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Reproductive Health Equity in the Arab Region

Fairness and Social Success

Regional Report 2019

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Reproductive Health Equity in the Arab Region: Fairness and Social Success
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Preface

The world has witnessed significant progress in implementing the ICPD Programme of Action since 1994. Examples include greater access to sexual and reproductive health care, reduced child and maternal mortality, increased life expectancy, and advances in gender equality and women's empowerment. But despite impressive gains, additional efforts are needed to reach those who have been left behind. The Arab region is till witnessing challenges including high levels of avoidable maternal deaths and Gender Based Violence (GBV).

Despite the significant gains in reproductive health over the past few decades in the Arab region with maternal mortality declining from 285 in 1994 to 162 maternal deaths per 100,000 live births in 2015, the exposure to health risks in excessively high across and within countries. The over-reliance on national averages masks severe disparities between the different population groups in each country, signifying huge health inequalities in the era where we should "leave no one behind".

UNFPA has therefore partnered with the Social Research Center at the American University in Cairo to undertake a research endeavor to better understand such inequalities and their structural determinants. This report is the product of the research undertaken and investigates the degree of SRH inequalities and whether these inequalities can be traced back to the domains of governance, public policies, and social arrangements in five Arab countries. It employs a methodology that aims to accelerate the achievements of the ICPD promise, and seeks to support Arab countries to realize equity in sexual and reproductive health (SRH). In particular, the report recognizes the centrality of SRH for the wellbeing of individuals, and the explicit links between fairness and equity in public policies and wellbeing.

The report concludes by proposing policy recommendations to address the root causes of SRH inequalities, as well as to embrace a fairness and a human right lens in the quest for "leaving no-one behind" and encourages countries to adapt and address their different development and conflict situations. Countries facing conflict situations need to recognize new challenges, and the inequalities and inequities created by the situation they are in, particularly hardships being experienced by people on the move including refugees and Internally Displaced Persons (IDPs).

The findings of this report provides an evidence base arguing for the importance of prioritizing bridging the gap of SRH inequalities; and goes beyond advocating for change by proposing concrete policy recommendations that address the root causes of SRH inequalities and inequities.

We hope this report contributes to knowledge about inequality and inequity of SRH service provision in the Arab Region, and provides decision and policy makers with a reasonable knowledge base on actions needed to bridge these gaps.

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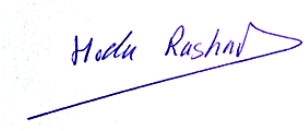

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Acknowledgments

This report is a product of the joint regional initiative on “Sexual and Reproductive Health Inequities” launched by the United Nations Population Fund for Arab States Regional Office (UNFPA/ASRO) during 2018 in partnership with The Social Research Center of The American University in Cairo (SRC/AUC). The initiative targets supporting governance and policy reforms to address sexual and reproductive health inequities. The report brings together the key findings of the national analytical reports of five countries in the region, Egypt, Jordan, Morocco, Oman and Sudan.

This effort would not have been possible without the support of many individuals and organizations. Therefore, we would like to extend our sincere gratitude to all of them. We would like to express our sincere thanks to the researchers who devoted their time and knowledge to the implementation of the national studies that form the basis of this regional report: Dr. Abdallah Zoubi, Dr. Abdellatif Lfarakh, Dr. Elham Abdalla Mohamed and Dr. Fatma Al-Hinai.

We are also grateful to the partner institutions: The National Population Council in Egypt, the Higher Population Council in Jordan, the National Observatory for Human Development in Morocco, the Ministry of Health in Oman, and the National Population Council in Sudan. The leaderships of these institutions have actively participated in all phases of the initiative. They welcomed the conduct of the national studies under their auspices, availed needed information, participated in a regional consultation meeting held in Cairo to discuss findings and recommendations of the national and regional reports. SRC appreciates the contributions of Dr. Abla Amawi, Dr. Ali Ben Table Al-Hanaei, Dr. Amr Hassan, Mr. El Hassan El Mansouri, Dr. Limiaa Abdelgfar Khalafalla and Dr. Tarek Tawfik.

We, also, express our gratitude to the five UNFPA country offices who have provided valuable assistance in facilitating national links with partners’ institutions. Finally, the report benefited from the comments of high level experts in this field: Dr. Eugenio Villar, Dr. Fran Baum and Dr. Orielle Solar.

SRC/AUC and UNFPA/ASRO Project Team

List of acronyms

ANC:	Antenatal Care
CI:	Concentration Index
CSDH:	Commission on the Social Determinants of Health
C-section:	Caesarean Section
EDHS:	Egypt Demographic and Health Survey
EHIS:	Egypt Health Issues Survey
ENPSF:	National Survey on Population and Family Health
FGM/C:	Female Genital Mutilation/Cutting
GBV:	Gender-Based Violence
GCC:	Gulf Cooperation Council
HBV:	Hepatitis B viral
HE:	Health Equity
HEiAP:	Health Equity in All Policy
HiAP:	Health in All Policy
HS:	Health System
HSS:	Health System Strengthening
ICPD:	International Conference on Population and Development
ID%:	Index of Dissimilarity Percent
ISA:	Intersectoral Action
LAS:	League of Arab States
MDA:	Millennium Development Agenda
MDGs:	Millennium Development Goals
MICS:	Multiple Indicator Cluster Survey
MMR:	Maternal Mortality ratio
PHC:	Primary Health Care
PoA:	Programme of Action
rCI%	Concentration Index Redistribution Need Percent
RHS:	Reproductive Health Survey
SDGs:	Sustainable Development Goals
SDH:	Social Determinants of Health
SDHI:	Social Determinants of Health Inequity
SII:	Slope index of inequality
SRC/AUC:	Social Research Center / American University in Cairo
SRH:	Sexual and Reproductive Health
SRHE	Sexual and Reproductive Health Equity
SRHR:	Sexual and Reproductive Health and Rights
STIs:	Sexually Transmitted infections
UHC:	Universality of Health Care Coverage
UN:	United Nations
UNFPA/ASRO:	United Nations Population Fund / Arab States Regional Office
WHO:	World Health Organization

Executive summary

This report responds to the new International Conference on Population and Development (ICPD) beyond 2014 framework that places people's well-being at the center and acknowledges their aspirations for dignity and human rights, adopts a rights based approach, and embraces equity and fairness. It is also anchored on the widely adopted Sustainable Development Goals (SDGs) and its pledge to "Leaving no one behind". It addresses current regional concerns with sexual and reproductive health (SRH) and mainstreams an equity lens in SRH policies and actions.

The report is a product of the joint regional initiative on "Sexual and Reproductive Health Inequities" launched by the United Nations Population Fund for Arab States Regional Office (UNFPA/ASRO) during 2018 in partnership with the Social Research Center of the American University in Cairo (SRC/AUC). The initiative targets supporting governance and policy reforms to address sexual and reproductive health inequities.

The long-term objectives of the regional initiative are to contribute to 1) informed policy dialogue about effective and measurable health equity solutions; 2) supporting governments to form integrated multi-sectoral policies and programs that engage civil society and communities to address SRH inequities in the Arab region; and 3) reduction in sexual and reproductive health inequities.

The report draws mainly on national analytical reports of five countries in the region: Egypt, Jordan, Morocco, Oman and Sudan. These reports were prepared by independent researchers nominated or endorsed by partner institutions from each country. The partner institutions are: National Population Council in Egypt, Higher Population Council in Jordan, National Observatory for Human Development in Morocco, Ministry of Health in Oman, and National Population Council in Sudan.

The regional report is one component within the broader initiative of research and policy support. The report aims to provide an impetus for a research and capacity building movement that allows for the expansion of the investigation to invisible social groups and in-depth up-to-date findings, as well as the articulation of more detailed country specific policy and action plans.

This report uses available evidence to analyze and highlight the level and trend of SRH inequalities within different social groups, and traces these inequalities to the different forces shaping them. It proposes general action and policy recommendations to address reproductive health inequities.

The report is careful in its use of the terms inequalities and inequities. The first are

differences with no judgement on their underlying causes, the second are differences that were demonstrated to be caused by unfair determinants.

The overarching contribution of this report is in illustrating the unfairness of the determinants of the social patterns of health outcomes and of the distribution of their risk factors. Such unfairness underlies the difference between normalizing the social patterns of health as expected inequalities and recognizing that these social patterns of health speaks about our society and are disturbing signals of injustices. The inequities consideration provides an additional urgency and an ethical imperative for addressing the systematic differences in health. The inequities consideration moves the concern with inequalities from just being driven by a moral human right rationale, to being anchored on the pillars of fairness and justice. Furthermore, the report situates the unfair determinants in the domains of good governance, equitable public policies and intermediary social arrangements. The intermediary social arrangements investigated the responsiveness of health care system to differentiated health needs and the unequal influence of the distribution of gender norms on SRH.

The inequities analysis and the framing of actions within upstream structural forces and social arrangements push health equity (HE) to become a measure of fairness and social success. Health inequities are now considered a manifestation of societal malfunctioning. They provide warning signals of marginalization, frustrations and social cohesion challenges. SRH equity is no longer just a public health priority but a development goal and whole of government performance indicator. Health equity in this report is the entry point to alleviate the preventable extra ill health burden and to address the drudgeries of the unfair distribution of development.

The key contributions of this report are:

- Adopting the Social Determinants of Health Inequity (SDHI) conceptual framing and applying a systematic methodology to the investigation of SRH inequalities;
- Providing a comprehensive and systematic evidence base on the degree of SRH inequalities;
- Identifying priority SRH inequality challenges and showing that these may be different from priority SRH challenges;
- Probing the role played by the mal-distribution of the two key social arrangements of health sector services and gender norms;
- Demonstrating the need for integrating a social determinants approach and an equity lens in the health sector services;
- Clarifying the necessity of appreciating and addressing the unequal distribution of gender norms and not treating gender as just one common social determinant;
- Tracing the origins of SRH inequalities to governance and social public policies; and in the provision of general recommendations for the way forward to address SRH inequities.

The regional report draws on existing data that span the period 2008-2015 for the five countries considered. It should be noted that some of the data sets used are not recent enough to draw national level contemporary findings. However, the systematic approach adopted and the commonality of findings, from diverse contexts and time periods, allow this report to provide recommendations to guide the Arab region for the achievement of SRH equity and SRH related sustainable development goals and commitments.

