The National Composite Index for Family Planning (NCIFP)

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September 2015

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Acknowledgements

Data collection for both the FPE and NCIFP was jointly funded by Bill and Melinda Gates Foundation (through Avenir Health) and USAID (through Health Policy Project, implemented by Futures Group). The analysis presented in this report was conducted by Track20 funded by Bill and Melinda Gates Foundation. The views expressed are those of the authors and do not necessarily represent the views of the funders.

Further, FP2020, through their Performance, Measurement, and Evidence (PME) and Rights and Empowerment (RE) Working Groups, provided technical oversight and guidance to the development of the NCIFP. We gratefully acknowledge the support provided by these partners.

Executive Summary

A new survey has been completed of 86 developing countries to measure levels and types of effort for a range of reproductive health indicators, termed the NCIFP (National Composite Index for Family Planning). It falls under the FP2020 initiative and was implemented as part of the latest (2014) round of the long running series, the National Family Planning Effort Index (FPE).

This report presents the main findings of the survey together with analyses to reduce the length of the questionnaire and to search for underlying factors imbedded in the NCIFP data. Most results reported here are for the reduced questionnaire, of 35 items, down from the 69 questions in the NCIFP survey itself. Of the 35 items some are drawn from the FPE and the others from the NCIFP original questionnaire.

The total score for the NCIFP is the average of the 35 individual scores for each country. They are organized under the five dimensions of Strategy, Data, Quality, Equity, and Accountability. The overall score, averaged over all countries (unweighted), is 54, or about half of the maximum possible (representing very strong effort on all criteria). For the five dimensions respectively the averages are 63, 53, 54, 58, and 40, so the range is considerable, with strategy scoring the highest, and accountability scoring the lowest, a 23 point gap.

Regions differ considerably: interestingly both Francophone and Anglophone sub-Saharan Africa score above the other regions on the total score, and come at or near the top on all five dimensions. Next, in order toward lower total scores, come Asia, Asia without China and India, Latin America, the Middle East/North Africa, and former USSR countries. The total regional range is from 58 to 48. Note that the ranking is nearly the same with scores weighted by population.

Despite these average differences on the total score, the regions follow similar patterns across the 35 scores: they tend to move together, rising and dipping together, agreeing largely on which scores are ranked higher and which ones lower. This suggests a commonality in what programs find it easier and harder to do, inviting future research into these similarities.

In order to further explore the variation across countries and individual scores, detailed results are presented on each of the following:

(a) Within each region, the ranking of all countries on the total score,
(b) For each of the 35 scores, across all countries, the average deviation from the mean (varies from about 10% to nearly 25%)
(c) Following (b), a ratio to show the average deviation divided by the mean, since in (b) a low mean restricts the amount of deviation possible (ratio varies from 0.15 to about 0.65)

Contraceptive use tends to be higher where the NCIFP total score is higher; this occurs within both the SSA and Non-SSA regions. As well, fertility levels tend to be lower where the total score is higher. While the gradients are in the right direction the correlations are rather modest, reflecting confounding influences. With the completion of a second round of the NCIFP it would be feasible to track changes within each country rather than relying on a cross-sectional approach.

A different analysis found that a higher score on the equity dimension is accompanied by a smaller gap between the poorest and richest wealth quintiles in contraceptive use. That is true for both the SSA countries and the non-SSA countries.

Finally, specialized analyses were performed to subject the data to a Principal Components Analysis, to look for underlying dimensions within the 35 scores. This produced two components of interest, each of which reflected somewhat different sets of the scores. Building on this, a Clustering Analysis was performed to explore whether countries fall into separate groups with regard to the component values. The results are not entirely definitive, but as exploratory exercises they point to useful additional research.

Introduction

A new measure was developed to support FP2020 measurement efforts to capture key areas related to the enabling and policy environment, entitled "The National Composite Index for Family Planning (NCIFP)." The implementation of this questionnaire took advantage of the timing of the 8th cycle of the "Family Planning Program Effort Index" (FPE), planned for 2014. The NCIFP questionnaire was added at the end of the FPE questionnaire, so data were gathered on both instruments in all countries. The intention was to build on the standard FPE questions, adding items to capture areas not fully covered by the FPE; these pertained especially to issues related to rights, quality, and accountability.

Sixty-nine questions were added to the FPE questionnaire, under five topics: strategy, data, quality, equity, and accountability. These related both to having policies or systems/standards in place, and actual implementation of the policies and systems/standards. The process of producing the final list of questions was consultative and included many partners, such as FP2020 working groups (both the PME and RE), donors (USAID and UNFPA) and various implementation partners. It consisted of one in-person meeting that decided the main dimensions to be included in the questionnaire, as well as the subordinate topics to fall under each dimension. Development and approval of the final questions was done by email exchanges among the concerned agencies.

Funding for the fielding of the questionnaire was shared between USAID (through Health Policy Project, implemented by Futures Group) and the Bill and Melinda Gates Foundation (through Avenir Health). The countries in the study were divided between these two executing agencies; Futures Group was responsible for those countries in which USAID was especially active (30 countries), while Avenir Health was responsible for the remainder (56 countries[1]). The development and analysis of the NCIFP results was conducted by Avenir Health's Track20 project, with funding from the Bill and Melinda Gates Foundation.

The study was directed to most developing countries starting with all those over 1 million population. Some in the former Soviet Union were included such as Ukraine, Moldova, and Romania, as well as the three Caucasus countries and the five Central Asia Republics. Exclusions included some that had basically discontinued their family planning programs and have very low fertility, such as Korea, Taiwan, Hong Kong, and Singapore, along with a few middle-income countries with very low fertility rates, and finally, those for whom persistent efforts to obtain replies did not succeed. Responses were obtained from countries accounting of 94% of the developing world, including the large Asian set of China, India, Bangladesh, Pakistan, and Indonesia that alone account for 62% of the total. Approximately 86 countries participated, similar to the experience of past cycles of the FPE research. The following table shows the final list, by region.

[1] Note: Cambodia, Dominican Republic, and Lebanon were excluded from this paper because their data was received after completion of the analysis. These countries will have FPE scores reported.

Table 1: Countries by Regional Grouping

Asia- *presented with and without India and China* **(ASIA)**	**Latin America and the Caribbean (LAC)**	**Middle-East/North Africa (MENA)**	**Anglophone Sub-Saharan Africa (SSAF-A)**	**Francophone Sub-Saharan Africa (SSAF-F)**	**Former Soviet Union Countries (USSR)**
Afghanistan	Bolivia	Algeria	Cameroon	Benin	Armenia
Bangladesh	Costa Rica	Egypt	Eritrea	Burundi	Azerbaijan
China	Ecuador	Iran	Ethiopia	Chad	Georgia
India	El Salvador	Iraq	Ghana	Congo	Kazakhstan
Indonesia	Guatemala	Jordan	Kenya	Cote d'Ivoire	Kyrgyzstan
Malaysia	Haiti	Libya	Lesotho	DR Congo	Moldova
Mongolia	Honduras	Morocco	Liberia	Guinea Bissau	Romania
Myanmar	Jamaica	Oman	Malawi	Madagascar	Tajikistan
Nepal	Mexico	Tunisia	Mauritius	Mali	Turkmenistan
Pakistan	Nicaragua	Turkey	Namibia	Mauritania	Ukraine
Papua New Guinea	Panama	Yemen	Nigeria	Mozambique	Uzbekistan
Philippines	Paraguay		South Africa	Niger	
Sri Lanka	Peru		South Sudan	Rwanda	
Thailand	Trinidad & Tobago		Swaziland	Senegal	
Timor-Leste			Tanzania	Togo	
Vietnam			The Gambia		
			Uganda		
			Zambia		
			Zimbabwe		

Methodology

The study methodology was carried over from the system used in the 1999, 2004, and 2009 FPE cycles.[2] In each country a consultant was retained who was closely familiar with the national family planning program and also with persons who were knowledgeable about it and could gauge the effort levels of its various features. The consultant chose about 10-15 respondents, instructed them in the questionnaire, and followed up to obtain the replies. To obtain a variety of perspectives respondents were sought of four types: some working inside the program, some in local NGO organizations, some in local academic or research organizations, and some working as resident staff of international agencies.

Questionnaire replies were copied and forwarded to the Futures Group or to Avenir Health for data entry, with the tabular information returned to the consultant for possible use within the country. Data were entered in Excel, with checks for consistency with a second round of validations, and checks via the standard deviations of responses across respondents and across items. For questions asked on a scale (e.g. a 1-10 rating), a percentage of the maximum likelihood was calculated to standardize response across countries. The responses from each respondent in a country were averaged obtain a country score for each individual question. The total score, and scores for each domain are calculated from averaging across the individual questions. Analytic techniques included the usual cross-tabulation methods, graphical and regression approaches, and exploratory methods such as principal components analysis and cluster analysis. Both unweighted and weighted regional totals are presented; weighted totals are weighted by the number of women of reproductive age (15-49) in each country in 2015, based on the UN World Population Prospects (2012 Revision).

The questionnaire itself is appended; the first part is the standard FPE instrument; the second part is composed of the new NCIFP questions. This report focuses primarily on the NCIFP results, with a few comparisons to the FPE patterns.

Revision of the Index

After completing the implementation of the FPE and the added NCIFP questions, an initial NCIFP score was created for each country as a straight average of answers on all 69 questions for 73 countries with available data at the time of analysis. From this initial analysis, revisions to the NCIFP were made. A summary of the process is below; further details regarding changes made are documented later in this section. The sequence of steps was as follows:

- Scores were calculated based on the full set of 69 NCIFP questions (*original*)
- An initial analysis (original) was presented to PME WG at their London meeting (February 2015)
- Avenir Health/Track20 conducted the initial revision of the NCIFP scoring *(version 1)*
- Revised NCIFP (*version 1*) was circulated to PME and RE Working Group Members for review
- An in-person meeting was held to review and further revise the scoring (April 28th 2015)
- A revised NCIFP (*version 2*) was sent back to PME and RE Working Group Members for final review
- The final NCIFP scoring (*final version*) was agreed.

Regarding the original NCIFP scores, several observations led to the decision to try modifications. There was a weak relationship between the NCIFP and FPE scores across countries, the vast majority of countries scored higher on the NCIFP than the FPE, and scores were uniformly high across all key areas

[2] See Ross, J, and E. Smith, "Trends in National Family Planning Programs, 1999, 2004 and 2009. *Int'l Perspectives on Sexual and Reproductive Health*. 2011, 37(3): 125-133.
Doi: 10.1363/3712511

except accountability, which scored considerably lower. These initial results raised potential concerns about the validity of the index, and to what degree the 69 questions were capturing the intended concepts. The PME Working Group expressed a particular concern about the high score for the 'equity' dimension. In addition, 69 questions seemed to invite respondent fatigue.

Further analysis supported these concerns, highlighting the following challenges:

1. **Strong correlation between questions**: analysis found numerous questions among the full set of 69 that were strongly correlated, indicating redundancy and less need for them all.
2. **Asking mostly yes/no questions**: Nearly all of the NCIFP questions were in a "yes" or "no" format, so the score for each question simply represented the percent of respondents who said yes. For some questions, a clear cut 'yes' or 'no' answer was hardly feasible, because the question asked about multiple issues, or the answer fell into an intermediate place between the two.
3. **Asking about multiple concepts in one question:** numerous questions asked about multiple, or compound items that could conflict, making it difficult for respondents to provide a single answer.
4. **Too many questions included**: The NCIFP in its full form included 69 individual questions; this compares to 31 questions in the FPE[3]. Two issues arise: (1) it will be difficult to repeat the questionnaire in the future, or add it again to another survey, given so many questions, and (2) computationally, including so many questions reduces the importance, or "influence," of each question since scores are based on averages. The redundancy among questions argued for a reduced set.

In order to address these issues, an initial revision to the list of NCIFP items was conducted. Because the questionnaire had already been fielded, any changes had to draw from the available responses to it and to the FPE. Future rounds however could revise the questionnaire with less length and other changes. The revision therefore focused on:

1. Removing questions that were highly correlated to others
2. Removing questions that did not seem to capture the intended topic area
3. Replacing yes/no questions with similar questions asked in the FPE on a 1-10 scale to allow finer nuances in responses.

The first revision was conducted by Track20, Avenir Health. The revision resulted in a set of 42 questions to be included, 33 from the original NCIFP questions and 9 from the FPE. This revision was then presented to a group of technical experts from FP2020's Performance, Monitoring and Evidence, and Rights and Empowerment Working Groups. This group reviewed the initial NCIFP revision (*version 1*), either accepting or rejecting each change, and suggested additional revisions. These included creating a single composite score to replace three questions with numerous subtopics — e.g. asking if the Government collects data among many sub-groups (youth, postpartum, rural, etc.). Other suggestions were to include certain FPE questions that seemed relevant to the NCIFP.

