majority of missionaries were sent from Europe and Northern America to Asia, Africa and Latin

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[1] For a more complete explanation of the method please see Barrett and Johnson, *World Christian Trends*, Part 24, 'Microevangelistics', pages 737–57. The 20 elements and code values are listed on pages 756–7.

America. In 2020 the sending of foreign missionaries is more even across continents, although Europe and Northern America still have much higher per-capita sending rates than most countries of the Global South. These pages depict foreign missionaries (those who cross national boundaries), but it should be noted that much of the growth of the missionary movement has been in home missionaries (those who work as missionaries within their own national boundaries). This is especially true for India and Nigeria, which rank second in foreign-missionary sending in Asia and Africa, respectively, but which also have many home missionaries among their national workers. Thus, the combined numbers of Southern foreign and home missionaries are sometimes contrasted with only the numbers of Northern foreign missionaries, excluding the large numbers of home missionaries and other national workers in countries such as the USA and Britain. The table on the facing page reveals the significant variations in the numbers of national workers, missionaries sent and missionaries received for each UN region. It is particularly instructive to compare workers or missionaries per million population (or per million affiliated Christians in the case of missionaries sent). For example, in 2020 Polynesia sends the fewest foreign missionaries of any region, but the most by far per million affiliated Christians. Another profound change over time has been the distance that missionaries travel. In 1900 Northern American and European missionaries took lengthy and often hazardous journeys. Today, especially in the Global South, foreign missionaries often work in an adjacent country. The vocations of missionaries have changed as well. One hundred years ago, large numbers of missionaries were involved in schools, hospitals and other social projects. By the middle of the twentieth century many of these institutions were handed over to national workers. At that time missionaries from newer denominations came in, planting churches and holding evangelistic crusades. In the early part of the twenty-first century, Protestant and

Independent missionaries increasingly are involved in social projects, ranging from microenterprise to schools. What has not changed, however, is the enormous dangers of the missionary enterprise. Missionaries, North or South, continue to find themselves in harm's way. Every year several Christian missionaries are killed in the midst of their work. Today, though, they are just as likely to be Korean as British and just as likely to be African Independent as Roman Catholic.

The sending and support of foreign missionaries is overwhelmingly the work of affiliated Christians– persons who belong to or are connected with organized congregations. Therefore, the tables report the number of missionaries sent from each country and continent as per million affiliated Christians (rather than per million total Christians). Figures for affiliated Christians are found in the religion tables in each country.

Personal Contact

In recent years the concept of translation has become one of the significant motifs in Christian mission, not only for Bible translation but for the serial expansion of Christianity around the world. The starting point of translation is personal contact, in which a Christian, from any other culture or tradition, learns the language and culture of the people he or she is trying to reach. In normal missionary practice, this means making friends. With this in mind, we have recently been asked, 'How many Muslims have a Christian friend? How many Hindus personally know a Christian? How many Buddhists have significant contact with Christians?' Considering these questions carefully, we realized that the concept of personal contact was built into the measurements we had previously made related to evangelization of ethnolinguistic peoples.[2] For

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[2] For a more complete treatment on this subject see Todd M. Johnson and Charles L. Tieszen, 'Personal Contact: The sine qua non of Twenty-first Century Christian Mission', *Evangelical Missions Quarterly*, October 2007, pages 494–502.

our study of evangelization mentioned above, we isolated 20 variables measuring evangelization among every ethnolinguistic people in the world (Barrett and Johnson, World Christian Trends, 756–7). Two of these variables relate very closely with personal contact between Christians (of all kinds) and non-Christians. The first, 'discipling/personal work', is an indication of how much contact local church members have with non-Christians. The second, 'outside Christians', extends this concept further by looking at the presence of Christians from other peoples who live nearby. Under normal circumstances, the more Christians there are nearby, the more likely the contact between Christians and non-Christians. Thus, for every non- Christian population in the world there is an indication of Christian presence and contact. A formula was then developed to make an estimate of those personally evangelized (contacted) by Christians. The formula applied to each ethnolinguistic people is (Population 2020 * [Disciple Code (0-10) + Outside Christian Code (0-10)]) / ([100-Christian Percentage] * [Percentage Non-Christian]). Separate values for these two codes are reported for each ethnolinguistic people. These are added up for each country, region, and continent, producing a global total reported in this volume.[3]

Projecting Religious Populations

The starting point of future studies is natural growth of the total population of the country or region of interest, using demographic projections as a baseline. Three major areas beyond natural growth are utilized to improve the projections. First, birth and death rates vary among religious communities within a particular country. Secondly, increasing numbers of people are likely to change their religious affiliations in the future. Thirdly, immigration and emigration trends will impact a country's population over time. The highest-quality projections for religious

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[3] Listing of the world's peoples with these variables appear in Barrett, Kurian, and Johnson, *World Christian Encyclopedia*, 'Part 8 Ethnosphere' vol. 2, 30–241 and in the online *World Christian Database*.

communities are built on cohort-component projections ones that use differential rates for each religion: age-specific fertility rates by religion, age structure in five-year age-and-sex cohorts by religion, migration rates by religion, and mortality by religion.

Unfortunately, this kind of detail is not yet available for many countries (half of censuses do not ask a question about religion). Fortunately, the process of filling in missing data using demographic and smaller-scale general population surveys is underway, and as these data become available through the Pew–Templeton Global Religious Futures Project, researchers will have access to these data through the *World Religion Database*, where they will be archived in full, with summary results available at the Pew Forum's website. In the meantime, projections cannot solely rely on the cohort-component method. Instead, they use a hybrid projection method. First, the 2015 religious composition of each country is established as the baseline. Then, utilizing the United Nations medium variant cohort-component projections of populations for five-year periods up to 2050, future religious shares are modestly adjusted from the 2020 baseline. Adjustments are based on analysis of past differential growth rates of religious groups, factoring in historical patterns of religious switching and possible future attenuation of past trends. Finally, these projections take into account how immigrants might alter the future religious composition of country populations.[4]

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[4] Parts of this section are adapted from longer treatments in Todd M. Johnson and Gina A. Zurlo, *World Christian Encyclopedia,* 3rd edition (Edinburgh: Edinburgh University Press, 2019).