The following are some selected findings:

- The SRH agenda is still unfinished, particularly in terms of some stages in the life course trajectory, and a number of neglected or socially sensitive issues. These include: puberty and menopausal stages, infertility, reproductive cancers, sexually transmitted Infections, gender-based violence, sexual health and reproductive rights.
- Progress on many SRH physical fronts such as maternal mortality, maternal and childcare and some aspects of health system (HS) performance and capacity are documented. However, social risk factors are lagging behind even in countries that demonstrated significant achievements on the physical SRH fronts. Child marriages still exist in some Arab countries and range from 4%-34%. Consanguinity, SRH uninformed choices, risky birth intervals, marital violence are but few examples of social risks undermining SRH.
- The degree of inequalities within social groups is quite severe for a good number of measures of reproductive health impact and risk factors. Moreover, the improvement of indicators over time did not guarantee improvement in the inequality distribution and was, in some cases, accompanied by a worsening of this distribution.
- The distribution of gender norms is an important stratifier producing significant differences in SRH conditions. This stratifier can still benefit from improved conceptualization and measurement.
- The available SRH impact measures do not capture the social and mental dimensions of reproductive health. This is inferred from the observation that while inequalities in social and physiological risk factors are notably high, such inequalities in risk factors are not adequately reflected in the available health impact inequality measures.
- The comparison between priority sexual and reproductive health challenges and priority sexual reproductive health inequality challenges show that they are not similar. The report presented different configurations of these priority challenges and discussed different policy approaches that are consistent with each type of configuration.
- The analysis demonstrated a high level of inequality of health system performance and capacity among different social groups. The trend in health system inequality, however, shows different patterns for different components of SRH in the Arab countries investigated. For

some of them a positive change has occurred.

- The investigation of fairness of structural determinants suggest that at the level of governance, fairness is not fully embraced as a central pillar of good governance. This is based on the status of information system and the absence of prerequisites of corporate responsibility and accountability to HE in many Arab countries.
- The unfairness of SRH relevant policies requires detailed investigation of each specific policy which was beyond the focus of the analytical reports. The unfairness, however, was inferred by noting that:
  - The formulation of public policies does not demand the required HE impact assessment.
  - The formations of social groups (particularly geographic and wealth) are deemed unfair because they are shaped by an unfair distribution of resources and opportunities.
  - The inequality of HS performance and capacities, as an intervening force which was well documented in relation to the three stratifiers used in the analysis namely geographic areas, wealth, and gender norms classifications. These inequalities provided an indication of the unfairness of policies shaping HS performance and capacity.
  - The distribution of gender norms was not traced to specific gender policies. The report suggested that gender policies are deemed unfair if they do not specifically target and/or respond to these differences in norms.
  - The accumulation of the deprivation across the three stratifiers (geographic areas, wealth, and gender norms classifications) was documented. The fact that these stratifiers reinforce and interact with each other, suggests that the unfairness in one form is bound to influence the unfairness in the others. This is particularly true for the distribution of gender norms, which while shaped by cultural forces, yet feeds on deprivation.
- The concerns with sexual and reproductive health and with the importance of 'Leaving no one behind' is evident in the political discourse in the Arab region and also in its international commitments. Yet, the challenges that remain are in prioritizing SRH inequities based on a recognition of its seriousness and associated societal risks, as well as in the translation of the voiced commitments into policies and actions with demonstrable impact.
- The inadequacy and limitations of the information base do not support pushing HE to the forefront and mainstreaming an equity lens in policies and actions. The cyclical nature between absence of information and invisibility of the challenge is at play in the Arab region.
- A large number of policy implications were introduced. These were divided

into three domains of: Sectoral policies and actions, governance and whole of government policy reforms, and enablers of policy and actions.

- The specificities of each country in terms of the priority SRH inequalities, stratifiers reflecting more severe inequalities, missing information and invisible social groups call for country level in-depth and up-to-date analytical efforts to guide recommendations of required country level policies and actions.

The next section provides a brief overview of the five parts of the report:

Part one: Setting the scene: seizing the opportunity for action on sexual and reproductive health inequities

Part one provides the theoretical rationale for the call for actions on sexual and reproductive health inequities in the Arab region. The call is anchored on the many shifts in international development thinking that centralized sexual and reproductive health as a development concern and equity as a measure of social success. The call is also anchored on the appreciation that while the Arab region has engaged and implemented efforts to improve reproductive health and gender equality, yet the region can greatly benefit from a policy reform movement to improve sexual and reproductive health equity through actions on the inequitable distribution of structural social determinants of health.

This part covers the new shifts in development thinking spanning the last three decades. It briefly reviews the engagement and responsiveness of the Arab region to the international discourse; pointing to some challenges on the road to SRH equity. It concludes by noting that the combinations of development thinking and the recent efforts in the Arab region provide an opportunity to support actions on SRH inequities. It also notes the many specific features of SRH that makes this component of health an appropriate candidate for the application of an equity lens in a structural social determinants framing of inequalities.

Part two: Framework, indicators and methodology

Part two introduces SDHI frame. This frame is a key contribution that allowed linking SRH inequalities with upstream structural determinants and their fairness.

This part covers the adaptation of the conceptual framework, the identification of indicators and the applied methodology.

The ***framework*** adopted uses the multilevel conceptual framework of the Commission on the Social Determinants of Health (CSDH) as the point of departure. It adapts it by reorganizing the frame, explicitly differentiating between the social determinants of health and the social determinants of health inequities as well as articulating two key intermediary determinants that lend themselves to policy interventions.

The articulation involves: 'Introducing the distribution of gendered norms as a social

stratifier of SRH inequalities', and a 'Thorough incorporation of the fairness of health care system and its relative contribution as a social determinant of sexual and reproductive health inequality'.

The identification of sexual and reproductive health ***indicators, stratifiers, and measures of inequality*** was based on an extensive literature review and a systematic approach. A list of 57 sexual and reproductive health indicators were identified to capture the landscape of SRH (See Annexes 1-3). The social ***stratifiers*** investigated cover geographic area, wealth and gender norms classifications. The index of dissimilarity and concentration index were chosen as the two ***summary measures*** of inequality.

It should be noted that data constraints did not allow the full benefits of adaptations and systematic methodology to be gained. For example, this part highlighted the missing SRH indicators. Also, the measurement of gender norms and its distribution were constrained and not calculated for two countries, Morocco and Oman. Similarly, data to conduct trend analysis of SRH inequality was missing for three countries; Morocco, Oman and Sudan. Clearly, investment in data collection and accessibility is very much needed in the Arab region.

Part three: Sexual and reproductive health: levels and inequalities

Part three provides the evidence needed to support the urgency of action on SRH inequalities and monitoring their trends. It illustrates the need to adopt different policy approaches to cater for different configurations of priority SRH and priority SRH inequalities.

This part provides empirical evidence on priority SRH challenges and progress overtime. It discusses positive changes dealing with SRH inequalities, and assesses the degree and trend of inequalities in SRH challenges across different stratifiers. It also compares priority SRH with priority SRH inequality challenges.

This part provided detailed evidence for each of the five countries. The specificities of each country in terms of the priority SRH inequalities, stratifiers reflecting more severe inequalities, missing information and invisible social groups. The different configurations of SRH and SRH inequality challenges call for country level in-depth and up-to-date analytical effort to guide recommendations of country level policies and actions.

Part four: SRH-related health system performance and capacity: levels and inequalities

Part four demonstrates that the health system is not only confronted with SRH related performance and capacity challenges, it is also required to fairly distribute the services and resources in response to the unequal needs of social groups. This part documents priority health system performance and capacity inequality challenges and the different configurations of HS and HS inequalities challenges in an attempt to guide health policies and actions.

This part investigates HS capacity and performance in relation to SRH, as well as its responsiveness to the unequal distribution of SRH challenges among social groups. It also assesses the trend in HS inequality and compares priority HS challenges with priority HS inequality challenges.

The evidence base documented that SRH agenda is still unfinished, particularly in terms of some stages of the life course, and a number of neglected or socially sensitive issues. The evidence showed that a high level of inequality in the health system performance and capacities indicators. Moreover, the HS is not only unsuccessful in meeting the unequal needs of the different social groups, but also, in many cases, its capacities suffer from mal-distribution and is worse off among the most vulnerable social groups.

Part five: Fairness of upstream determinants, and policy implications

Part five returns to the SDHI frame and links it to the many findings of the report to provide broad recommendations in three domains.

This part investigates the fairness of structural determinants, the fairness of intermediary determinants, and draws on all the findings to propose the broad policy recommendations.
The evidence of ***unfairness of structural determinants*** was inferred from the missing prerequisites to demonstrate that fairness is embraced as a pillar of governance, and is incorporated in policy formulations. The evidence of ***unfairness of intermediary forces*** was illustrated through available pieces of evidence and the findings of this report that the performance and the capacity of health system are unequal among social groups. The report asserts that public policies are unfair if they do not specifically target or respond to SRH inequalities.

The proposed broad ***policy recommendations*** recognized that now is the time for Arab countries, individually and collectively, to respond to the aspirations of their people. These aspirations were explicitly articulated in the ICPD beyond 2014 calling for dignity and human right and the SDGs pledge for "Leaving no one behind". The Arab countries need to engage with the current international movement by placing sexual and reproductive health equity (SRHE) at the center of their development. They need to commit to reform national policies, build human resources and institutional capacities, produce and implement needed policies and actions. The policy recommendations were grouped under three domains, and are detailed in part five.

The first set of recommendations is ***Sectoral Based***. The ***Health Sector*** is required, in collaboration with other social sectors to expand and improve on its SRH related contributions, to integrate a fairness lens in its provision of services and evaluation of its performance, to pay urgent attention to the many SRH inequality challenges through targeted multi-sectoral policies and actions, and to play its stewardship role. The social sectors, such as education, Labor market, social welfare, housing and transportation…etc.,

should be held accountable for their impact on SRH inequities. In particular, for each of the five core structural policy domains (macro-economic policies; social welfare policies; relevant public policies; cultural and societal values; as well as epidemiological conditions), a Health Equity in All Policies (HEiAP) should be implemented. HEiAP implies ensuring that social policies do not negatively impact health equity, HEiAP also demands a demonstration of positive impact on SRH equity as a success criteria for social policies. The ***Research and Non-State Sectors*** need to move from advocacy to concrete policy and actions recommendations.