The final NCIFP includes 35 individual scores:

- 18 individual questions from the original NCIFP questionnaire
- 3 composite scores based on averages of individual questions from the original NCIFP questionnaire
    - Does the government collect data to monitor special sub-groups?
    - Are there policies in place to prevent discrimination towards special sub-groups?
    - To what extent do service providers discriminate against special sub-groups?

[3] A total of 49 questions are asked, but only 31 are included in the main FPE score.

- 12 individual questions from the FPE questionnaire
- 2 composite scores based on averages of individual questions from the FPE questionnaire
    - Extent to which the entire population has ready access to LAPMs
    - Extent to which the entire population has ready access to STMs

In the final version, the 35 individual scores fall across the five dimensions as follows:

- Strategy: 6 scores
- Data: 7 scores
- Quality: 12 scores
- Equity: 5 scores
- Accountability: 5 scores

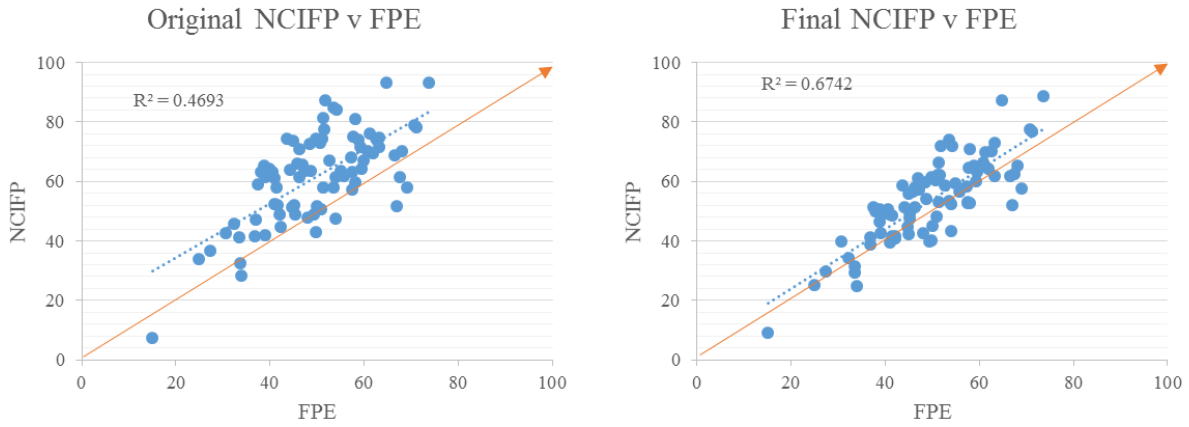
The following table shows the NCIFP scores by dimension from each of the revisions; the overall average score reduced from 61 to 54, with declines seen across all five dimensions.

Table 2 Comparison of Scores: Original, Revised (version 1), and Final Scores, by Dimension: Percent of the Maximum Score (averages for all countries, unweighted)

	Strategy	Data	Quality	Equity	Accountability	Total
Final NCIFP	62.8	53.0	53.7	57.7	39.8	53.7
Revised (v1)	62.8	54.8	50.0	62.9	39.8	54.8
Full set of 69	66.6	61.6	59.9	66.1	47.3	61.1

Further, as seen in the figures below, the final NCIFP also shows a cleaner relationship with the FPE (higher R value), and has many more countries scoring similarly, i.e. close to the line of equality. This is only partly because a higher proportion of NCIFP questions are taken from the FPE in the final version than in the original.

Figure 1 Comparison of the FPE and NCIFP in Two Versions



Based on the inputs from the technical working group, and on the various comparisons of the original, the revised (v1), and the final versions of the sets of questions, it was agreed to use the final version for all subsequent analyses.

Full details of the evolution of the NCIFP instrument appear in **Annex 1**. It lists 83 items: all 69 items in the original NCIFP questionnaire, plus 14 items selected from the FPE questionnaire. These are in the order of the five dimensions, with codes to show which items were retained in the revised and final revisions. In the final column there are 49 "y" entries for yes, but three groupings are each collapsed to

summary measures, for a net reduction of 14, leaving 35 surviving items. Of the 35, 14 are those selected from the FPE questionnaire and 21 come from the original NCIFP questionnaire (including the three summary measures that replace numerous detailed items).

The three summary items first (1) collapse the 7 'yes" items in Question 2a of the NCIFP questionnaire, to use their average value in the analyses done here; the next (2) collapses the 5 "yes" items in Question 4a, and the last (3) collapses the 5 'yes" items in 4b. The 17 are replaced by the 3 summary items, for our analyses of the 35 final list.

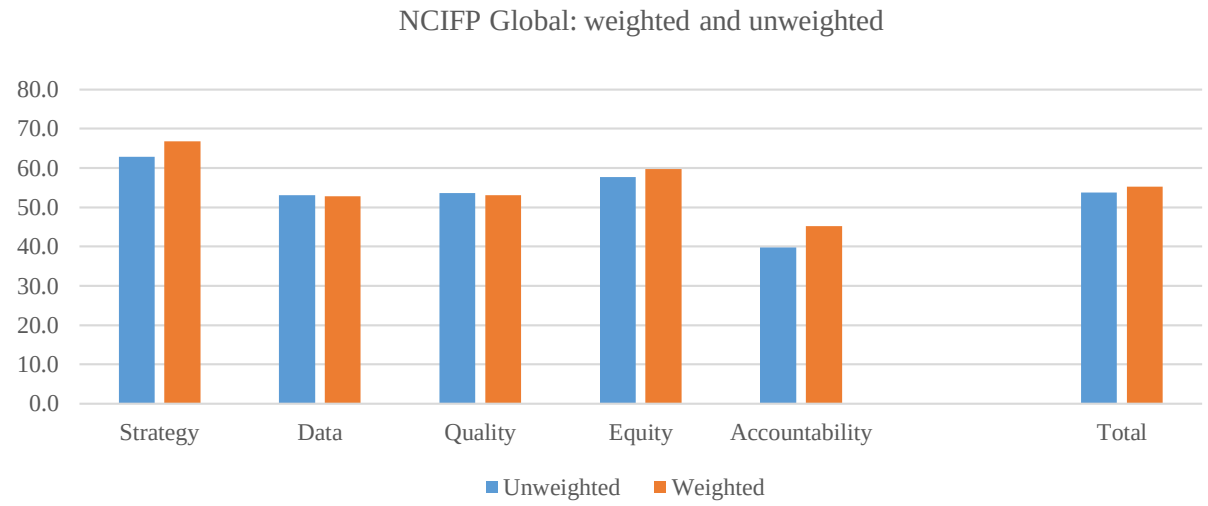
Annex 2 gives the final set of 35 questions. **Annex 3** contains the original FPE and NCIFP Questionnaire administered to all countries.

Results

This section presents the results for the final list of 35 items, as described in the previous section. Results are shown by dimension (strategy, data, quality, equity, accountability), as well as by individual scores. Figure 2 provides an overview, comparing unweighted and weighted scores; the weighted scores take into account the number of women of reproductive age (WRA) living in each country.

Performance as an all-country average is at about half of the maximum score. The total score unweighted was 53.7 as in Table 1, and the weighted score is slightly above. Overall, the strategy dimension scored the highest, and accountability scored the lowest. The equity dimension was quite close to the strategy one; the other two for data and quality fell at intermediate levels.

Figure 2 Global scores by domain (weighted and unweighted)



Regional differences, by dimension, are displayed in Figure 3 and Figure 4. To clarify regional patterns we show Asia first as a whole, and again without India and China. Sub-Saharan Africa is divided by Anglophone and Francophone (SSA-A and SSA-F). The former USSR countries are kept separate (*a later section discusses them in relation to the other regions).*

A surprise was that the Sub-Saharan African countries scored the highest, as shown in the rightmost total bars. Their superiority is most pronounced in the strategy and data dimensions. However, when weighted by the population of women of reproductive age[4] (Figure 4) the differences in the total bars are less pronounced, with Asia scoring nearly as well. All further regional analysis is based on weighted values to represent full populations rather than the average country.

[4] Based on UN World Population Prospects (2012 Revision) population of women of reproductive age (15-49) in 2015.

Figure 3 NCIFP by Region and Dimension, Unweighted

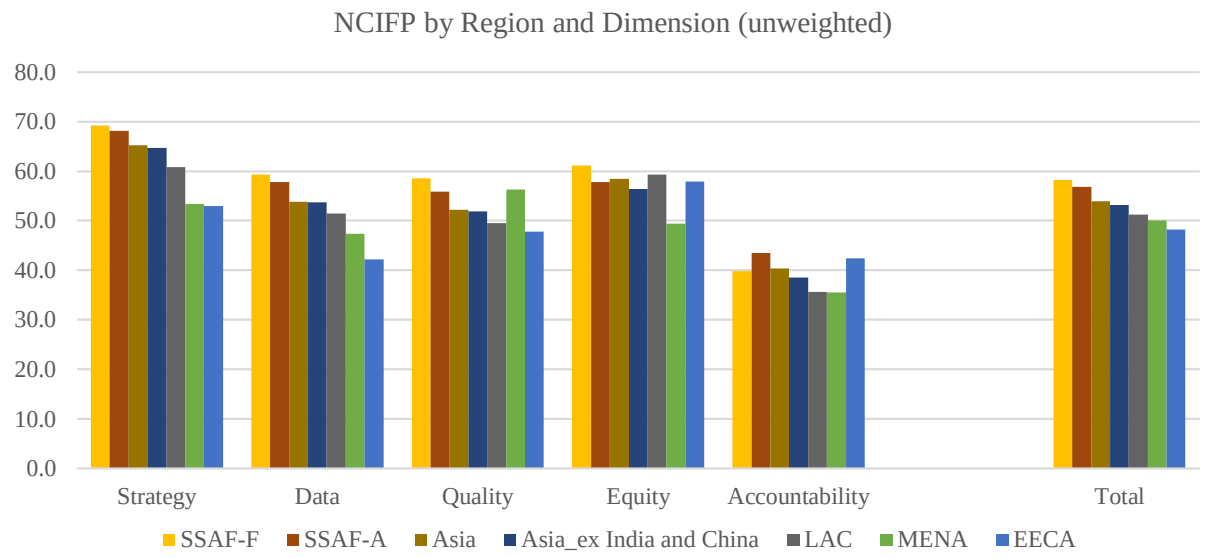
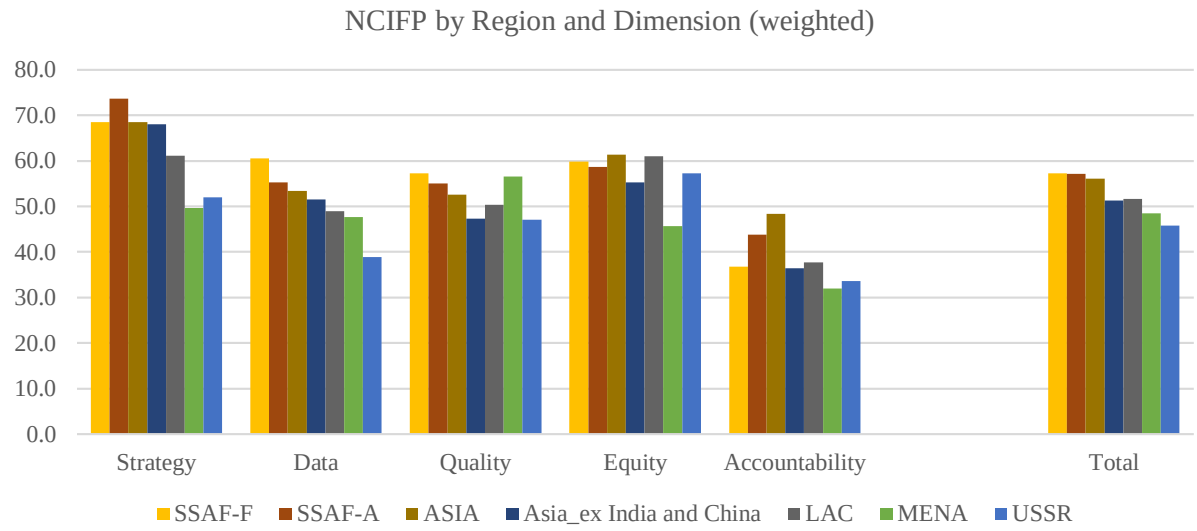


Figure 4 NCIFP by Region and Dimension, Weighted by WRA Population Size



Patterns for the 35 Individual Scores by Region (weighted)