The second set of recommendations is related to ***governance and whole government based recommendations.*** They require embracing fairness as a governance pillar; adopting SRHE as a performance measure of social success and a benchmark for a just and fair society; and engaging in a policy reform movement anchored on fairness and achievement of SRHE.

The third set of recommendations includes ***enablers for policies and actions***. They require: strengthening the health information system and building an information system for health; supporting and nurturing research and analytical capacities; engaging and developing capacities of policy and decision makers, and health practitioners; establishing policy dialogue forums and widening the opportunities for participation; and supporting informed public demand for fair social policies and HE.

A final note

This report demonstrated that the core challenges are generally similar for many Arab countries, which allowed for broad policy recommendations. However, the report also pointed to specificities of each country. For example, the data accessible for investigating SRH inequalities were very different in periodicity, coverage and details. Also, the priority stratifiers were not similar (e.g.: geographic area stratifier in Egypt, wealth stratifier in Jordan). Similarly, the priority inequality challenges and their configurations differed in each country. Needless to say, that Arab countries in conflict situations and political upheavals or hosting large numbers of refugees and migrants have their own nontraditional categories of disadvantaged groups including refugees and internally displaced persons with different sets of SRH needs and priorities.

Each country needs to conduct its own detailed in-depth and up-to-date investigation and to contextualize its findings. The articulation of evidence based country level specific policy and actions still demand improved data, methodological innovations, and further analytical and advocacy efforts. This report is but one-step in the right direction.

Introduction

This report is a product of the joint regional initiative on "Sexual and Reproductive Health Inequities" launched by UNFPA/ASRO during 2018 in partnership with the SRC/AUC. The initiative targets supporting governance and policy reforms to address sexual and reproductive health inequities.

The long-term objectives of the initiative are to contribute to:

1. Informed policy dialogue about effective and measurable health equity solutions.
2. Supporting governments to form integrated multi-sectoral policies and programs that engage civil society and communities to address SRH inequities in the Arab region.
3. Reduction in SRH inequities.

The report brings together the key findings of the national analytical reports of five countries in the region, Egypt, Jordan, Morocco, Oman and Sudan. The specific objectives of this regional report are to:

- Demonstrate the opportunity for action on SRH inequities; investigate the regional engagement and responsiveness to the new shifts in development thinking and to the international consensus.
- Introduce, adapt and operationalize the SDHI framing to the investigation of SRH, as a systematic approach to generate evidence on the priority SRH challenges and the priority SRH inequality challenges.
- Provide empirical evidence on the SRH priorities; assess the degree and trend of inequalities in SRH challenges across key stratifiers, as well as the similarities and dissimilarities between priority SRH and SRH inequalities.
- Investigate health sector performance and capacity unequal distribution among different social groups.
- Investigate the fairness of structural determinants producing social stratifications influencing public services and social arrangements.
- Provide general policy recommendations and discuss the way forward.

The regional report draws mainly on national analytical reports of five countries in the region: Egypt, Jordan, Morocco, Oman and Sudan[1,2,3,4,5]. These reports were prepared by national experts with support from SRC team. They provide more detailed information and country specific analysis.

The researchers in each country applied a common framework and a standard methodology agreed upon in a workshop organized by SRC/AUC in Cairo. They also benefited from technical assistance and continuous consultations from the SRC/AUC project team. The five country reports analyzed the existing data on SRH to determine the priority challenges of SRH and SRH inequalities, and to investigate key issues related to the distribution of SRH inequalities and fairness of policies and services.

The independent national researchers were nominated or endorsed by partner institutions from each country. The partner institutions are: National Population Council

in Egypt, Higher Population Council in Jordan, National Observatory for Human Development in Morocco, Ministry of Health in Oman, and National Population Council in Sudan.

The partner institutions welcomed the conduct of the national studies under their auspices, availed needed information, participated in a regional consultation meeting held in Cairo to discuss findings and recommendations of the national and regional reports. The consultation was also attended by representatives of some UNFPA country offices, whose role in establishing national links with partners' institutions is quite valued.

The regional initiative has a number of defining features. These include a careful choice of country case studies to represent the diversity of national contexts. They also include the involvement of key diverse actors in each country to secure ownerships, encourage policy uptake of the recommendations, as well as future sustainability of the initiative to achieve long term goals. In addition, the identification of a well-established academic center, that is a full participant in the international equity development discourse, allowed the many conceptual and methodological contributions of the current work.

The regional report draws on existing data that span the period 2008-2015 for the five countries. It should be noted that some of the data sets used are not recent enough to draw national level contemporary findings. However, the systematic approach adopted and the commonality of findings, from diverse contexts and time periods, allow this report to provide general recommendations as a guide for the achievement of SRH equity and SRH related SDGs and commitments. In addition to the well informed and evidence based regional policy recommendations, the report, also hopes to provide an impetus for a research and capacity building movement that allow the expansion of the investigation to invisible social groups and in-depth up-to-date findings, as well as the articulation of more detailed country specific policy and action plans.

The national analytical reports investigated the simple frequently asked question "why SRH inequalities are occurring?" The question, while posed as a research query, is mainly intended to support policies and actions to address the inequitable distribution of health and to contribute to a movement of policy reforms.

It is important to note that the question on determinants of health inequalities is not new and has been dealt with in a reasonable number of studies. What is new is that the driving question is no more: "why the disadvantaged practice risky health behavior?" but is "why the disadvantage itself is occurring?" The focus now is on the distribution of disadvantage in societies, its underpinnings and the fairness of this distribution. This focus is consistent with the equity discourse and the call for policy reforms that are currently gaining momentum but have not yet gained the prominence they deserve and have not filtered in the conscious mind of many policy actors.

The fairness focus in the analytical investigation demonstrates the difference between the framing of inequalities and inequities. Indeed, differences in health outcomes that are caused by unfair opportunities and misallocations of power, resources and services are not inequalities they are inequities. Such inequities provide the proposed ethical imperative for the policy movement.

To address the question of SRH inequalities using the framing of inequities, the national reports used the new SDHI frame and not the commonly used Social Determinants of Health (SDH) frame. SDHI framing builds on the many shifts in international thinking and aims to provide the needed evidence and recommendations to support a policy movement for the promotion of SRH and the achievement of SRH equity in the Arab region. Such a movement is very much aligned with the Arab region commitments to achieve the SDGs and the ICPD Plan of Action (PoA).

The report is organized in five parts:

Part one covers the new shifts in development thinking and explains the theoretical basis for urgency of actions on SRH inequities in the Arab region. It briefly reviews the engagement and responsiveness of the Arab region pointing to some challenges on the road to SRH equity.

Part two presents the adopted framework, conceptual thinking and methodology clarifying the new contributions of the SDHI framing of SRH and the systematic approach adopted. It also discusses the data sources and the availability of relevant indicators.

Part three provides empirical evidence on priority SRH challenges and progress overtime. It discusses positive changes in relation to dealing with SRH inequalities, and assesses the degree and trend of inequalities in SRH challenges across different stratifiers. It also compares priority SRH with priority SRH inequality challenges.

Part four investigates health system capacity and performance in relation to SRH. It also assesses the trend in HS inequality and compares priority HS challenges with priority HS inequality challenges.

Part five traces the inequalities in SRH to the fairness of structural and intermediary determinants, and reflects on broad policy implication.

Part One: Setting the scene: seizing the opportunity for actions on sexual and reproductive health inequities

Part One summarizes the new shifts in development thinking and explains the urgency for actions on SRH inequities in the Arab region. It also briefly reviews the engagement and responsiveness of the Arab region pointing to some challenges on the road to SRH inequities.

I.1. New shifts in development thinking

During the last three decades, the SRH landscape has benefitted from a number of shifts in development thinking and witnessed many significant and positive changes. The cumulative impacts of these shifts resulted in an international consensus that moved SRH from a public health concern to a development priority; and expanded broadly the content of the SRH agenda; the vision and approach guiding SRH policies and actions; as well as the players and leadership of actions. More recently, the development paradigm had embraced a movement from the health inequality focus driven by a moral human right rationale to a concern with inequity driven by an ethical imperative of fairness and justice. This movement resulted in the recent call for policy reforms to mainstream an equity lens in health policies (HEiAP), which implies ensuring that social policies do not negatively impact health equity, HEiAP also demands a demonstration of positive impact on SRH equity as a success criteria for social policies.

The development paradigm had embraced a movement from the health inequality focus driven by a moral human right rationale to a concern with inequity driven by an ethical imperative of fairness and justice.

The following section briefly describes these shifts, which provide the rationale for the regional initiative and guide the focus and analytical approach adopted.

Sexual and reproductive health is a central human development goal

The International Conference on Population and Development, held in Cairo in 1994, and its resulting Plan of Action, moved population policies to a focus on human rights and emphasized the mutually reinforcing linkages between population and development[6]. It recognized that SRH and sexual and reproductive health rights are important ends in themselves and key to improving the quality of life for everyone. In the ICPD vision, SRH does not only entail improving women's chances of surviving pregnancy and birth but also encompasses other aspects of health beyond reproduction, as well as mental and social wellbeing.

SRH is both a measure of health and an approach. In this approach, gender is not merely a social determinants of health, but a central component of SRH. The approach recognizes the biases affecting the position of women and emphasizes the implications of that reality on how women experience sexuality and reproduction. It is a liberating and human rights ideology that identifies women empowerment and fair gender relations as goals in their own right.

As a result, SRH became a priority development concern that found a central position in all development goals. The agenda of SRH incorporated gender equity and reproductive rights as measures of wellbeing (impact SRH measures). Also, SRH invited new topical concerns affecting wellbeing (infant mortality, violence, harmful traditional practices …). The pool of actors on SRH became no longer confined to the health sector alone. Indeed SRH became the mandate of many actors in the fields of population, gender as well as social development.

SRH became a priority development concern that found a central position in all development goals.

In addition, the interlinkages with development implies that gender, social and economic determinants are part of the SRH policy and actions agenda. The Fourth World Conference on Women, held in Beijing, China, in 1995, reaffirmed these aspirations with the adoption of the Beijing Declaration and Platform for Action[7].

In the years that followed the ICPD, many countries around the world, including the Arab States, used the ICPD PoA as a template for elaborating their own SRH strategies and action plans to promote SRH and SRH rights.

Few years later, the Millennium Development Agenda (MDA 2000-2015)[8] embraced, among its eight carefully chosen goals, four key SRH-related goals. These are: MDG3 ***"Promote gender equality and empower women"***, MDG5 "***Improve maternal health***", MDG 4 "***Reduce child mortality***" and MDG6 ***"Combat HIV/AIDS***…" as well as other related poverty and education development goals.