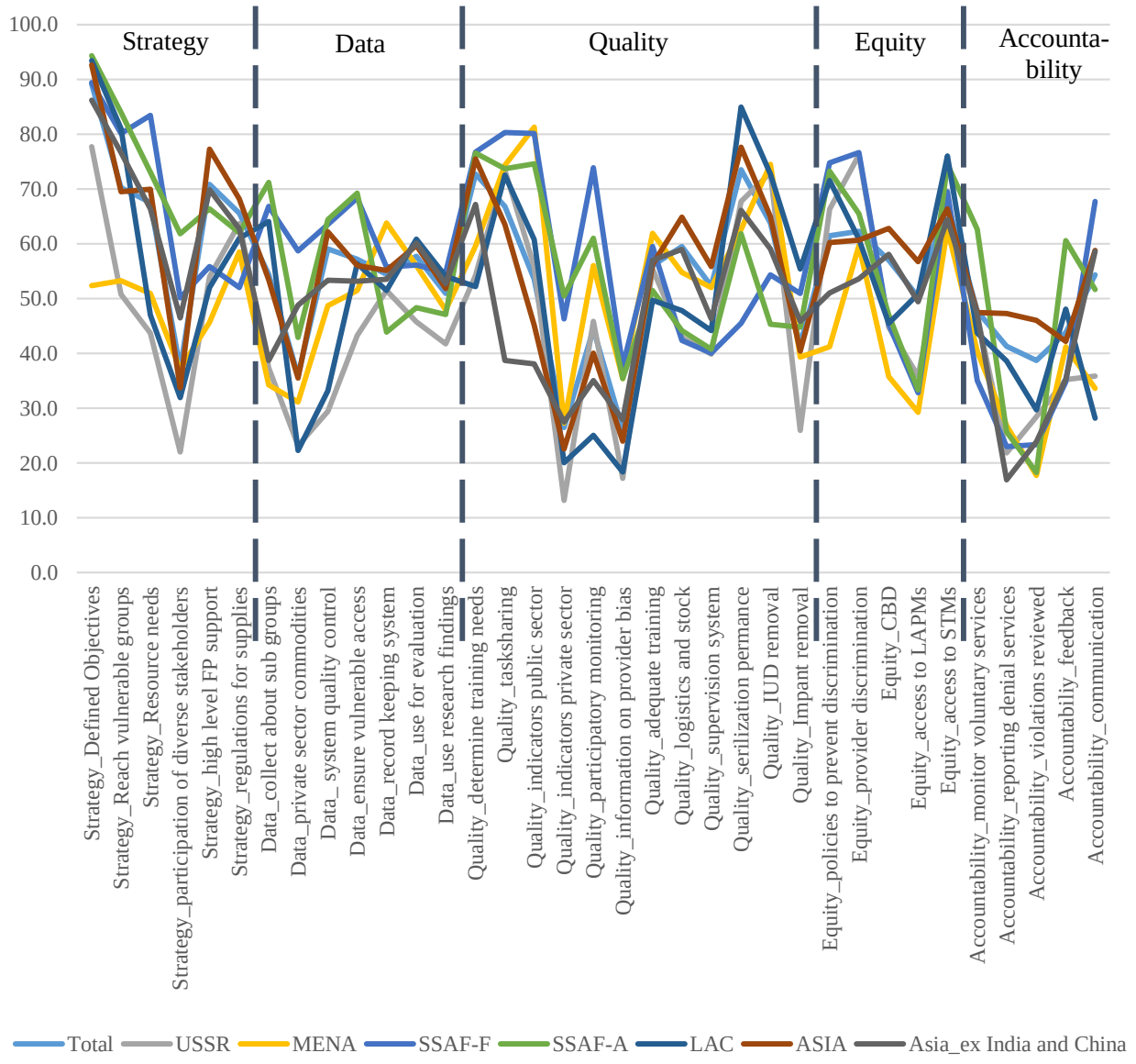
Figure 5 seems complex, but note how the regional lines rise and dip together, reflecting common forces at work internationally. Effort levels are not random from one region (or country) to another. Instead, programs find it easier to exert strong efforts for some of the 35 features than for others.

For all regions except MENA, the highest score across the 35 NCIFP scores was for the very first score- "Does the National Family Planning Action Plan include defined objectives over a 5-to-10 year period, including quantitative targets"- suggested that this was the easiest effort to achieve. In MENA, the highest score was achieved on the quality question- "Are indicators for quality of care collected and used for public sector family planning services?"

There was less consistency in terms of the lowest scores by region; the following list shows the NCIFP individual score for which each region had the lowest average (across the 35 scores):

- USSR and ASIA: Are indicators for quality of care collected and used for private sector family planning services?
- LAC: Does government collect information related to informed choice and provider bias?
- SSAF-F and Asia ex India and China: Does the government have mechanisms in place for reporting instances of denial of services on non-medical grounds (age, marital status, ability to pay), or coercion (including inappropriate use of incentives to clients or providers)?
- MENA and SSAF-A: Are violations reviewed on a regular basis?

Figure 5 Individual NCIFP Scores According to Region, weighted by WRA Population Size



Another way to see regional differences, for the most and least agreement, is by the gaps in Figure 5 between the lines for any score. A large gap identifies a large difference among the regions. The greatest difference between the highest and lowest scores appears in a question in the Quality dimension: "Are there structures in place to address quality, including participatory monitoring or community/facility quality improvement activities?" LAC scored the lowest at 25.1, compared to SSA-F, the highest at 73.9; creating a 48.8 point gap between the highest and lowest scores. The individual NCIFP score on which regions scored the closest was also in the Quality dimension (at the middle of the quality section) on the question "Extent to which training programs, for each category of staff in the family planning program, are adequate to provide personnel with information and skills necessary to carry out their jobs effectively". On this question there was only a 12.2 point spread—from 49.7 in LAC to 61.9 in MENA.

Across the 35 individual NCIFP scores, the USSR most often scored the lowest (11 times) followed by MENA (8 times). The region's most often scoring the highest were SSAF-F (10 times), SSAF-A (9 times), and ASIA (8 times).

Country Variation

Variation across regions in each score is shown above in Figure 5, but within each region countries vary greatly. Figure 6 shows how they do so in the total score. Note that a focus on the total score is quite different from the focus in Figure 5, which delineates effort levels among the individual scores. Those disparities are disguised within the total score.

Figure 6 shows the span of high values in the former USSR (top group) from below 30 to nearly 90; equally extreme is the disparity in Francophone SSA, from Rwanda (highest of all countries) at nearly 90, up from only 33 for Mauritania, the lowest among all countries except for Romania.

Figure 7 gives another way of looking at country variations, this time for each of the 35 scores. It presents the average variation around the mean for each score, to identify scores on which countries agree the most and the least. Questions with especially low and high deviations (disagreements) appear in Figure 7 by green (lowest 5) and red shading (highest 5). The average deviation ranged from 9.8 (on the Equity score regarding provider discrimination), to a high of 24.3 (on the Quality score related to use of quality of care indicators for public sector services). There are numerous scores with high deviations in the quality dimension, but high deviations appear also in the other dimensions except less so in the equity dimension.

Figure 8 builds on this to correct for the size of the mean, since variations cannot be large when the mean is very low. The Figure divides the average deviation in Figure 7 by the mean as an adjustment for the smaller variations seen on questions with low mean scores. Again green shading identifies the lowest 5 and red shading the highest 5. Compared to the pattern in Figure 7 three scores remain in the lowest 5, and two scores remain in the highest 5. Five new scores at the top or bottom are highlighted now, including two scores in accountability that take high values.

Figure 6 Total Scores by Country and Region

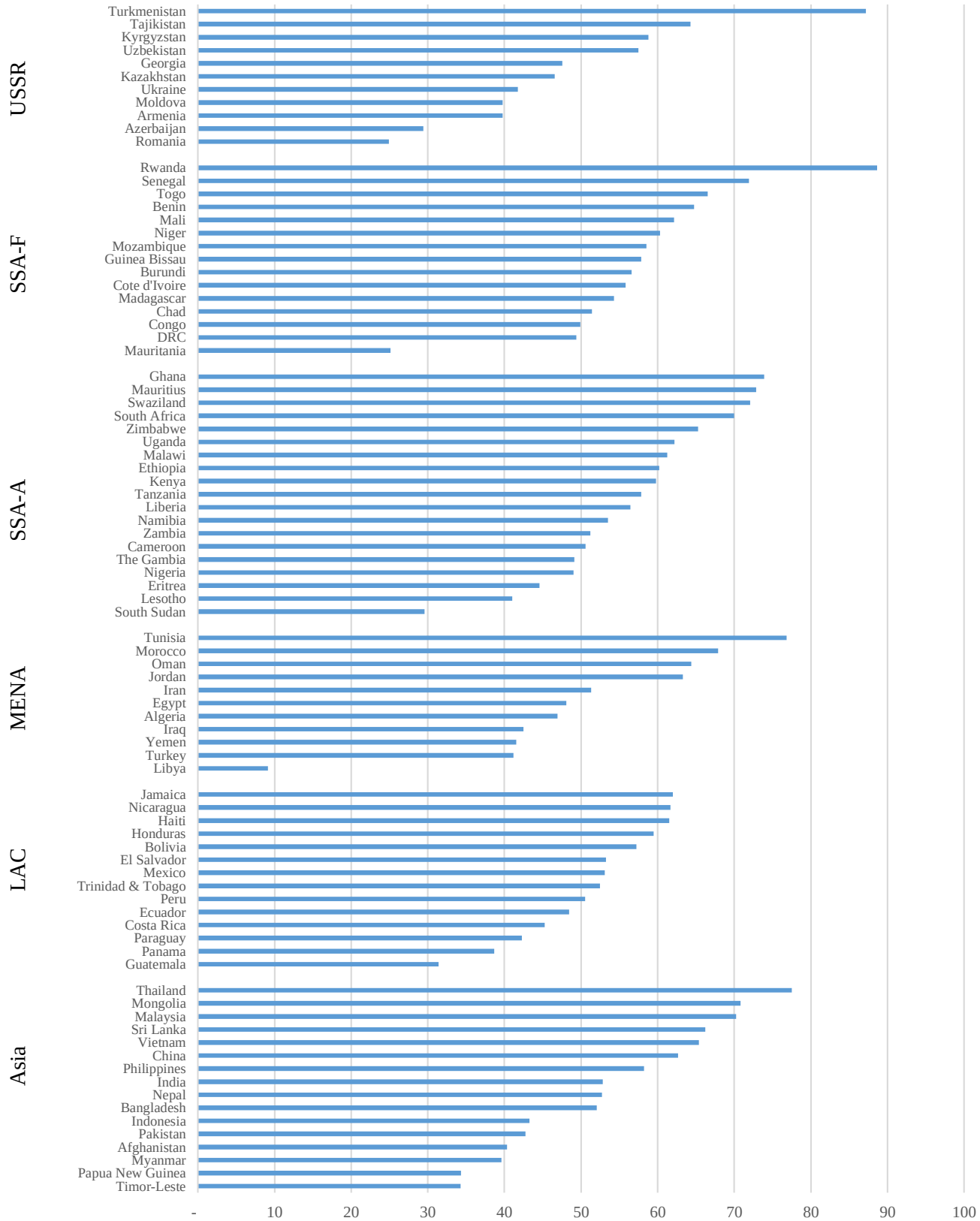


Figure 7 Average deviation from mean across all countries (red = highest 5, green = lowest 5)

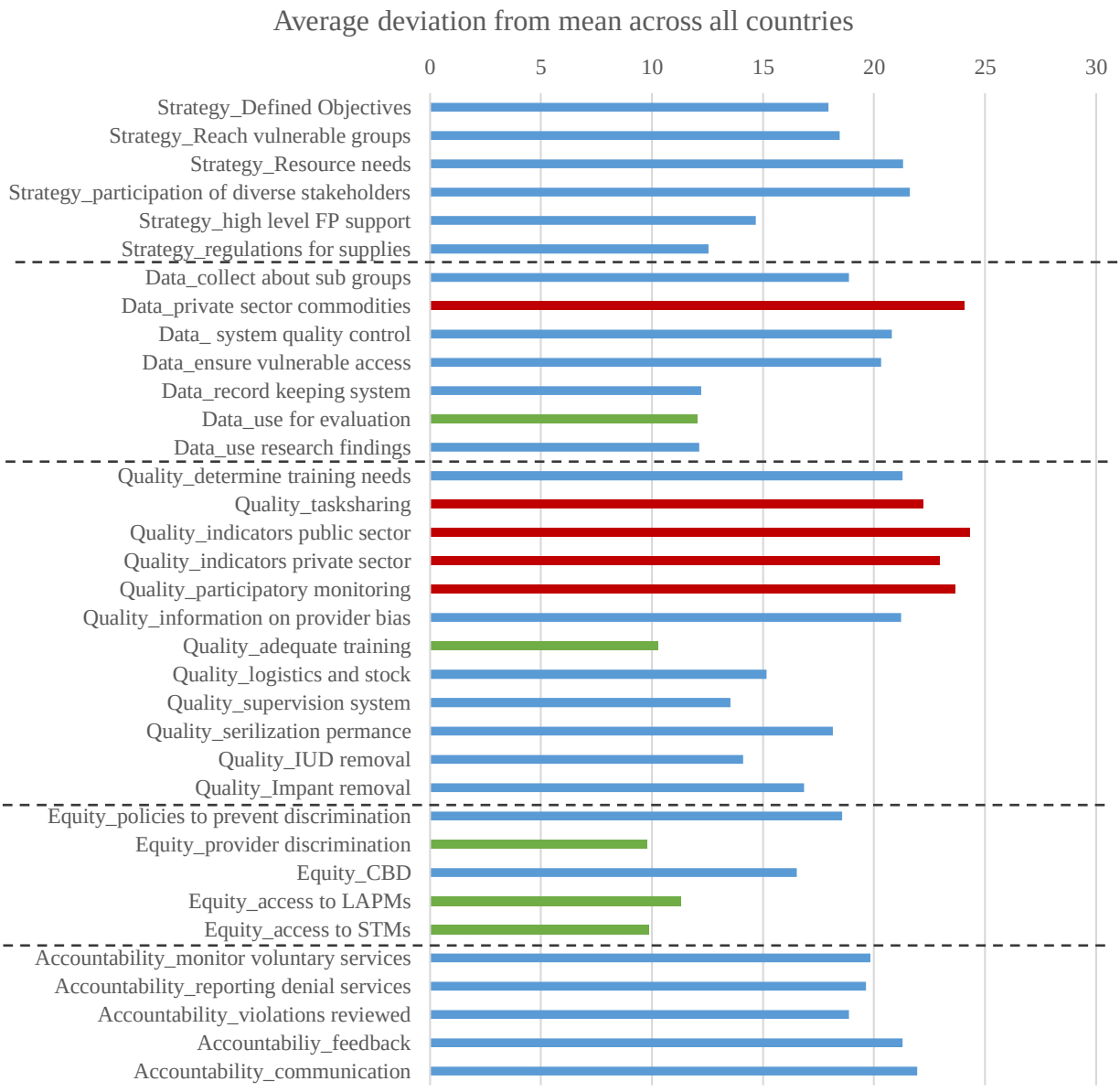
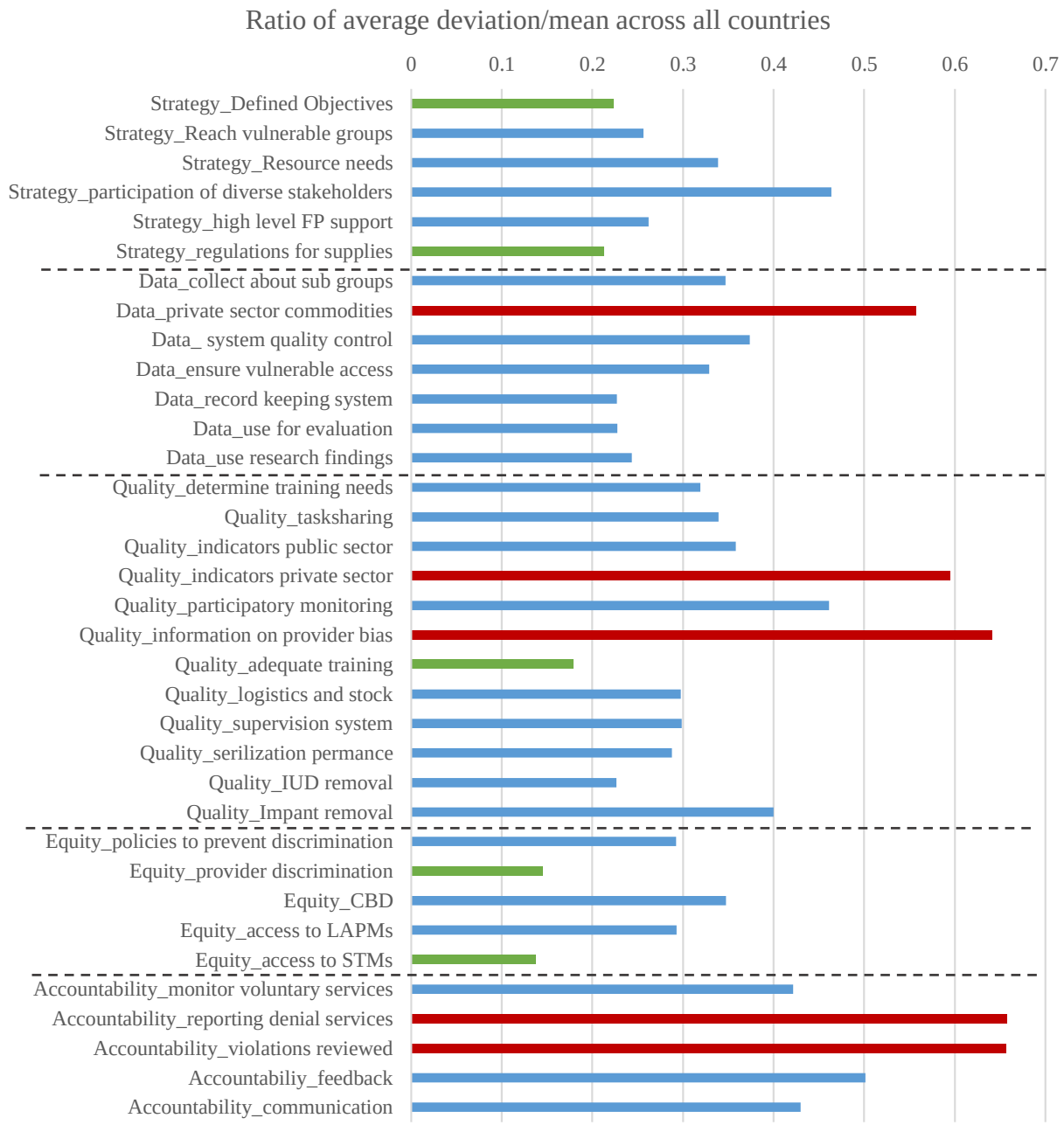


Figure 8 Ratio of average deviation to mean score across all countries (red = highest 5, green = lowest 5)



Next we look at key issues such as fertility and contraceptive use, combining the NCIFP results with external data sources to provide a deeper understanding of the results.

Are Contraceptive Use and Fertility Related to the NCIFP Total Score?
This question is explored here cross-sectionally; ideally it would be examined over time within individual countries, but that is not possible with only one NCIFP survey. Data for these analyses are drawn from the latest DHS surveys in StatCompiler of ICF International, from the UN Compilation of national surveys, and from the UN estimates of fertility rates (UNPD Population Prospects 2012 Revision).

For both the SSA and Non-SSA regions, contraceptive use is positively related to the total score. (There are 30 countries in SSA, 46 in Non-SSA.) Results appear in Figure 9 and Figure 10.

- The slopes are substantial for both the CPR (Figure 9) and the mCPR (Figure 10): a ten point increase in the total score is accompanied by a 6 point increase in the CPR in SSA and a 3 point increase in the Non-SSA region. For the mCPR the slopes are similar by region, a 5 point increase per 10 points rise in the score.

- However the relationships are not close: the R2 values are small (however equivalent "r" values are the square roots, hence 0.19, 0.35, 0.35, and 0.37 reading from top to bottom in the two charts.

- Especially, note that while the SSA cluster for contraception (Y-Axis) lies well below the Non-SSA one, the two regions are very similar in the patterns for the total score (X-Axis). In advance of seeing the results we would have expected scores in SSA to be worse than elsewhere. The similarity is something of a puzzle, since SSA has weaker infrastructures and ranks below other regions on many indicators. It also ranks below other regions on the FPE Score.

Figure 9 Total NCIFP score and CPR by region

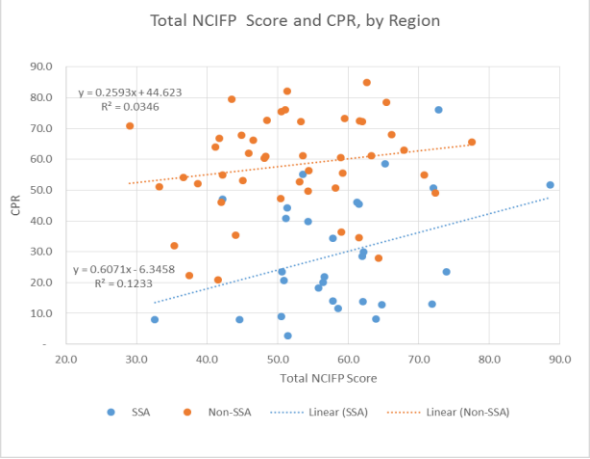
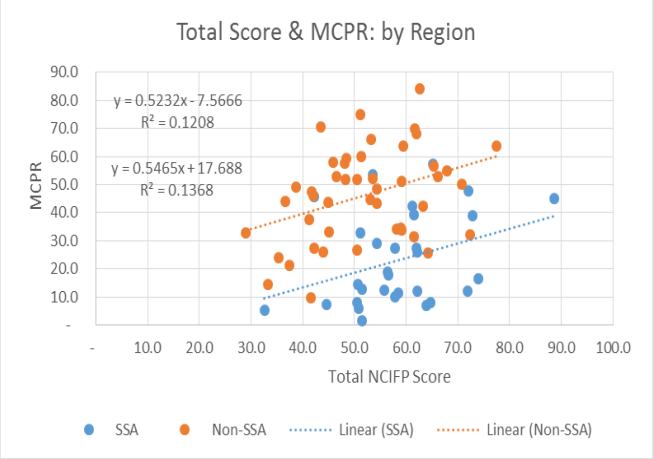


Figure 10 Total NCIFP score and mCPR by region



The following two tables give the "r" correlations for the total scores (same as those mentioned in the text above), and to the component scores.

Fertility: for the TFR and the total score the directions are negative, as expected, but the "r" values are not large. For the component scores the patterns are irregular: in the SSA the range of "r" values is from 0.10 to 0.17 but the range is from .00 to.20 in the Non-SSA. The relationship with the TFR as with other indicators is only cross-sectional, and the TFR estimates are from surveys of past dates; also the TFR is age-insensitive whereas the scores are targeted to the population at large. Nevertheless higher scores are generally accompanied by lower fertility rates.

For contraceptive use the correlations with the total score are discussed above. By component, the SSA region shows substantial correlations between each component and contraceptive use, and they are similar for the CPR and mCPR.

However in the Non-SSA region the correlations with the mCPR are much the same as in SSA, but they are definitely lower with the CPR. That is another puzzle; it suggests that traditional use plays a different role in the two regions, departing more from modern use in the Non-SSA region.

Table 4 SSA Correlation Matrix:

	TFR	CPR	MCPR
Total score	(0.16)	0.35	0.35
Strategy	(0.10)	0.39	0.37
Data	(0.14)	0.26	0.27
Quality	(0.17)	0.34	0.29
Equity	(0.12)	0.30	0.30
Accountability	(0.16)	0.27	0.33

Table 3 Non-SSA Correlation Matrix

	TFR	CPR	MCPR
Total score	(0.11)	0.19	0.37
Strategy	0.00	0.13	0.33
Data	(0.08)	0.15	0.36
Quality	(0.04)	0.16	0.31
Equity	(0.20)	0.20	0.42
Accountability	(0.20)	0.18	0.24

How does the NCIFP equity dimension relate to other measures of equity?

One new area measured by the NCIFP is the dimension of equity. While the NCIFP is not the full answer to the challenge of measuring equity, it provides a new measurement to understand the perception of equity in countries. In order to better understand how well this dimension captures equity, it is compared to another measure of equity- the gap between modern contraceptive use by the poorest and richest women in a country. Here this gap is measured by the ratio of use by the two wealth quintiles: a ratio of 1 means there is the same level of use, a ratio less than one means the mCPR among the poorest is lower than among the richest, and, a ratio greater than one means mCPR among the poorest is greater than among the richest[5].