The concern with inequality: "Leaving no one behind"

In recognition of the need to learn from implementation experiences and to respond to changes in the international development thinking, the United Nations General Assembly called for a global operational review of the ICPD in 2010. The review confirmed that the ICPD PoA has significantly contributed to substantial improvement[9]. The review underlines that the number of people living in extreme poverty in developing countries has significantly declined from 47% in 1990 to 22% in 2010. Over the 20 years, population growth has also slowed partly; fewer women were dying in pregnancy and childbirth; skilled birth attendance has increased; more women have access to education and work; more children are going to school; and fewer adolescent girls are having babies.

Yet the review alerted against the uneven and unfair distribution of these gains. In the poorest communities, life expectancies continued to be unacceptably low and hundreds of women die daily in childbirth and there are still millions of women without access to contraception and family planning. The review warned that the growing serious inequalities will undo the significant gains in health and longevity made over the past 20 years. This strong base of evidence calls upon governments to confront the inequality challenge that hurt the poorest and most marginalized. The main outcome of the of the review was the introduction of a new ICPD Beyond 2014 Framework which acknowledges that human aspirations for dignity and human rights, including good health, security of place and mobility, are the ultimate motivations for development. It also emphasizes the importance of moving beyond national averages.

It is now quite clear that achieving the health targets at the national level is not enough; some population subgroups might exceed targets while others lag far behind. The key wordings permeating the recently adopted SDGs and targets: **Universal and "Leaving no one behind".**

Social determinants of health: from proximate to structural causes of the causes

As early as the seventies, it was recognized that health is a social phenomenon and that its promotion invites the actions of more than one social sector. Different articles in Alma Ata (1978)[10] declaration referred to the role of social sectors (article 1), to the unacceptability of inequality and the need for all countries to be concerned with it (article 2). More importantly, the Alma Ata declaration recommended the adoption of primary health care (PHC) as a modality that emphasized community level actions and participation, as well as actions at the more structural level of economic and socio-cultural conditions of the country.

The actual implementations of the PHC did not capture this broad vision of Alma Ata. The biomedical model dominated approach, and the vertical solutions were adopted under the proximate social determinants frame and neglected in practice the real essence of Alma Atta. They did not manage to escape the entrapment of economics, health expenditure and functioning of health care. The framing of these solutions was built around the premise that the only causes of ill health are attributed to inadequate spending on health care and the malfunction of the health care system. The role of social forces and social policies were ignored or addressed within a proximate determinants frame.

The interpretation of the SDH frame was translated into a call for policies and interventions targeting the most disadvantaged aiming mainly to change proximate determinants of risky health behavioral practices emphasizing direct awareness interventions.

It was soon realized that the exaggerated focus on behavior changes through simplistic awareness programs was not an effective solution. It was argued that the behavioral proximate determinants are not usually shaped by an individual free and informed choice. They are mainly reflecting the limitations experienced by the disadvantaged groups in knowledge, resources and opportunities for health.

The focus on behavioral changes was gradually complemented with the need to improve the socio-economic situation of the target group and to empower them to make informed choices. The role of structural determinants in shaping the situation of vulnerable groups was starting to take prominence in the discourse on SDH. It should be emphasized here that, at this stage, the role of the state and structural determinants was couched in a moral frame. It was also confined to targeting the most disadvantaged. Changing the distribution of disadvantage was not yet central.

The human rights movement provided the **Moral Rationale** for the duty of the state and communities to prevent the extra health sufferings whenever feasible. The focus on proximate SDH and the Moral Obligation couched the whole discourse in a social development discourse constrained by the available economic resources and ineffective policies. Improvements in health alongside socioeconomic progress convinced policy actors that the combination of effective socioeconomic policies and targeting is indeed the right way ahead.

From inequality to inequity

The recent past has moved the paradigm from its concern with health inequality driven by human rights moral rationale to a concern with health inequity driven by an ethical imperative of fairness and justice.

Specifically, the year 2008 was a turning point, when the Commission on the Social Determinants of Health called for pushing health equity to the forefront and its consideration as a whole of government performance indicator. The Commission directed the attention to the unfair distribution of structural SDH as root causes of ill-health. The CSDH argued that the health landscape is challenged by major social and economic mal-distribution of opportunities and resources for health with consequent significant inequalities. It is now important to recognize that inequities are largely governed by factors outside of the HS and are driven by people's fair access to social, economic and cultural resources and opportunities. Such access intersects across macro political and economic structures and policies, as well as social arrangements. They operate at a community and social grouping levels and through living and working conditions, as well as, individual lifestyle factors[11].

The era of health inequities indicated that action is essential as such differences are unjust and remain beyond the control of the individual and the health system. Indeed, poor health associated with social inequity is avoidable and amendable. It became evident that if actions are taken to redress health

inequities, there will be a notable reduction in the associated health burden and social cost.

Since then, the concern with health inequities and the call for action on SDH became quite central in the current development paradigm[11]. The nature of actions targeted social transformations through more fair public policies and social arrangements.

A policy movement for health equity

The current policy movement for health equity is a cumulative build up that recognizes the many shifts described earlier. The policy movement expressed in CSDH, 2008 report and embraced by the SDGs entails the following:

- Push health equity to the forefront of attention and consider health equity as a social success. The systematic monitoring of health inequalities and the tracing of their origin linking them to the performance of political, social and economic forces (causes of the causes) as well as the fairness of these policies (from inequality to inequities) are pre-requisites to demonstrate such country commitment.
- Health Equity in All Policies is an expression of the commitment. The concern with health equity is the mandate of the whole development field and the social sectors and cannot be delegated to the health sector alone. Indeed, the commitment to SDGs is an opportunity for both health and development field to work together to achieve both health and other sectoral goals (health is an input and outcome) through adoption of fair transformative social public policies. The SDGs are excellent manifestations that health and wellbeing for all are both input and outcome measures of development. This explains why a body like UNFPA is concerned with SRH and SRHE, and why many bodies in national settings (Population Councils, Human Development Bodies, Councils of Women…) are partners in this agenda.
- Policies and actions on the social determinants of health inequities must embrace a wider group of actors. Such policies and actions must involve the whole government, civil society and local communities, business, global forums and international agencies. Health Equity in All Policies is an expression of a corporate priority and responsibility of the state. Intersectoral actions (ISA) are an important modality of work that requires structural, logistical and financial considerations.
- Health system inequities are a significant part and parcel of social determinants of health, but equity in health care is not a proxy for equity in health status. It is necessary but not sufficient. The CSDH made sure to define health system as an SDH.
- The Ministry of Health is critical to the needed policy reform movement. It can champion social determinants of health equity approach at the highest level of society, demonstrate effectiveness

through good practice, and support other ministries in creating policies that promote health equity. The World Health Organization (WHO) as the global body for health must do the same on the world stage. This necessitates a new stewardship role of the Ministry of Health or even better the establishment of a high health council or a multisector body concerned with SDGs and health equity. The stewardship role implies redefinition of the role of the body entrusted with health. This body is not "Producer of health and health care" but "Purveyor of a wider set of social norms and values"[12].

All Arab states have confirmed their commitment to SDG3 "ensure healthy lives and promote well-being for all" and SDG5 "achieve gender equality and empower all women and girls". Furthermore, all countries agreed that SDG10 "reducing inequalities within and among countries" is crucial in its own right and for further improvement of SRH.

I.2. Engagement of Arab region in development agenda

Countries in the Arab region have actively participated and engaged in all international forums related to SRH. They contributed to the formulation of the social development agenda. They also participated in the many global and periodic reviews of the implementation of the ICPD programme of action.

In particular, the Arab region held a conference during 2013 to reflect on its efforts and on its regional specificities. The 2013 Cairo declaration[13] adopted by representatives of member states of the League of Arab States (LAS) represents the consensus of the Arab countries on the way forward. The inputs of the Arab region were merged into the "Framework of Actions for the follow-up to the Plan of Action of the ICPD Beyond 2014"[9]. This framework is the culmination of the United Nations review of progress, gaps, challenges and emerging issues in relation to the ICPD PoA.

The Cairo declaration was formulated as an expression of the collective consensus of the Arab States to the ICPD. This consensus was further stressed upon by adopting the Sustainable Development Agenda[14] and the related SDGs, which explicitly spell out in their targets the universal access to SRH and SRHR in accordance with the PoA of ICPD, as well as universal access to SRH healthcare services.

All countries have confirmed their commitment to SDG3 "*ensure healthy lives and promote well-being for all*" and SDG5 "*achieve gender equality and empower all women and girls*". Furthermore, all countries agreed that SDG10 "*reducing inequalities within and among countries*" is crucial in its own right and for further improvement of SRH.

Five years following the 2013 Cairo declaration, a regional review report was prepared[15] as mandated by the United Nations (UN) General Assembly (resolution 65/234). The review is solely based on the

received answers of twelve Arab governments to a standard questionnaire. The review noted that, despite the many serious sufferings[a] and development challenges, significant implementation efforts are demonstrated.

In relation to SRH and gender equality which are the cornerstones of ICPD, the report showed positive changes. It referred to the ratification of international frameworks, the establishment of high level councils, the changes in the legal frame, the formulations of strategies and programs for protection of women.

In terms of reproductive health care services, the report stated that some of these services have been integrated within PHC. It also showed that in all countries that answered the questionnaire, there have been expanded and improved services related to maternal health, family planning and prevention and treatment of sexually-transmitted infections (STIs) including HIV/AIDS. The majority of these countries have invested in planning relevant human resources, upgrading their skill or improving their geographic distribution. In addition, in most of the responding countries, there exist programmes aiming to provide accessibility to sexual and reproductive health care for all, without discrimination based on gender, nationality, displacement status or marital status.

Table (1) provides more detailed illustrations of measures adopted by Arab countries. The large number of measures, notwithstanding the diversity and variations among Arab countries and among specific measures investigated, are quite evident.

Other sources of information provided by independent scholars do not contradict the message (based on government's responses) that a lot of efforts have been done. These sources, however, made more clear the many impediments and proposed specific recommendations.

Two relevant studies in this regard are briefly referred to here. The first study provides the findings of a recent regional study[16] based on 11 Arab countries. The study developed and applied a mapping tool to assess the SRH laws and policies in the selected Arab countries.