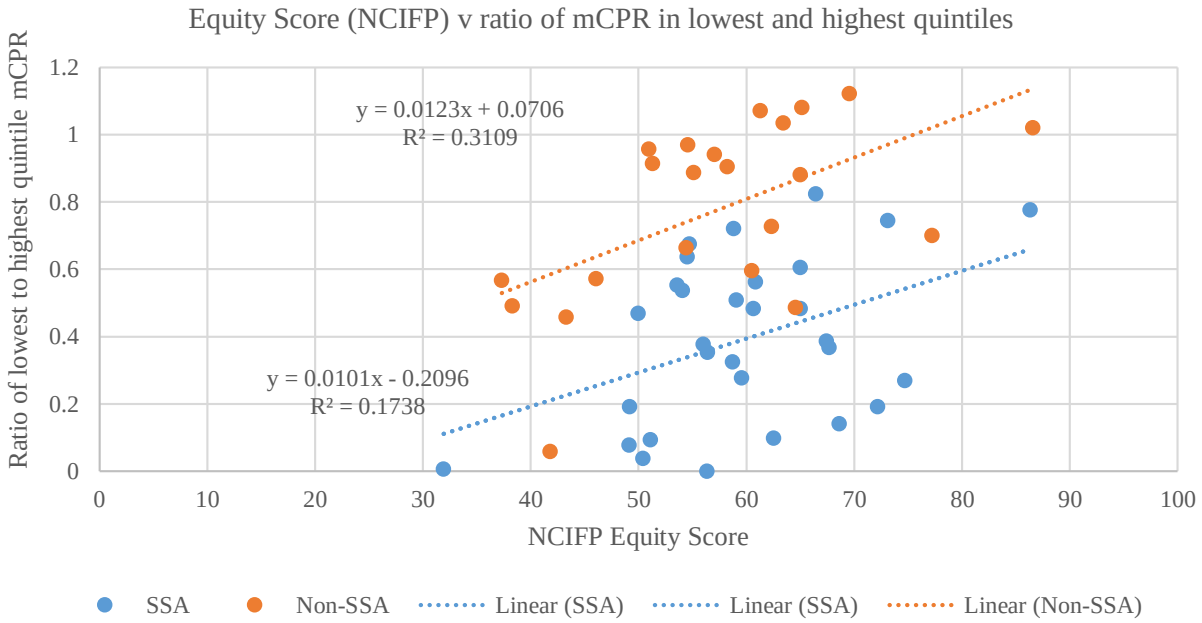
Figure 11 shows the positive relationship between the two equity measures, separately for the two regional groups. The line for the SSA countries falls below that for the Non-SSA countries because the use ratios are generally worse there. However both lines show that an improvement of 10 points in the NCIFP Score is accompanied by an improvement of 0.1 in the ratio for use, roughly a rise of 10% on the full Y-Axis scale.

There is substantial variation within both regions, and some SSA countries do better on the ratio of use than some Non-SSA countries. But the pattern is clear, that in general a higher score on the equity

[5] Data were taken from the most recent DHS survey in each country. A total of 52 countries with available mCPR rates (married women) by quintile were included in this analysis, based on data ranging from 1996 to 2014.

dimension is accompanied by a smaller gap between the poorest and richest wealth quintile in contraceptive use. That is true for both the SSA countries and the non-SSA countries. Where the NCIFP equity score is high, the mCPR ratio between the poorest and wealthiest quintiles is better.

Figure 11 NCIFP Equity score and ratio of mCPR in the lowest and highest wealth quintiles



Why do some countries score higher than others? What are likely determinants of the intensity of effort?

While effort levels are examined above for their effects on contraception and fertility, the question can be reversed, to ask what determines the effort levels in the first place. Why do some countries score higher than others? What are likely determinants of the intensity of effort? Here we only point to the question and look briefly at regional effects. For later research such determinants as donor contributions and influences, or female empowerment, or health expenditures may be examined. An initial look at health expenditures found no correlation to the effort scores.

By region the total NCIFP score varies, as laid out earlier, and regions tend to possess profound religious and cultural contrasts. It seemed possible that such vast regional differences as between sub-Saharan Africa and Latin America, or between the former USSR countries and the Middle East, would point to some proximate determinants of score variation.

For example, it seemed plausible that the health systems created by the USSR, with widespread coverage of maternal care and deliveries, might have carryover effects to the current period and result in higher scores. However the reverse occurred; the total score was only 47 for the former USSR, well below the average of 54. Within that group the 3 Caucasus countries averaged 42, the 4 Central Asia countries averaged a high 57, but the other three countries were very low at 39%. Such variations occur within every region. But it remains that the hypothesis was not supported, that on average the inheritance of the old Soviet maternity systems would produce higher scores.

The chief surprise was the high scores in sub-Saharan Africa, and the lack of any difference between the averages for Francophone and Anglophone countries. It seemed reasonable to expect lower scores in Francophone settings, but that did not occur. As noted above the other three regions were mixed: compared to the all-country average of 54, Asia fell slightly above, while Latin America and the Middle East/North Africa fell below.

Special Analyses: Principal Components Analysis and Clustering Analysis[6]

Even though the original NCIFP questionnaire of 69 items was reduced to 35 items (primarily by inspection of the close correlations among some items), it is possible that even the 35 items can reflect a few underlying themes. This was explored by a principal components analysis (PCA), closely related to factor analysis. The technique is quite technical, but basically it looks for commonalities among the questions, to detect those with similar patterns that may reveal underlying structures, or components. Each component identified is created to capture an entirely separate structure.[7]

The first component generated by the PCA analysis explained 37% of the variance across all countries, and the second component explained almost 10%. Other components were quite minor. These results indicate that the 35 questionnaire items tend to measure two different features of effort. The original intent in developing the questionnaire was to measure the concept of "program effort," and the results suggest that there are two clusters of questions that get at somewhat different types of effort. However the set of questions under each component contains considerable diversity, making the interpretations somewhat unclear.

For the first component several questions pertain to the use of information to improve program performance. Notable ones follow which originated in the FPE questionnaire, due perhaps to their reliance on the 10 point scale rather than the "yes/no" type.

- Management's use of evaluation findings: Extent to which program managers use research and evaluation findings to improve the program
- Evaluation: Extent to which program statistics, national surveys, and small studies are used by specialized staff to report on program operations and measure progress.
- Record keeping: Extent to which systems for client recordkeeping, clinic reporting and feedback of results are adequate.

Other questions tie in to actual performance implementation: Examples:

- Supervision system: Extent to which the system of supervision at all levels is adequate (regular monitoring visits with corrective or supportive action).
- Logistics and transport: Extent to which the logistics and transport systems are sufficient to keep stocks of contraceptive supplies and related equipment available at all service points.
- Training program: Extent to which training programs, for each category of staff in the family planning program, are adequate to provide personnel with information and skills necessary to carry out their jobs effectively.

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[6] We express thanks to our colleague Bill Winfrey for conducting these analyses in STATA

[7] The PCA method is mostly used as a tool in exploratory data analysis and for making predictive models. Its operation can be thought of as revealing the internal structure of the data in a way that best explains the variance in the data. The number of principal components is less than or equal to the number of original variables. The first principal component accounts for as much of the variability in the data as possible, and each succeeding component in turn accounts for the highest variability possibility, with the constraint that it is uncorrelated with the preceding components. --- Adapted from Wikipedia "Principal Component Analysis."

The second component is created by the software to be quite different, to be uncorrelated with the first one. It accounts for only 10% of country variations, and there is less cohesion in the questions that relate to it. Some pertain to program attention to the interests of clients in various ways. Examples:

- Are there mechanisms in place at the facility level to solicit and use feedback from clients?
- Does government collect information related to informed choice and provider bias?
- Are indicators for quality of care collected and used for private sector family planning services? (Similar question for public services)
- Others pertain to whether people in general have access to services
- Extent to which the entire population has ready access to STMs
- Extent to which the entire population has ready access to LAPMs
- Community-based distribution (CBD): Extent to which areas of country not easily serviced by clinics or other service points are covered by CBD programs …
- These examples are suggestive of underlying themes among the 35 questions, even though the focus within each component is somewhat diffuse.

Clustering: A further step was to explore whether countries fall into separate groups with regard to the component values. Clustering software[8] automatically groups countries into subsets that are especially low, and high, on the Component scores. Then it is possible to look for similarities among the countries that fall into each group, whether by regions or in other ways. We therefore ran an analysis using the first two components of the PCA to create four clusters of countries.[9] The clusters and their member countries follow (only five regions are shown, to avoid small numbers in the cells). In terms of sheer numbers, the clusters are about even, at 20-23 each except for 11 in the second cluster (Table 5 and Table 6). The largest cell is for the 17 sub-Saharan countries in the first cluster.

Table 5 Countries listed by cluster and region

	Cluster Number				
	1	**2**	**3**	**4**	**Count**
Asia					
	Philippines	Myanmar Papua New Guinea Timor-Leste	Bangladesh India Indonesia Nepal Pakistan	China Malaysia Mongolia Sri Lanka Thailand Vietnam	15
Latin America					
	Bolivia Haiti	Guatemala Panama	Costa Rica Ecuador El Salvador Mexico Paraguay Peru	Honduras Jamaica Nicaragua	13

[8] Cluster analysis groups a set of objects into subsets so that members in the same subset ("a cluster") are especially similar to each other, and different on average from other subsets. It is used in data explorations, or mining, and is a common technique for statistical data analysis in many fields. ---Adapted from Wikipedia "Cluster Analysis."

[9] We are grateful to Bill Winfrey for performing both the component and the cluster analyses.

	Cluster Number (table continued)				
	1	**2**	**3**	**4**	**Count**
Middle East/N. Africa					
			Algeria Egypt Iran Iraq Turkey Yemen	Jordan Morocco	8
Sub-Saharan Africa					
	Benin Cameroon Chad Congo Cote d'Ivoire DR Congo Guinea Bissau Kenya Liberia Madagascar Malawi Mali Mozambique Namibia Niger Tanzania Uganda	Lesotho Mauritania	Eritrea The Gambia Zambia	Burundi Ethiopia Ghana Mauritius Rwanda Senegal Swaziland Zimbabwe	30
Former USSR					
		Armenia Azerbaijan Romania Ukraine	Georgia Kazakhstan Moldova	Kyrgyzstan Tajikistan Uzbekistan	10
Total:	**20**	**11**	**23**	**22**	**76**

Table 6 Number of countries in each Region by cluster

	Cluster Number				
	1	**2**	**3**	**4**	**Total**
Asia	1	3	5	6	15
Latin Am.	2	2	6	3	13
Middle East/N. Africa	-	-	6	2	8
Sub-Saharan Africa	17	2	3	8	30
Former USSR	-	4	3	3	10
All regions	20	11	23	22	76

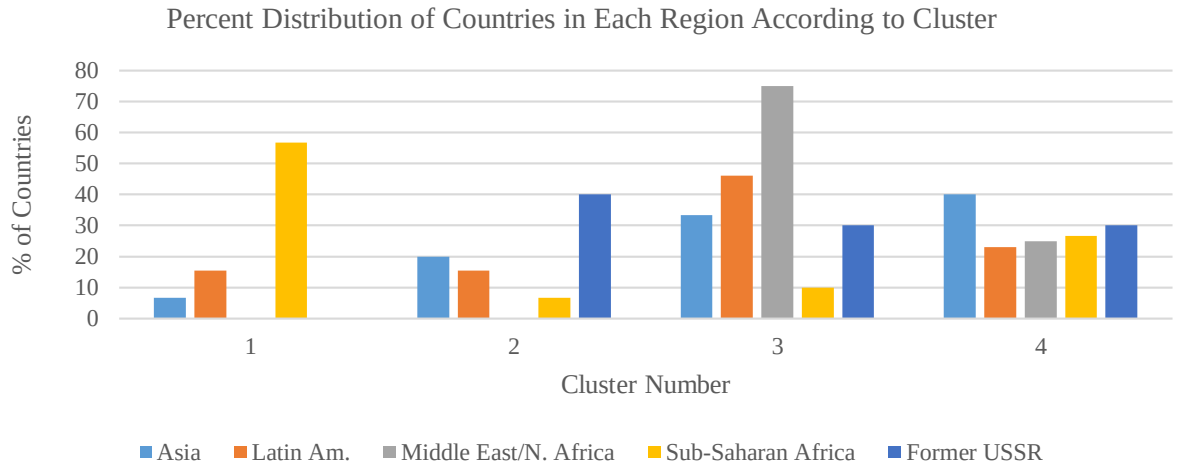
Do the clusters differ according to region? Cluster 1 is composed heavily of sub-Saharan African members but it has 30 countries in the sample, more than any other region. On the other hand the Middle East/North Africa has only 8 members, but nearly all are in the third cluster. So to standardize the number of countries Table 7 gives each region in effect the same number of countries by percentagizing the rows.

Table 7 Percent distribution of countries in each region by cluster

	Cluster Number				
	1	**2**	**3**	**4**	**Total**
Asia	7	20	33	40	100
Latin Am.	15	15	46	23	100
Middle East/N. Africa	-	-	75	25	100
Sub-Saharan Africa	57	7	10	27	100
Former USSR	-	40	30	30	100
All regions	26	14	30	29	100

This says that if a country is in sub-Saharan Africa it is most likely to fall in the first cluster, and secondarily in the fourth one. Regions do differ considerably: Asia favors the fourth cluster, then the third one. Figure 12 displays the data in Table 7 to show these differences.

Figure 12 Percent distribution of countries in each region by cluster



Note that Clusters 1 to 3 have very irregular regional patterns. The first is favored by sub-Saharan Africa only; the second is favored especially by the former USSR countries, the third mainly by the Middle East/North Africa but also somewhat by Asia and Latin America. The fourth cluster receives fairly even interest by the various regions.

Apart from the sharp regional differences it is somewhat difficult to capture the essential differences between the clusters. Roughly, countries in cluster 1 may be making efforts to mobilize information and effort, but have poor performance on access to LAPMs. Cluster 2 may reflect less effort currently to organize strong programs but LAPMs are moderately available. Cluster 3 is more likely to have LAPMs widely available, but many programs are not strong. Cluster 4 is characterized more by stronger programs and LAPMs access. However some countries in each cluster depart from these traits.

The clusters are created to separate countries according to high and low values on the Component scores. In the following table the average score for Component 1 varies from -.566 to 4.01, and for Component 2 from -1.12 to 1.91. The negative values indicate that the countries scored poorly; for example the countries in the second cluster have the lowest scores, on Component 1, at -5.66. They do somewhat better, at 0.27 on Component 2. The best score, of 4.01, appears in the fourth cluster, for Component 1.

Finally, how well does scoring on a Component match the total NCIFP score or contraceptive use? In general, not well. Moreover, contraceptive use does not closely follow the total NCIFP score: the lowest effort score, at 37% in cluster two, accompanies a CPR of 46%, while a high effort score, of 58% in cluster 1, goes with a CPR of merely 29%. The two CPR levels in clusters 3 and 4 are similar while the effort scores differ considerably (Table 8).

Table 8 Scores for Components, Effort and Contraceptive use by Cluster

	Cluster Number			
	1	**2**	**3**	**4**
Component 1	0.65	-5.66	-1.69	4.01
Component 2	1.91	0.27	-1.12	-0.70
Total effort score	57.66	37.38	48.52	67.05
MCPR	21.59	32.41	44.20	45.99
CPR	29.34	45.91	55.35	53.94

Note that the emergence of a component only indicates that several questions are closely allied; it does not necessarily mean that this group of questions is highly correlated to any outcome variable like contraceptive use.

Conclusion

The National Composite Index for Family Planning (NCIFP) represents a new and innovative measurement tool to help capture the enabling environment in which family planning programs are implemented. The NCIFP measures both the existence of policies and program implementation, and uses 35 individual scores organized under the five dimensions of strategy, data, quality, equity, and accountability.

This report documents the process undertaken to create this modified version of the original NCIFP. In the future, further refinements may be made to the NCIFP questionnaire to improve the results, for example changing some questions from a yes/no response to a 10-point scale. However, making such changes would mean that future versions would not be fully comparable to the one presented here.

Results in this report are presented globally, by region, and by country. All three can inform policy judgments and resource allocations. Especially at the country level, the scores can identify areas for potential improvements in program implementation. The experiences of high-scoring countries can be suggestive for how low-scoring countries can improve; and this may well differ depending on the particular score or dimension.

The analyses here highlight the rather large variations in key scores according to regions, and by country within regions. Average levels also vary; for example the accountability dimension generally scored the lowest, while the strategy dimension scored the highest. Surprisingly, sub-Saharan Africa scored above the other regions. Preliminary work to discover determinants of score variations were inconclusive.

In the reverse direction, to use the scores as determinants of various outcomes, analyses found higher contraceptive use and lower fertility rates where the scores were higher. The advanced techniques of Principal Components Analysis and Clustering Analysis looked at underlying relationships across the individual scores.

The NCIFP is the first comprehensive measure to cover important topics like those related to equity and accountability, going beyond some of the measures in the "FPE" (the Family Planning Program Effort Index). While there is room for further improvement and refinement of the NCIFP, these initial results tell an important story about how to focus on these new areas and how improvements may be made.

Finally, while providing a useful tool, the NCIFP is not the only approach needed to understand the five dimensions of strategy, data, quality, equity, and accountability. The NCFIP provides one perspective, further work is needed to develop complementary measures in these areas.

Annex 1: Evolution of the new NCIFP questionnaire

This annex lists 83 items: all 69 items in the original NCIFP questionnaire, plus 14 items selected from the FPE questionnaire. These are in the order of the five dimensions, with codes to show which items were retained in the revised and final revisions. In the final column there are 49 "y" entries for yes, but three groupings are each collapsed to summary measures, for a net reduction of 14, leaving 35 surviving items. Of the 35, 14 are those selected from the FPE questionnaire and 21 come from the original NCIFP questionnaire (including the three summary measures that replace numerous detailed items).

The three summary items first (1) collapse the 7 'yes" items in Question 2a of the NCIFP questionnaire, to use their average value in the analyses done here; the next (2) collapses the 5 "yes" items in Question 4a, and the last (3) collapses the 5 'yes" items in 4b. The 17 are replaced by the 3 summary items, for our analyses of the 35 final list.

NCIFP Questionnaire and revisions (y = include, n = exclude)

Survey Source	NCIFP Dimension	Question	Revision (v1)	Final	Notes
NCIFP	Strategy	Does the National Family Planning Action plan include			
NCIFP	Strategy	• Defined objectives over a 5–to 10–year period, including quantitative targets?	y	y	
NCIFP	Strategy	• Objectives to reach the poorest and most vulnerable groups with quality FP information and services	y	y	
NCIFP	Strategy	• Subnational objectives (examples: region, urban/rural, income groups, etc.)?	n	n	Sub-groups covered elsewhere; question too broad.
NCIFP	Strategy	• A clear strategy for attaining these objectives, including the role of both the public and private sectors?	n	n	Private sector covered elsewhere, highly correlated with data use questions
NCIFP	Strategy	• Projection of the resources (material, human and financial) required to implement the strategy, as well as sets forth a plan to secure the resources?	y	y	
NCIFP	Strategy	• A contraceptive commodity plan that ensures that contraceptive requirements are projected annually and that a range of method choices?	n	n	Use FPE question instead

NCIFP	Strategy	• An M&E framework?	n	n	Highly correlated with data use questions
NCIFP	Strategy	• A mechanism and funding to support meaningful participation of diverse stakeholders?	y	y	
FPE	Strategy	Level of program leadership High level of seniority of the director of the national family planning program and whether director reports to a high level of government	y	y	Added from FPE
FPE	Strategy	Import laws and legal regulations Extent to which import laws and legal regulations facilitate the importation of contraceptive supplies or extent to which contraceptives are manufactured locally	y	y	Added from FPE
NCIFP	Data	Does the government collect data to monitor coverage, quality, unmet need, and use of FP services among the following population subgroups *(note: turned into single composite score based on average across sub-groups)*			
NCIFP	Data	• Youth?	n	y	Initially removed for correlation, added back
NCIFP	Data	• Unmarried women?	n	y	Initially removed for correlation, added back
NCIFP	Data	• Unmarried youth?	y	y	
NCIFP	Data	• Postpartum women?	y	y	
NCIFP	Data	• Wealth status?	y	y	
NCIFP	Data	• Rural populations?	n	n	High correlation, generally high responses compared with other subgroups.
NCIFP	Data	• Post abortion clients?	y	y	
NCIFP	Data	• HIV Status?	y	y	
NCIFP	Data	• Other?	n	n	No responses for this sub-group
NCIFP	Data	Does the government collect data from the private sector on number of clients?	n	n	High correlation, commodity question seen as more important
NCIFP	Data	Does the government collect data from the private sector on commodities?	y	y	
NCIFP	Data	Are government service statistic data reviewed and analyzed for program evaluation at least annually?	n	n	Answers high-- use FPE question instead
NCIFP	Data	Is there a system of quality control for service statistics?	y	y	

NCIFP	Data	Is government collected data available for external use?	n	n	Answers high, does got really address issues
NCIFP	Data	Are data used to adjust national plans in order to:			
NCIFP	Data	• To review targets on an annual basis?	n	n	correlation, use FPE
NCIFP	Data	• To adjust strategies for improving access?	n	n	correlation, use FPE
NCIFP	Data	• To define training needs for providers?	y	n	Removed in final revision, training covered later under quality
NCIFP	Data	• To improve quality of care?	n	n	asked later under quality
NCIFP	Data	• To ensure that the poorest and most vulnerable women and girls have access to quality FP services?	y	y	
FPE	Data	Record keeping: Extent to which systems for client recordkeeping, clinic reporting and feedback of results are adequate	y	Y	Added from FPE
FPE	Data	Evaluation: Extent to which program statistics, national surveys, and small studies are used by specialized staff to report on program operations and measure progress	y	Y	Added from FPE
FPE	Data	Management's use of evaluation findings: Extent to which program managers use research and evaluation findings to improve the program in ways suggested by findings	y	y	Added from FPE
NCIFP	Quality	Are family planning standard operating procedures in line with the latest WHO medical guidelines and are these standards used for			
NCIFP	Quality	• Staff and facility performance appraisal?	n	n	correlation
NCIFP	Quality	• Determining areas of need for quality improvement?	y	y	
NCIFP	Quality	• Proposed changes in program strategies or operation's?	n	n	correlation with data
NCIFP	Quality	Are there guidelines on task sharing of family planning services?	y	y	
NCIFP	Quality	Are there specific indicators for quality of care that are collected and used by the government to monitor coverage, quality, and equity of:			
NCIFP	Quality	• Public sector family planning services?	y	y	
NCIFP	Quality	• Private sector family planning services?	y	y	

NCIFP	Quality	Are there structures in place to address quality of public sector FP services, particularly			
NCIFP	Quality	• Trainings for providers on rights of clients to full, free, and informed choice (voluntarism, non-discrimination policies, third-party authorization, etc.)?	n	n	Removed, too many components asked in one question.
NCIFP	Quality	• Refresher trainings?	n	n	correlation, and use FPE
NCIFP	Quality	• Supervision structures?	n	n	correlation, and use FPE
NCIFP	Quality	• Mystery clients?	y	n	Removed in final revision, had very low scores; but felt not having mystery clients should not stand out as strong negative in scores.
NCIFP	Quality	• Participatory monitoring or community/facility quality improvement activities?	y	y	
NCIFP	Quality	Does the government collect any information related to informed choice?			
NCIFP	Quality	• Availability of different types of contraceptives at different levels of facilities?	n	n	correlation
NCIFP	Quality	• Content of counseling?	n	n	correlation
NCIFP	Quality	• Provider bias?	y	y	
NCIFP	Quality	• Provider training needs?	n	n	correlation
FPE	Quality	Training program: Extent to which training programs, for each category of staff in the family planning program, are adequate to provide personnel with information and skills necessary to carry out their jobs effectively	y	y	Added from FPE.
FPE	Quality	Logistics and transport: Extent to which the logistics and transport systems are sufficient to keep stocks of contraceptive supplies and related equipment available at all service points, at all times and at all levels (central, provincial, local)	y	y	Added from FPE.
FPE	Quality	Supervision system: Extent to which the system of supervision at all levels is adequate (regular monitoring visits with corrective or supportive action)	y	y	Added from FPE.
FPE	Quality	Sterilization permanence: Extent to which clients adopting sterilization are routinely informed that it is permanent?	n	y	Added from FPE.