The study showed almost universal ratifications of international mechanisms, reforms on the legal fronts in a number of countries and in important areas pertaining to reproductive rights were noted[b]. Other positive changes include articulation of special family planning policies, increase of services for the treatment of infertility, and improvement in evidence base[c].

[a] Occupation, armed conflicts, civil unrests, terrorism, forced displacement, as well as political instability

[b] These included removing all reservations to CEDAW (Tunisia); explicit guaranteeing of the right to health (all countries but two) and the right to decide on the number and spacing of children (Morocco); the right of women to pass their nationality to their children (except 6 countries), many reforms in personal status law (particularly prevention of child marriage); protection against rape; legal measures to address female genital cutting in countries where practice is prevalent (Egypt, Sudan).

[c] The study referred in particular, to the formal comprehensive policies for the notification of maternal mortality.

Table (1) Selected policies, strategies and program measures on reproductive health

Country name	Measures to address newborn and maternal mortality						Government support for family planning
	Expanded coverage of comprehensive prenatal care	Expanded coverage of obstetric care	Expanded coverage of essential postpartum and newborn care	Expanded access to effective contraception	Expanded access to safe abortion care, including post-abortion care	Expanded recruitment or training of skilled birth attendants	
Algeria	•	•	•	•	o	o	Direct support
Bahrain	o	o	o	o	o	o	Direct support
Comoros	•	•	•	•	o	•	Direct support
Djibouti	•	•	•	•	•	•	Direct support
Egypt	•	•	•	•	•	•	Direct support
Iraq	•	•	•	•	o	•	Direct support
Jordan	•	•	•	•	•	•	Direct support
Kuwait	o	o	o	o	o	o	Direct support
Lebanon	•	•	•	•	•	•	Direct support
Libya	o	o	o	o	o	•	No support
Mauritania	•	•	•	•	o	•	Direct support
Morocco	•	•	•	•	o	•	Direct support
Oman	•	•	•	•	•	•	Direct support
Palestine	•	•	•	•	•	•	Direct support
Qatar	o	o	o	o	o	o	Direct support
Saudi Arabia	•	o	•	o	o	o	No support
Somalia	•	•	•	•	•	•	Direct support
Sudan	•	•	•	•	o	•	Direct support
Syria	•	•	•	•	o	•	Direct support
Tunisia	•	•	•	•	o	o	Direct support
UAE	o	o	o	o	o	o	No support
Yemen	•	•	•	•	o	•	Direct support

Table (1) Selected policies, strategies and program measures on reproductive health (continued)

Country	Measures on reproductive and sexual health of adolescents			Policy on restricting access to contraceptive services						Level of concern about unsafe abortions
	Raised or enforced minimum age at marriage	Expanded girls' secondary school enrolment or retention	Provided school based sexuality education	Minimum age	Marital status	Parental consent (for minors)	Emergency contraceptive pills	Sterilization of women	Sterilization of men	
Algeria	•	•	o	o	o	o	o	o	o	Not a concern
Bahrain	•	•	•	o	o	o	o	o	o	
Comoros	•	•	•	o	o	o	o	o	o	
Djibouti	•	•	•	o	o	o	o	o	o	Major concern
Egypt	•	•	•	o	•	o	o	o	o	Minor concern
Iraq	•	•	o	o	•	o	o	o	•	No official position
Jordan	•	•	o	o	•	•	•	o	•	No official position
Kuwait	o	o	o							
Lebanon	•	•	•	o	o	o	o	o	o	Minor concern
Libya	o	o	o							
Mauritania	•	•	o	o	o	o	o	o	o	Major concern
Morocco	•	•	•	o	•	o	o	o	o	No official position
Oman	•	•	•	o	o	o	o	o	•	Not a concern
Palestine	•	•	•	o	•	o	o	o	o	Major concern
Qatar	•	o	o							
Saudi Arabia	o	•	o							
Somalia	•	•	o	o	o	o	o	o	o	
Sudan	o	•	o	o	o	o	o	o	o	
Syria	•	•	o	o	o	o	o	o	o	
Tunisia	•	o	o	o	o	o	o	o	o	
UAE	o	o	o							
Yemen	o	•	o	o	o	o	o	o	o	

- • Indicates that policies and strategies are adopted or concrete measures were taken
- o Indicates that no policies were adopted nor measures were taken

A blank cell indicates that data are not available

Source: United Nations, 2017[17].

The second study on integration of SRH services[18] starts by indicating that such integration is specified in the two targets of SDGs (3.7 and 5.6). The study states that: "Integration of SRH services and primary health care means that people who are seeking information or health care for a specific SRH concern can have their other needs met simultaneously (and vice versa)—preferably at the same time in the same location, or otherwise by effective referral"[19]. The wide range of services to be included were also noted[d].

On the path of achieving this integration, Table (2) summarizes the essential SRH services offered at PHC facilities in selected Arab countries. It is clear that Morocco is on the right track in terms of such integration and offers all the specified SRH services at the PHC facilities. Also, a good number of countries do provide many of these services.

The national analytical reports of the five countries[1-5], that form the basis of the current regional report, provide further information. They have confirmed that the five countries (Egypt, Jordan, Morocco, Oman and Sudan) are committed to the international obligations and their application. The reports have demonstrated that at the level of political discourse, as well as national and international commitments, the human rights related to SRH are aspired to be respected, protected and fulfilled. The five countries have several legislations that ensure social and economic protection to all citizens without discrimination. The countries have also adopted different SRH supportive policies and strategies.

The reports also noted that the five countries are faced with some challenges related to cultural and gender norms coupled with resource constraints, which often hinder the effective translation of the political discourse into SRH gains, render the laws unenforceable and retain the services inaccessible. For example, given the stigma towards STIs and HIV/AIDS, there are many constraints in availing and accessing the services to the affected people. Another, example, despite that gender-based violence and marriage before the age of 18 are addressed by legislations in many countries, yet these practices continue to exist and are tolerated among many social groups. Sexual health and sexual rights are also dimensions of SRH that are totally invisible in the agenda of policies and actions.

At the level of political discourse, as well as national and international commitments, the human rights related to SRH are aspired to be respected, protected and fulfilled.

[d] These include: family planning; maternal and new born health care; clinical management of sexual and gender-based violence; post-abortion care; and prevention and management of HIV, other sexually transmitted infections, cancers of the reproductive system, and infertility.

The reports also referred to a number of issues within the life course trajectory that appear not to be receiving sufficient attention, and also presented the limitations in addressing these issues.

The unfinished SRH agenda includes those related to puberty and menopausal stages, consanguineous marriages, infertility, reproductive cancers, sexually transmitted infections, gender-based violence and sexual and reproductive rights.

I.3. Opportunities for actions on SRH inequities in the Arab

The CSDH report (2008) formed the basis of policies and programs adopted by many governments (e.g., Australia, Canada, England, Finland and Sweden, and number of countries in Latin America….). It also led to the adoption of Rio political declaration (2011) on social determinants of health.

Table(2) Essential SRH services offered at primary healthcare facilities

Services	Egypt	Jordan	Morocco	Palestine	KSA	Sudan
Family planning	✓	✓	✓	✓	✓	✓
Antenatal care	✓	✓	✓	✓	✓	✓
Labour and delivery			✓			✓
Postnatal care	✓	✓	✓	✓	✓	✓
Newborn and child health	✓	✓	✓	✓	✓	✓
Prevention of unsafe abortion and post-abortion care			✓			✓
Emergency contraception	✓a		✓	✓		✓
STI/RTI screening, diagnosis and treatment		✓	✓	✓		✓
Cervical cancer screening			✓	✓		
Breast cancer screening	✓	✓b	✓	✓		
Prevention and management of gender-based violence		✓c	✓	✓		

a. private facilities only
b. diagnosis and treatment only
c. management only

Source: MENA Health Policy Forum, UNFPA Arab States Regional Office, 2017[20].

The declaration called for pushing health inequity to the forefront of the political agenda and recommended the adoption of Health in all Policies (HiAP) as the best strategy to tackle these inequities and their structural determinants[21].

In 2013, the ICPD beyond 2014 review that lead to the Cairo declaration reaffirmed the commitment of the Arab region to the ICPD agenda and to the realization of SRH and reproductive rights. The declaration stressed issues of equality and dignity and called for

"ensuring an integrated approach to inclusive economic growth and inclusive social development, the right of everyone to the enjoyment of the highest attainable standards of physical and mental health, equality of opportunity for all as well as access to social and health services and the need to recognize equality and dignity as central to progress and peace and security"[13].

Building on this international concern for health equity and SRH as well as on Cairo declaration, the Arab region can greatly benefit from a policy reform movement to improve SRH equity through actions on the inequitable distribution of structural SDH.

Indeed, SRH has a number of features that lend themselves more easily to the application of an equity lens in a structural determinants framing of health inequalities. These features include the following: First, SRH is now very much firmly placed on the development agenda and is receiving increased attention on the national level. Second, the impact measures of SRH and its risk factors are much broader than the physical domain encompassing many sexual, social and mental health dimensions. These dimensions of health fall much more squarely within the mandate of social actors. In particular, gender dynamics and gendered practices are not just one of the many social determinants of health. They are much more central in impacting SRH and do have their own pathway of influence. This speaks directly to policy actors concerned with gender and development.

A recent article[22] argued that the Arab region development trajectory needs to embrace fairness and inclusiveness as core pre-requisites for individual and social wellbeing, and that "The appreciation of links between voiced aspirations and realization of an equitable distribution of health has not filtered into the conscious minds of Arab people, and has not gained the prominence it deserves within the policy arena".

Clearly, the call for actions on SRH inequities in the Arab region is supported by the fact that these inequities are no longer viewed as just a public health priority. They are now considered a manifestation of societal malfunctioning. They are signals of marginalization and frustrations and a social cohesion challenge. The Arab region commitment to SDGs is a step in the right direction.

The Arab region development trajectory needs to embrace fairness and inclusiveness as core pre-requisites for individual and social wellbeing.

Part Two: Framework, indicators and methodology

Part two presents the adopted framework, conceptual thinking and methodology clarifying the new contributions of the SDHI framing of SRH and the systematic approach adopted. It also discusses the data sources and the availability of relevant indicators.
The first step in the analysis was to adapt the framework to make it more relevant to the current investigation of SRHE. The second step was to operationalize the framework through a set of currently available indicators and stratifiers. Following these steps, the analysis used an appropriate methodology to allow investigating SRH challenges and to contribute to an evidence based diagnosis of intermediary and structural determinants of inequalities.