FPE	Quality	IUD Removal: Extent to which the entire population has ready and easy access to IUD removal	n	y	Added from FPE.
FPE	Quality	Implant Removal: Extent to which the entire population has ready and easy access to implant removal	n	y	Added from FPE.
NCIFP	Equity	Are there policies /strategies in place to prevent discrimination towards (note: turned into single composite score based on average across sub-groups)			
NCIFP	Equity	• Youth?	n	y	Initially removed for correlation, added back
NCIFP	Equity	• Unmarried women?	n	y	Initially removed for correlation, added back
NCIFP	Equity	• Unmarried youth?	y	n	Removed, because covered by the 2 above.
NCIFP	Equity	• Postpartum women?	n	n	correlation
NCIFP	Equity	• Wealth status?	y	y	
NCIFP	Equity	• Rural populations?	n	n	correlation
NCIFP	Equity	• Postabortion clients?	y	y	
NCIFP	Equity	• HIV status?	y	y	
NCIFP	Equity	• Other marginalized groups?	n	n	Correlation; broad category
NCIFP	Equity	To what extent do service providers discriminate against each of the groups below? Use a score of 1 to illustrate minimal discrimination and a score of 10 to show widespread discrimination *(note: turned into single composite score based on average across sub-groups)*			
NCIFP	Equity	• Youth?	n	y	Initially removed for correlation, added back
NCIFP	Equity	• Unmarried women?	n	y	Initially removed for correlation, added back
NCIFP	Equity	• Unmarried youth?	y	n	Removed, because covered by the 2 above.
NCIFP	Equity	• Postpartum women?	n	n	correlation
NCIFP	Equity	• Wealth status?	y	y	
NCIFP	Equity	• Rural populations?	n	n	correlation
NCIFP	Equity	• Postabortion clients?	y	y	
NCIFP	Equity	• HIV status?	y	y	
NCIFP	Equity	• Other marginalized groups?	n	n	correlation
FPE	Equity	Community-based distribution (CBD) Extent to which areas of country not easily serviced by clinics or other service points are covered by CBD programs for	y	y	Added from FPE.

		distribution of contraceptives (especially rural areas)			
FPE	Equity	Extent to which the entire population has ready access to LAPMs (composite score based on average of access to sterilization, IUD, implant)	n	y	Added from FPE
FPE	Equity	Extent to which the entire population has ready access to STMs (composite score based on average of access to condom, pill, injections)	n	y	Added from FPE
NCIFP	Accountability	Are there mechanisms in place at the national, subnational, and facility level to monitor whether or not access to voluntary, non-discriminatory FP information and services is being achieved?	y	y	
NCIFP	Accountability	Does the government have mechanisms in place for reporting instances of denial of services on non-medical grounds (age, marital status, ability to pay), or coercion (including inappropriate use of incentives to clients or providers)?	y	y	
NCIFP	Accountability	Are violations reviewed on a regular basis?	y	y	
NCIFP	Accountability	Are violations investigated?	n	n	People say not reviewed, but investigated.
NCIFP	Accountability	Are there mechanisms in place at the facility level to solicit and use feedback from clients?	y	y	
NCIFP	Accountability	Are the following groups represented in national coordinating bodies			
NCIFP	Accountability	• Commercial/Private Sector?	n	n	Asked under strategy
NCIFP	Accountability	• Religious Groups?	n	n	Asked under strategy
NCIFP	Accountability	• Other Civil Society Groups?	n	n	Asked under strategy
NCIFP	Accountability	Is there a system in place that encourages dialogue and communication between users and service providers/health officials about service availability, accessibility, acceptability and quality?	y	y	

Annex 2. Final set of 35 NCIFP Scores by Dimension

Dimension	Question	**Notes**-if from FPE, or, if composite of multiple questions
Strategy	Does the National Family Planning Action plan include defined objectives over a 5–to 10–year period, including quantitative targets?	
Strategy	Does the National Family Planning Action plan include objectives to reach the poorest and most vulnerable groups with quality FP information and services	
Strategy	Does the National Family Planning Action plan include projection of the resources (material, human and financial) required to implement the strategy, as well as sets forth a plan to secure the resources?	
Strategy	Does the National Family Planning Action plan include a mechanism and funding to support meaningful participation of diverse stakeholders?	
Strategy	Level of program leadership High level of seniority of the director of the national family planning program and whether director reports to a high level of government	From FPE
Strategy	Import laws and legal regulations Extent to which import laws and legal regulations facilitate the importation of contraceptive supplies or extent to which contraceptives are manufactured locally	From FPE
Data	Does the government collect data to monitor special sub-groups?	Average of: youth, unmarried women, unmarried youth, postpartum women, wealth status, post-abortion clients, HIV status
Data	Does the government collect data from the private sector on commodities?	
Data	Is there a system of quality control for service statistics?	
Data	Are data used to\ ensure that the poorest and most vulnerable women and girls have access to quality FP services?	
Data	Record keeping Extent to which systems for client recordkeeping, clinic reporting and feedback of results are adequate	From FPE
Data	Evaluation Extent to which program statistics, national surveys, and small studies are used by specialized staff to report on program operations and measure progress	From FPE
Data	Management's use of evaluation findings Extent to which program managers use research and evaluation findings to improve the program in ways suggested by findings	From FPE
Quality	Are FP SOP in line with WHO and used for determining areas of need for quality improvement?	
Quality	Are there guidelines on task sharing of family planning services?	
Quality	Are indicators for quality of care collected and used for public sector family planning services?	
Quality	Are indicators for quality of care collected and used for private sector family planning services?	
Quality	Are there structures in place to address quality, including participatory monitoring or community/facility quality improvement activities?	

Quality	Does government collect information related to informed choice and provider bias?	
Quality	Training program Extent to which training programs, for each category of staff in the family planning program, are adequate to provide personnel with information and skills necessary to carry out their jobs effectively	From FPE
Quality	Logistics and transport Extent to which the logistics and transport systems are sufficient to keep stocks of contraceptive supplies and related equipment available at all service points, at all times and at all levels (central, provincial, local)	From FPE
Quality	Supervision system Extent to which the system of supervision at all levels is adequate (regular monitoring visits with corrective or supportive action)	From FPE
Quality	Sterilization permanence Extent to which clients adopting sterilization are routinely informed that it is permanent?	From FPE
Quality	IUD Removal Extent to which the entire population has ready and easy access to IUD removal	From FPE
Quality	Implant Removal Extent to which the entire population has ready and easy access to implant removal	From FPE
Equity	Are there policies in place to prevent discrimination towards special sub-groups?	Average of: youth, unmarried women, wealth status, post-abortion clients, HIV status
Equity	To what extent do service providers discriminate against special sub-groups?	Average of: youth, unmarried women, wealth status, post-abortion clients, HIV status
Equity	Community-based distribution (CBD) Extent to which areas of country not easily serviced by clinics or other service points are covered by CBD programs for distribution of contraceptives (especially rural areas)	From FPE
Equity	Extent to which the entire population has ready access to LAPMs	From FPE; average of access to sterilization, IUD, implant
Equity	Extent to which the entire population has ready access to STMs	From FPE; average of access to condom, pill, injections
Accountability	Are there mechanisms in place at the national, subnational, and facility level to monitor whether or not access to voluntary, non-discriminatory FP information and services is being achieved?	
Accountability	Does the government have mechanisms in place for reporting instances of denial of services on non-medical grounds (age, marital status, ability to pay), or coercion (including inappropriate use of incentives to clients or providers)?	
Accountability	Are violations reviewed on a regular basis?	
Accountability	Are there mechanisms in place at the facility level to solicit and use feedback from clients?	
Accountability	Is there a system in place that encourages dialogue and communication between users and service providers/health officials about service availability, accessibility, acceptability and quality?	

Annex 3 Full Questionnaire for both FPE and NCIFP

IINTERNATIONAL FAMILY PLANNING

PROGRAM STUDY

--2014 CYCLE—

_____

Country

Conducted By

Futures Group

And

Avenir Health

QUESTIONNAIRE

INTERNATIONAL FAMILY PLANNING PROGRAM STUDY

CHARACTERISTICS AND STRENGTH OF EFFORT

- This questionnaire is intended to provide internationally comparable information for nearly 85 countries. It concerns large-scale family planning programs, and it will update previous investigations of the characteristics and strength of these programs.

- Throughout this questionnaire we refer to "the family planning program." In most countries there is only one large-scale program, and usually it operates under government auspices. The focus is on the national picture of family planning activities. If these are merged with maternal and child health activities please focus on the family planning aspects.

- The 2014 version of the questionnaire has 2 main parts:
    - Questions about family planning program efforts, including policy and stage-setting activities, services and service-related activities, record-keeping and evaluation, availability and accessibility of methods, reversal of long-term methods (LTM) and long-acting and permanent methods (LAPM), and the justification for the family planning program.
    - Questions for the National Composite Index for Family Planning (NCIFP) which includes the contents of the country's family planning plan or strategy, government collection of data to monitor the program's progress and accomplishments, data use for decision-making, quality of care guidelines, choice, equity, and accountability.

- Do not respond for pilot projects or small service networks. The focus is at the national level.

- Please do not complete questions for which you lack information – other respondents in your country may handle those. Please confer with other individuals as you wish, and answer the items simply in your personal capacity, giving your own best judgment. All responses are entirely confidential.

- Thank you for your assistance with this study. In return, please note that you can obtain without cost a variety of software programs. These are on the web at www.futuresgroup.com (go to "Resources" then to "Software.") and www.avenirhealth.org (go to "Software.")

FOR THE SURVEY ADMINISTRATOR (Skip if self-administering survey)

Hello, and welcome to the 2014 Family Planning Effort Score (FPES) questionnaire. Please read the above guidelines and sign below indicating that you have read and understand the directions and explained them to the respondent.

Does the respondent agree to participate? Y N

Signature of survey administrator:_____
Date:_____

INFORMED CONSENT

Hello, and welcome to the 2014 Family Planning Effort Score (FPES) questionnaire. The 2014 FPES study is being conducted by Futures Group. The FPES estimates the strength of national family planning programs, and is measured in over 80 countries around the world. The FPES provide a unique time series about FP policies and environment; they have been measured approximately every five years since 1979. It measures four different dimensions of an FP program: policies, services, evaluation, and method access. The scores are used by researchers around the world as a way of estimating programmatic strength. The current round of FPES will also provide the measurement of the policy-enabling environment for FP2020.

The questionnaire is confidential and you will not be identified by name, position or institution in any reports or analyses of the results. No identifying information will be shared beyond the research team. Completion of this questionnaire is voluntary and you can choose not to answer any individual question or all of the questions. You can stop at any time. However, we hope that you will participate in this questionnaire since your views are important.

Will you participate in this study? Y N

At this time, do you have any questions about the questionnaire? Y N

This study is funded by USAID and the Bill and Melinda Gates Foundation

To give a summary picture of program effort, please rate the following items. Score each item from 1 to 10, where 1 represents non-existent or very weak effort and 10 represents extremely strong effort. Try to answer each item; omit it only if you lack information.

Component	Description	1= Non-existent to 10= Extremely strong									
		1	2	3	4	5	6	7	8	9	10
POLICY AND STAGE-SETTING ACTIVITIES											
Policy on fertility reduction and family planning	Extent to which government policy stresses family planning for fertility reduction over health reasons or is simply neutral or opposed.	1	2	3	4	5	6	7	8	9	10
Statement by leaders	Extent to which the head of government, as well as other officials, speak publicly and favorably about family planning at least once or twice a year	1	2	3	4	5	6	7	8	9	10
Level of program leadership	High level of seniority of the director of the national family planning program and whether director reports to a high level of government	1	2	3	4	5	6	7	8	9	10
Policy on age at marriage	Extent to which legal age at marriage for females is set at 18 years or higher and is enforced	1	2	3	4	5	6	7	8	9	10
Import laws and legal regulations	Extent to which import laws and legal regulations facilitate the importation of contraceptive supplies or extent to which contraceptives are manufactured locally	1	2	3	4	5	6	7	8	9	10

Advertising of contraceptives allowed	Extent of freedom from restrictions on advertising of contraceptives in the mass media	1	2	3	4	5	6	7	8	9	10
Involvement of other ministries and public agencies	Extent to which other ministries and government agencies assist with family planning activities (e.g., delivery of supplies, services, information, education) or other population activities	1	2	3	4	5	6	7	8	9	10
Percent of in-country funding of family planning budget	Extent to which total family planning/population budget is derived from in-country sources (e.g., 1 for 10 percent, 5 for 50 percent, 10 for 100 percent)	1	2	3	4	5	6	7	8	9	10
SERVICE AND SERVICE-RELATED ACTIVITIES											
Involvement of private-sector agencies and groups	Extent to which private-sector agencies and groups assist with family planning or other population activities	1	2	3	4	5	6	7	8	9	10
Civil bureaucracy involved	Extent to which the civil bureaucracy of the government is used to ensure that program directives are carried out, and whether its senior officials take responsibility for program directives being carried out	1	2	3	4	5	6	7	8	9	10
Community-based distribution (CBD)	Extent to which areas of country not easily serviced by clinics or other service points are covered by CBD programs for distribution of contraceptives (especially rural areas)	1	2	3	4	5	6	7	8	9	10

Social marketing	Extent of coverage of the country by a social marketing program (subsidized contraceptive sales at low cost in commercial sector, especially in urban areas)	1	2	3	4	5	6	7	8	9	10
Postpartum program	Extent to which all new mothers in the country receive postpartum family planning assistance.	1	2	3	4	5	6	7	8	9	10
Home-visiting workers	Extent of coverage of population by workers whose primary task is to visit (rural) women in their homes to talk about family planning and MCH	1	2	3	4	5	6	7	8	9	10
Administrative structure	Extent to which administrative structure and staff at national, provincial and county levels are adequate to implement the family planning program	1	2	3	4	5	6	7	8	9	10
Training program	Extent to which training programs, for each category of staff in the family planning program, are adequate to provide personnel with information and skills necessary to carry out their jobs effectively	1	2	3	4	5	6	7	8	9	10
Personnel carry out assigned tasks	Extent to which all categories of family planning program staff (administrative, medical, paramedical, field) carry out assigned tasks effectively	1	2	3	4	5	6	7	8	9	10