It should be noted that the application of the framework and methodology showed some variations between countries due to the difference in the number and content of data sets available. This was particularly evident in the comprehensiveness of SRH indicators used for each country study, the investigation of gender norms, and trend over time.

A summary of the key steps of the current investigation is provided below.

II.1. The framework for SRH inequity investigation

The SDHI framework adopted in the analysis is presented in Figure 1. The framework describes the conceptual thinking explaining the relationships and pathways through which social determinants influence SRH and their distribution across the various social groups in the population. The framework is an **adaptation** of the multilevel conceptual framework of the CSDH[11].

In the conceptual framework of CSDH, the concept of SDH covers three levels. The first level covers the full set of social conditions in which people are born, grow, live, work and age. Such conditions are characteristics of particular social groups. This level includes the health care system as a social determinant. According to the framework, systematic and persisting health inequalities can be linked to the unequal distribution of these conditions reflected in the social position. This forms the second level. The social positions are the product of the wider upstream social, economic, political, environmental and cultural systems and structures. Such systems and structures are the third level of determinants referred to by CSDH as "the causes of the causes".

The CSDH framework has two defining features. The first feature is the careful incorporation of structural upstream social determinants of SRH (governance, public policies, cultural and societal forces). The second feature is its attention to the social patterns of health inequalities and the tracing of this pattern to the unfairness of structural forces.

It is important to note that the framework does not address differences that are a result of variations in individual preferences, agencies and biological endowments. Such variations are random and do not produce the systematic patterns that are the subject of this report.

The adopted conceptual framework adapts the CSDH framework by reorganizing the framework and articulating two intermediary determinants. The reorganization pays special emphasis to the intermediary social arrangements that lend themselves more readily to policy interventions. The new adapted framework similar to the CSDH has three levels of determinants. The first and third levels are the same as the CSDH frame, which are referred to as proximate and structural determinants. The second level is the focal point of the adaptation. This level is referred to as intermediary determinants including both the social stratification and intervening forces that lend themselves for policy interventions.

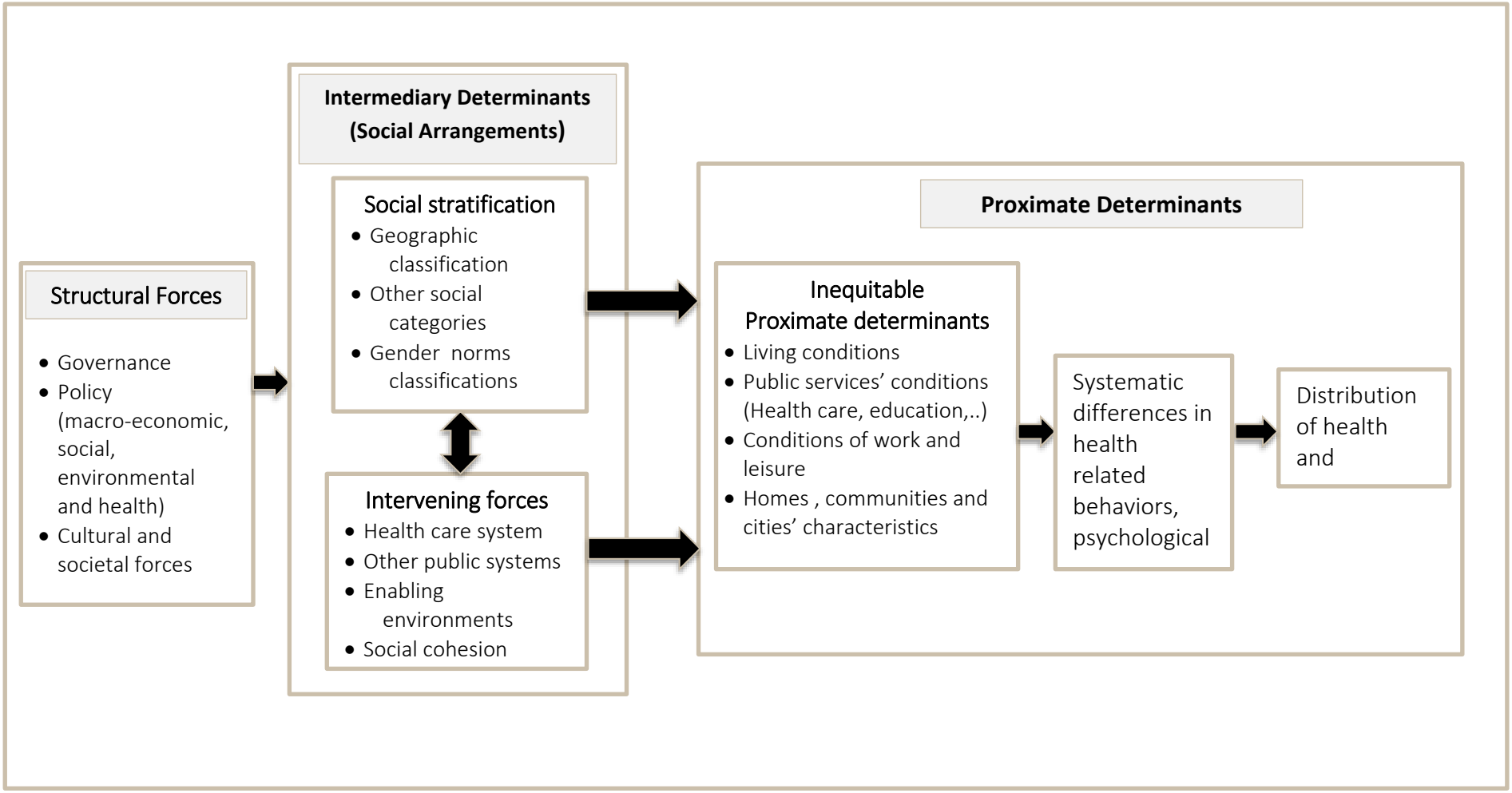
The social determinants of reproductive health may be different from the social determinants of reproductive health inequalities. The latter are determinants that influence the distribution of health among different categories of a particular stratifier

The adaptation of these intermediary determinants explicitly recognized that the social determinants of reproductive health may be different from the social determinants of reproductive health inequalities. The latter are determinants that influence the distribution of health among different categories of a particular stratifier. For example, gender norms are a well-known social determinant of reproductive health. However, gender norms only become a social determinant of reproductive health inequalities when gender norms are different among social groups and when these differences have unequal influences on health.

The adopted SDHI stresses the importance of the intermediary level determinants. It links the distribution of the stratifiers with the distribution of SRH inequalities in both the impact and risk factors. It also traces inequalities in these intermediary forces to their structural causes shaping the social stratification and influencing the capacity and performance of intervening forces. This emphasis moves the policy discourse from its usual sole focus on changing risky behavior and on improving general socioeconomic conditions to recognizing the need to address the structural determinants with its own pathway of influence on the distribution of the intermediate determinants.

The adaptation also included the articulation of two key intermediary determinants. These involved “introducing the distribution of gender norms as social stratifier of SRH“ and a “thorough incorporation of the fairness of the health care system and its relative contribution as a social determinant of sexual and reproductive health inequality.” The following is an explanation of the articulation of these two key determinants

Figure 1: Social determinants of health inequities framework



Source: Adapted from CSDH framework[11]

II.1.1. Introducing the distribution of gender norms as a social stratifier of SRH inequalities.

Gender norms are defined as the ideational and cultural attitudes that manifest themselves in environmental and behavioral forces impacting SRH. These norms are social constructs that significantly influence risky behavior and SRH impact conditions such as definition of gender roles and different sets of rights and responsibilities by sex. Gender norms manifest themselves in a community and family level environment that provide differentiated access to health resources and opportunities, as well as in risky SRH behaviors (such as traditional harmful practices, childhood and forced marriages, unhealthy reproductive patterns, gender-based violence,...).

Gender norms are social constructs that significantly influence risky behavior and SRH impact conditions such as definition of gender roles and different sets of rights and responsibilities by sex.

Despite the importance of gender norms in shaping SRH, the current evidence on social determinants of SRH does not pay adequate attention to this component. It is true that many analytical pieces acknowledge that risky gendered behaviors are detrimental to SRH, yet the SRH literature remain quite silent in terms of measuring gender norms and their distribution, as well as in linking such a distribution to the unequal distribution of SRH outcome measures.

The benefits of introducing gender norms and its distribution in the analysis include:

- Emphasizing gender norms as a central determinant with significant influence on SRH. This emphasis moves the policy discourse from its usual sole focus on changing risky gender behavior and on improving general socioeconomic conditions to recognizing the need to address gender norms as a contextual determinant with its own pathway of influence.
- Operationalizing the measurement of the distribution of gender norms and highlighting the needed data to adequately capture this important social determinant.
- Producing needed evidence that link the distribution of gender norms to the distribution of SRH outcome measures. Such evidence describing distributional aspect of gender norms is totally missing in the literature.
- Assessing the relative contribution of the distribution of gender norms versus the distribution of other social determinants (such as the health system, socioeconomic conditions, area level characteristics) in producing unequal SRH health outcomes for specific social groupings.

The significance of these benefits is particularly noted in making gender specific policy recommendations that are evidence based.

II.1.2. Thorough incorporation of the fairness of health care system and its relative contribution as a social stratifier of SRH inequality

The health care system is an important social determinant of health that lends itself readily to the health sector interventions. Hence, it was decided to devote a separate section dealing with the health care system. The analysis investigated the fairness of the distribution of the components of health care system within the social stratifiers implemented in the study.

The four domains covered in the WHO operational health system strengthening (HSS)[23] monitoring framework were used to monitor the HS capacity and performance as SDH influencing the SRH and their uneven distributions (Figure 2). The framework brings together indicators and data sources across the results chain and its entirety and composes four major indicator domains: 1) system inputs and processes, 2) outputs, 3) outcomes, and 4) impact. System inputs and processes reflect HS capacity. Outputs, outcomes, and impact are the results of investment and reflect performance. Monitoring of HS performance needs to show how inputs to the system (resources, infrastructure, etc.) are reflected in the outputs (such as availability of services and interventions) and eventually the outcomes and impact including use of services and better health status.

II.2. Operationalizing sexual and reproductive health inequity framework

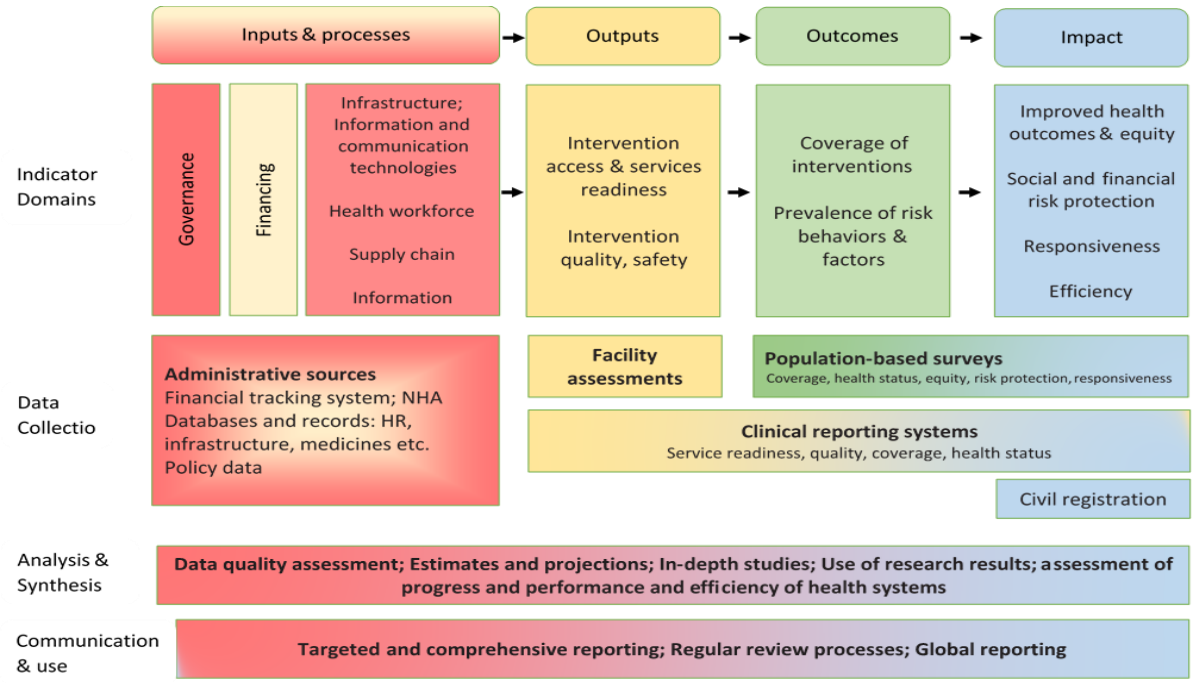
II.2.1. Sexual and reproductive health indicators

The operationalization of the framework requires choosing the dimensions to reflect each component of the SDHI framework that are contextually relevant. It also requires specifying the indicators of SRH and assembling the available ones, as well as choosing the appropriate stratifiers.

To guide such operationalization, a thorough literature search based on peer-reviewed and grey literature, policy documents, program evaluations and sector strategies and plans, as well as a review of the quantitative data from population-based surveys, routine data systems, international databases and other sources was carried out[e]. The purpose of the literature review was to capture the landscape of SRH challenges globally and in the Arab region with emphasis on SRH inequities and the specific population groups who are disproportionately impacted by poor health outcomes. In addition, the review, also, focused on identifying the indicators and social stratification commonly used for monitoring SRH inequalities.

[e] A shared folder organizing a good number of relevant pieces of literature was a byproduct of this review effort. See: http://schools.aucegypt.edu/research/src/Pages/SRH-Inequities.aspx

Figure 2: Monitoring and evaluation of health systems strengthening



Source: WHO. 2009.[23]

Fifty-seven SRH-related indicators were identified from literature review (see Annexes 1-3). The indicators were classified according to the operational framework into three domains:

- The first includes the SRH impact indicators, which reflect the overall impact of the "whole-of-government" achievement, living environment and HS influence on SRH. Twelve SRH impact indicators were identified. The internationally commonly used SRH impact indicators include:
  - SRH-related mortality indicators: Five indicators were defined to measure perinatal mortality, neonatal mortality, infant mortality, maternal mortality and mortality attributed to cancer (breast, cervical).
  - SRH-related morbidity indicators: Seven indicators were identified to measure prevalence of infertility, incidence and prevalence of HIV infection, incidence of hepatitis B viral (HBV) infection and prevalence of urethritis. The commonly used list does not include STIs and congenital anomalies.
- The second includes the risk factors (outcomes) which reflect the national level forces including, governance, policies, culture and gender norms, as well as HS challenges translated into gender manifestations, risk behaviors or even biological outcomes in certain social subgroups. There were 12 defined indicators. They represent risk factors and are classified into:

- Social and psychological risk factors: these are measured by nine indicators to identify negative SRH experience as early age at marriage, female genital mutilation/ cutting (FGM/C) and gender-based violence (GBV). The indicators miss many context specific social manifestations such as social and psychological needs at puberty and menopause; consanguineous marriages; multiparity; and risky birth interval.
- Biological risk factors: there were 3 indicators to identify biological risk factors including anemia in reproductive age, anemia in pregnant women and low birthweight. These indicators miss pregnancy-related diseases such as endometriosis, gestational diabetes, eclampsia, prematurity,

- The third includes the HS determinants, which reflect the negative influence of the health policies, and most importantly trace the negative impact of public policies on the HS performance and capacity, such as national financial policies, the education policies, the development policies, …etc. They include thirty-three indicators covering:
  - Service capacity with fifteen HS inputs related to the HS six building blocks.
  - Service performance indicators using 18 indicators to describe process, access/demand, service use and HS outcome.

II.2.2. Data sets and indicators used

The most recent data sets that were available and analyzed in the study are:

Egypt	Egypt Demographic and Health Survey 2014 (EDHS2014) Egypt Health Issues Survey 2015 (EHIS2015) Egypt Demographic and Health Survey 2005 (EDHS2005)
Jordan	Jordan Population and Family Health Survey 2012 (JPFHS2012) Jordan Population and Family Health Survey 2007 (JPFHS2007) Jordan Population and Family Health Survey 2002 (JPFHS2002) Jordan Population and Family Health Survey 1997 (JPFHS1997)
Morocco	National Survey on Population and Family Health 2011 (ENPSF-2011)
Oman	The Oman National Reproductive Health Survey 2008 (RHS2008)
Sudan	The Sudan Multiple Indicator Cluster Survey 2014 (MICS 2014)

It should be noted that it is expected that a new round of data sets will become available in the near future. It is highly recommended that a similar analysis be replicated on these new data sets.

Table (3) and (4) provide the lists of indicators (for SRH and the health system) that are available in the most recent data sets in the five countries. The green highlights in these

tables refer to the requested SDGs indicators. The two tables have a good number of missing indicators for four of the five countries. Clearly, investment in data collection is a very much needed effort in the Arab region.

Table (3) Sexual and reproductive health indicators utilized, and among them SDG indicators highlighted, in Arab countries

	Egypt	Jordan	Morocco	Oman	Sudan
Impact	2014& 15	2012	2011	2008	2014
Maternal mortality ratio	✓	✓	✓	✓	✓
Neonatal mortality rate	✓	✓	✓	✓	✓
Infant mortality rate	✓	✓	✓	✓	✓
Delayed primary fertility (>24months)	✓	✓	✓		✓
HBV infection in males (1-59 years)	✓				
HBV infection in females (1-59 years)	✓				
Self-reported STIs	✓		✓		
Social and psychological risk factors					
Female genital cutting (1-14 years)	✓				✓
Consanguinity	✓	✓	✓		
Early marriage (<18years)	✓	✓	✓		✓
Adolescent childbearing	✓	✓	✓	✓	✓
Multiparity (5+ children)	✓	✓	✓	✓	✓
Risky birth interval (<24months)	✓	✓		✓	
Marital violence	✓	✓			
Marital physical violence during pregnancy	✓	✓			
Biological risk factors					
Anemia among women in reproductive age	✓	✓			
Low birth weight	✓	✓	✓		✓

Table (4) Health system indicators utilized, and among them SDG indicators highlighted, in Arab countries

	Egypt	Jordan	Morocco	Oman	Sudan
Health system performance	2014& 15	2012	2011	2008	2014
No contraceptive method used	✓	✓	✓	✓	✓
FP unmet need	✓	✓		✓	✓
No FP demand satisfied by modern methods		✓			✓
No antenatal care (≤one visit)	✓	✓	✓	✓	✓
No regular ANC (<4 visits)	✓	✓	✓	✓	✓
Birth not protected against tetanus	✓	✓	✓		✓
Home delivery	✓	✓	✓	✓	✓
Birth not attended by skilled provider	✓	✓	✓	✓	✓
Caesarean section delivery	✓	✓	✓		✓
No postnatal checkup	✓	✓	✓		✓
No HIV/ AIDS comprehensive knowledge in females	✓	✓	✓		✓
No HIV/ AIDS comprehensive knowledge in males	✓				
Never had clinical breast examination	✓	✓			
No birth registration		✓	✓		✓
Health system capacity					
Distant healthcare facility	✓	✓	✓		
Difficult transportation	✓	✓			
Unavailable provider	✓				
Unavailable female provider	✓	✓	✓		
Unavailable medication	✓				
Unaffordable healthcare services	✓	✓	✓		

II.2.3. Choice of social stratifications

Measuring SRH inequalities involves identifying the appropriate socio-economic stratification that captures the difference in the population experience. Thus, before looking at summary measures of inequality, it is necessary to define the social stratification. In the literature, there is wealth of information that can be used to reflect the social dimensions of ill-SRH and guide policies to improve health and promote health equity.

The challenge is to identify the set of stratifiers sensitive to capture the SRH inequalities, as well as point to the underprivileged and underserved populations. The social stratifiers recommended in literature include gender, wealth, educational level, occupational status and place of residence. However, the use of many social stratifiers will not allow for identifying priority health inequalities. Thus, a minimum list of stratifiers will perform better in identifying priority SHR inequalities.

Thus, we considered the main administrative geographic classification and wealth as good candidates for reflecting SRH inequalities. The reasoning for this builds on the availability of data on these two dimensions in almost all data sets. Furthermore, they provide a direct or less controversial way in interpreting inequalities, which is appealing to policy makers.