Component	Description	1= Non existent to 10= Extremely strong									
		1	2	3	4	5	6	7	8	9	10
Logistics and transport	Extent to which the logistics and transport systems are sufficient to keep stocks of contraceptive supplies and related equipment available at all service points, at all times and at all levels (central, provincial, local)	1	2	3	4	5	6	7	8	9	10
Supervision system	Extent to which the system of supervision at all levels is adequate (regular monitoring visits with corrective or supportive action)	1	2	3	4	5	6	7	8	9	10
Mass media for IEC	Frequency and extent of coverage of mass media messages that provide population with information on family planning and service sites	1	2	3	4	5	6	7	8	9	10
Incentives and disincentives	Extent to which monetary or other incentives are used to encourage the adoption of family planning	1	2	3	4	5	6	7	8	9	10

Component	Description	1= Non existent to 10= Extremely strong									
		1	2	3	4	5	6	7	8	9	10
RECORD KEEPING AND EVALUATION											
Record keeping	Extent to which systems for client recordkeeping, clinic reporting and feedback of results are adequate	1	2	3	4	5	6	7	8	9	10
Evaluation	Extent to which program statistics, national surveys, and small studies are used by specialized staff to report on program operations and measure progress	1	2	3	4	5	6	7	8	9	10
Management's use of evaluation findings	Extent to which program managers use research and evaluation findings to improve the program in ways suggested by findings	1	2	3	4	5	6	7	8	9	10

AVAILABILITY AND ACCESSIBILITY OF METHODS AND SUPPLIES											
IUDs	Extent to which entire population has ready and easy access to IUDs	1	2	3	4	5	6	7	8	9	10
Pills	Extent to which entire population has ready and easy access to pills	1	2	3	4	5	6	7	8	9	10

Component	Description	1= Non existent to 10= Extremely strong									
		1	2	3	4	5	6	7	8	9	10
Injectables	Extent to which entire population has ready and easy access to injectables	1	2	3	4	5	6	7	8	9	10
Female sterilization	Extent to which entire population has ready access to voluntary sterilization services for women	1	2	3	4	5	6	7	8	9	10
Male sterilization	Extent to which entire population has ready access to voluntary sterilization services for men	1	2	3	4	5	6	7	8	9	10
Condoms	Extent to which entire population has ready and easy access to condoms	1	2	3	4	5	6	7	8	9	10
Implants	Extent to which entire population has ready and easy access to implants	1	2	3	4	5	6	7	8	9	10
Emergency Contraception	Extent to which entire population has ready and easy access to emergency contraception	1	2	3	4	5	6	7	8	9	10
Abortion	Extent to which entire population has ready and easy access to safe abortion or menstrual regulation (regardless of legal status)	1	2	3	4	5	6	7	8	9	10

LTM and LAPM REVERSAL

*LTM: Long-term methods
LAPM: Long-acting and permanent methods
Reversal: Removing an IUD or Implant, or the idea that sterilization is permanent

1= Non existent to 10= Extremely strong									
1	2	3	4	5	6	7	8	9	10

Sterilization permanence	Extent to which clients adopting sterilization are routinely informed that it is permanent?	1 2 3 4 5 6 7 8 9 10
IUD Removal	Extent to which the entire population has ready and easy access to IUD removal	1 2 3 4 5 6 7 8 9 10
Implant Removal	Extent to which the entire population has ready and easy access to implant removal	1 2 3 4 5 6 7 8 9 10

Please rate the general quality of family planning services. (Good quality includes a focus on client needs, with counseling, full information, wide method choice, and safe clinical procedures.)	1 2 3 4 5 6 7 8 9 10

FAMILY PLANNING JUSTIFICATION

How important is each of the following as a current justification for the national family planning program? (1 means negligible importance; 10 means great importance).

Reduce rate of population growth	1	2	3	4	5	6	7	8	9	10
Enhance economic development	1	2	3	4	5	6	7	8	9	10
Help women and men avoid unwanted births	1	2	3	4	5	6	7	8	9	10
Improve women's health	1	2	3	4	5	6	7	8	9	10
Improve child health	1	2	3	4	5	6	7	8	9	10
Reduce unmarried adolescent childbearing	1	2	3	4	5	6	7	8	9	10

Reduce unmet need for contraceptive services	1 2 3 4 5 6 7 8 9 10

SPECIAL POPULATIONS

To what extent does the family planning program give particular emphasis to special populations? (1 means negligible emphasis; 10 means great emphasis)

Unmarried youth	1 2 3 4 5 6 7 8 9 10
The poor	1 2 3 4 5 6 7 8 9 10
Rural populations	1 2 3 4 5 6 7 8 9 10
Postpartum women for counseling and contraceptive services	1 2 3 4 5 6 7 8 9 10
Postabortion women for counseling and contraceptive services	1 2 3 4 5 6 7 8 9 10

NEXT SECTION OF QUESTIONNAIRE

Questions for National Composite Index for Family Planning (NCIFP)

This section of questions pertains to the content of the country's family planning program or the FP strategic plan and its implementation, focusing on choice, quality, equity and accountability. Please note that your country may have a distinct and separate national FP strategic plan or the FP action plan may be part of the national reproductive health plan or strategy. Please also note that many of the questions below are first stated in broad terms then they branch out into specific items comprising the question. Please respond yes or no to each specific item asked in each question. Skip the question or item only if you do not know the answer.

Areas for inclusion:

1. Does the national family planning action plan include:
    a. Defined objectives over a 5–to 10–year period, including quantitative targets? __ Yes __ No
    b. Objectives to reach the poorest and most vulnerable groups with quality FP information and services (including identification and removal of legal, regulatory, policy, and financial barriers to access)? __ Yes __ No
    c. Subnational objectives (examples: region, urban/rural, income groups, etc.)? __ Yes __ No
    d. Clear strategy for attaining these objectives, including the role of both the public and private sectors? __ Yes __ No
    e. Projection of the resources (material, human and financial) required to implement the strategy, as well as sets forth a plan to secure the resources? __ Yes __ No
    f. Contraceptive commodity plan that ensures that contraceptive requirements are projected annually and that a range of method choices are reliably available to all clients in all facilities, whether urban/rural, public/private, fixed and mobile? __ Yes __ No
    g. M&E framework (An M&E framework usually refers to a table that describes the indicators that are used to measure the FP program's progress and accomplishments, who is responsible for collecting and reporting the information, what tools will be used to collect the data and report them, and when reports should be submitted? __ Yes __ No
    h. Mechanism and funding to support meaningful participation of diverse stakeholders (including women, youth, marginalized groups, civil society) in policy formulation and program design and oversight? __ Yes __ No

2. Use of data to make programmatic decisions
    a. Does the government collect data to monitor coverage, quality, unmet need, and use of FP services among the following population subgroups:
        i. Youth? __ Yes __ No
        ii. Unmarried women? __ Yes __ No
        iii. Unmarried youth? __ Yes __ No
        iv. Postpartum women? __ Yes __ No
        v. Wealth status? __ Yes __ No
        vi. Rural populations? __ Yes __ No
        vii. Postabortion clients? __ Yes __ No
        viii. HIV status? __ Yes __ No
        ix. Other, please specify _____

b. Does the government collect data from the private sector on:
    i. Number of clients? __ Yes __ No
    ii. Commodities? __ Yes __ No
c. Are government service statistic data reviewed and analyzed for program evaluation at least annually? __ Yes __ No
d. Is there a system of quality control for service statistics? __ Yes __ No
e. Are data collected by the government available for external use? __ Yes __ No
f. Are data used to adjust national plans in order to:
    i. To review targets on an annual basis? __ Yes __ No
    ii. To adjust strategies for improving access? __ Yes __ No
    iii. To define training needs for providers? __ Yes __ No
    iv. To improve quality of care? __ Yes __ No
    v. To ensure that the poorest and most vulnerable women and girls have access to quality FP services? __ Yes __ No

3. Quality of Care Guidelines and Procedures
    a. Are family planning standard operating procedures in line with the latest WHO medical guidelines and are these standards used for:
        i. Staff and facility performance appraisal? __ Yes __ No
        ii. Determining areas of need for quality improvement?__ Yes __ No
        iii. Proposed changes in program strategies or operation's? __ Yes __ No
    b. Are there guidelines on task sharing of family planning services? __ Yes __ No
    c. Are there specific indicators for quality of care that are collected and used by the government to monitor coverage, quality, and equity of:
        i. Public sector family planning services __ Yes __ No
        ii. Private sector family planning services? __ Yes __ No
    d. Are there structures in place to address quality of public sector FP services, particularly:
        i. Trainings for providers on rights of clients to full, free, and informed choice (voluntarism, non-discrimination policies, third-party authorization, etc.)? __ Yes __ No
        ii. Refresher trainings? __ Yes __ No
        iii. Supervision structures? __ Yes __ No
        iv. Mystery clients? __ Yes __ No
        v. Participatory monitoring or community/facility quality improvement activities? __ Yes __ No
    e. Does the government collect any information related to informed choice?
        i. Availability of different types of contraceptives at different levels of facilities? __ Yes __ No
        ii. Content of counseling? __ Yes __ No
        iii. Provider bias? __ Yes __ No
        iv. Provider training needs? __ Yes __ No

4. Equity and discrimination
    a. Are there policies /strategies in place to prevent discrimination towards:
        i. Youth? __ Yes __ No
        ii. Unmarried women? __ Yes __ No
        iii. Unmarried youth? __ Yes __ No
        iv. Postpartum women? __ Yes __ No
        v. Wealth status? __ Yes __ No
        vi. Rural populations? __ Yes __ No

vii. Postabortion clients? __ Yes __ No
viii. HIV status? __ Yes __ No
ix. Other marginalized groups? __ Yes __ No

b. To what extent do service providers discriminate against each of the groups below? Use a score of 1 to illustrate minimal discrimination and a score of 10 to show widespread discrimination:

i. Youth?
1 2 3 4 5 6 7 8 9 10

ii. Unmarried women?
1 2 3 4 5 6 7 8 9 10

iii. Unmarried youth?
1 2 3 4 5 6 7 8 9 10

iv. Postpartum women?
1 2 3 4 5 6 7 8 9 10

v. Wealth status?
1 2 3 4 5 6 7 8 9 10

vi. Rural populations?
1 2 3 4 5 6 7 8 9 10

vii. Postabortion clients?
1 2 3 4 5 6 7 8 9 10

vii. HIV status?
1 2 3 4 5 6 7 8 9 10

viii. Other marginalized groups?
1 2 3 4 5 6 7 8 9 10

5. Accountability and Participation
   a. Are there mechanisms in place at the national, subnational, and facility level to monitor whether or not access to voluntary, non-discriminatory FP information and services is being achieved? __ Yes __ No
   b. Does the government have mechanisms in place for reporting instances of denial of services on non-medical grounds (age, marital status, ability to pay), or coercion (including inappropriate use of incentives to clients or providers)? __ Yes ___ No
   c. Are violations reviewed on a regular basis? __ Yes __ No
   d. Are violations investigated? __ Yes __ No

e. Are there mechanisms in place at the facility level to solicit and use feedback from clients? __ Yes __ No

f. Are the following groups represented in national coordinating bodies?
   i. Commercial/Private Sector __ Yes __ No
   ii. Religious Groups __ Yes __ No
   iii. Other Civil Society Groups __ Yes __ No

g. Is there a system in place that encourages dialogue and communication between users and service providers/health officials about service availability, accessibility, acceptability & quality? (The system for dialogue and communication can include interviews after clinic visits, regular community forums, joint quality improvement systems, or other interactive sessions.)
   _ Yes __ No

Final Questions:

Name _____

Job Title _____

Sector (for example, private, public, international, NGO, donor, academic, etc.): _____

Gender M F Other

Have you filled out the FPE Survey before? __ Yes __ No

If you have, please indicate which years' you filled out 1972 1982 1989 1994 1999 2004 2009

We would like to disseminate the results to you when they are finalized. Please list an email address where we can reach you:_____

Please note here any contraceptive methods not listed in this questionnaire that are growing in importance in your country or national family planning program.
_____

_____

You were invited to work with other individuals if you wished.

How long have you been closely acquainted with the national family planning program? _____ years

During most of this time, what has your relationship been to the program?

Any final comments or suggestions?

_____