A country's administrative geographic classification reflects the experience of the entire population within a geographic area and captures the potential vulnerabilities to SRH and services coverage within a locality. Most importantly, the geographic administrative classification is used for planning services and allows policy makers to identify the underprivileged geographic locations. Furthermore, the geographic administrative classification attracts attention to SRH inequalities and produce a standard method for monitoring progress overtime and even comparison between countries. In all five countries, major regional administration classifications were implemented. For example, in case of Egypt, the geographic administration stratifier used in the analysis was based on the six main regions in the country; namely Urban Governorates, urban Lower Egypt, rural Lower Egypt, urban Upper Egypt, rural Upper Egypt and Frontier Governorates. Details on the classification of geographic areas used in the five countries are provided in Annex 4.

The wealth index classified into 5 quintiles is commonly used classification to reflect the household living conditions, as well as the socio-economic status of individuals. The wealth quintiles allow for identifying social inequality in SRH, as well as help in detecting the socially disfavored groups. Furthermore, the wealth classification allows policy makers to promote the package of social policies in a country.

As noted earlier, the use of gender norms as a stratifier is an important contextually relevant contribution of this study. Not only because gender is a key general determinant of SRH, but also because it is well recognized that inequitable gender values are an important developmental challenge. Such a challenge interacts with other social determinants and produce a highly unequitable contextual environment detrimental to SRH.

Due to the paucity of data, the analysis was forced to use a proxy for the gender norms which describe the gendered cultural context in which women lives. This in itself signals the need to better conceptualize and collect data that more adequately capture this stratifier.

The gendered cultural context index was developed by the research team to attempt to capture the gendered environment within which women live. The gendered cultural context is assessed along two dimensions, namely attitudes and their translations in behaviors. In Egypt, the attitudes and practices related to denial of education, female genital cutting, early marriage and partner's violence were used to construct the gendered cultural context. Box 1 provides a list of indicators used for Egypt. The steps for building the index included: 1) Identifying the

locality in which women live and for which the scale is calculated. In the case of Egypt, this locality was the urban/rural classification of the 25 governorates included in the EDHS (2014) resulting into 47 localities; 2) calculating each indicator included in the index at the level of the locality; 3) calculating the average of these indicators on the locality level. The average is the score of the gendered cultural context index for the locality and is assigned to each woman living in that locality; 4) for purpose of assessing inequality, the score was classified into four categories; namely negative, positive, more positive and most positive. The term "positive" indicates gendered cultural context conducive to good SRH, while "negative" points out non-conducive gendered cultural context to good SRH.

For other countries, slightly different components were used in building the index depending on the availability of data.

It should be noted that the study is conscious that the stratifiers used do not cover the whole range of contextually relevant stratifiers. Each country needs to identify the particular groupings that reflect social stratification that are amenable to change through structural reforms. For example, occupational stratifiers could point out to health inequalities caused by higher risks in certain occupations. The investigation of such inequalities is a good advocacy tool for reforming occupational health policies and implementing specific preventive and protective policies for high risks occupations.

Stratifiers for SRH could be specifically composed to push to the forefront specific vulnerabilities that tend to be invisible. For example, forced displacement and migration status is a good candidate for an SRH stratifier in many Arab countries. The current analysis, with its reliance on few stratifiers, is but one step in the right direction. Further steps are usually curtailed not just by the invisibility of the social strata but also by absence of data.

Box (1) Components of the gendered cultural context index

Perception and attitudes

- Percent who reported ideal age at marriage for women below 18 years
- Percent who believe that female genital cutting is required by religion
- Percent who justify wife beating for any reason

Practices and behavior

- Percent who married before age 18 years
- Percent of women who experienced female genital cutting
- Percent who were exposed to physical, emotional or sexual violence by husband
- Percent who were exposed to violence by any person other than the husband
- Percent with less than secondary education

II.3. The methodology

The analysis in the five country reports was carried out according to the following steps

- For identifying priority sexual and reproductive health and health system challenges, a measure of magnitude (prevalence/incidence) for the indicators were calculated. The measures of magnitudes were ranked and a cutoff point of 20% was used to identify priority challenge. In other words, a prevalence of 20% or more was classified as high priority. Neonatal and infant mortality were considered priority if the neonatal mortality exceeded 12 per thousand which is the threshold for SDG target for neonatal mortality.
- For assessing priority inequality SRH challenge or HS challenge, two steps were followed
    - To identify the inequality measures to be implemented in the inequality analysis, a thorough review of the inequality measurement literature was carried out[24,25,26,27,28,29,30,31,32]. This review concluded with a decision to implement the index of dissimilarity (ID%) for non-ordered categorical stratifier and the concentration index (CI) and CI redistribution need (rCI %) for the ordered categorical social stratifiers. The two chosen measures indicate equality when they are equal to Zero. The research team agreed to use a 10% cutoff point to identify sever level of inequality. In other words, if the ID% or the rCI% equal or exceeded 10%, the inequality is classified as sever inequality. Moderare inequality was defined in terms of the measure of inequality falling in the range 5% to 10%, while low inequality was defined in terms of the measure of inequality falling below the 5% threshold.
    - The two chosen measures were applied on the different SRH and HS indicators for the three selected stratifiers and priorities inequality SRH and HS challenges were identified.
- For monitoring the changes in the SRH and HS challenges and their inequalities across time, the change in the magnitude of the SRH or HS indicator for the different categories of the stratifier was followed over two points of time and graphically presented. This was companied with a comparison of the magnitude of inequality measure at these two points of time.
- The investigation of the fairness of the upstream SRH determinants was inferred from the investigation of the presence of pre-requisites and guarantees for such fairness (e.g. adequate information system, HEiAP,…). It was also explored through discussing the fairness of the allocation of resources and opportunities for SRH health and SRH health equity. In addition, the finding that gender and health system policies are not succeeding in targeting and responding to SRH inequalities was used as an indication of unfairness of public policies.

Part Three: Sexual and reproductive health: levels and inequalities

Part three provides empirical evidence on priority SRH challenges and progress overtime. It discusses positive changes in relation to dealing with SRH inequalities, and assesses the degree and trend of inequalities in SRH challenges across different stratifiers. It also compares priority SRH with priority SRH inequality challenges.

III.1. Sexual and reproductive health: progress and challenges

Despite the improvements in many SRH indicators, there remains a number of concerns pertaining to the current levels, and the differences between countries.

- Progress across time

Several pieces of evidence demonstrate progress in the Arab region (Table 5). The maternal mortality ratio, as well as the neonatal and infant mortalities were nearly halved. The percentage of women receiving antenatal care (ANC) and the skilled birth attendance and the unmet need for family planning have also showed improvement over the past decades.

Table (5) Sexual and reproductive health progress in Arab states

	1990	2010	2015
Maternal mortality ratio (per 100,000 live births)	358.0	261.0	162[a]
Neonatal mortality rate (per 1,000 live births)	29.0	21.0	18.0[b]
Infant mortality rate (per 1,000 live births)	63.0	42.0	28.7[b]
Pregnant women receiving antenatal care) (%)	53.0	70.0	-
Births attended by skilled health staff (% of total)	52.0	69.0	-
Contraceptive prevalence, any methods (% of women ages 15-49)[c]	33.7	49.8	51.5
Unmet need for family planning [c] (% of ever married women ages 15-49)	24.7	17.0	16.6
Proportion of demand for contraception satisfied [c]	57.8	74.6	75.6

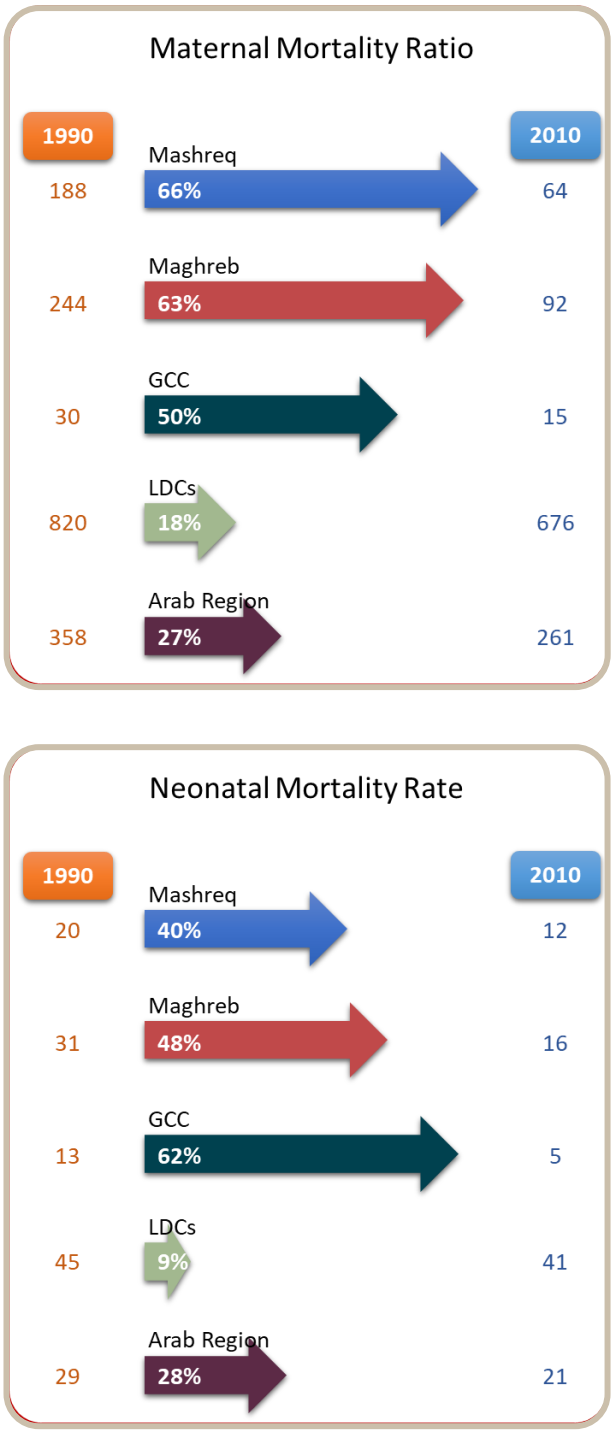
Source: UN, LAS,2013[33], a: UNFPA, 2017[34],b: World Bank Data Bank[35], c: UNFPA, 2016[36]

The progress on the SRH front for the Arab region was not uniform in all Arab sub-regions[f].

Figure (3) demonstrates that over the past two decades (1990 to 2010), the Arab region showed tangible progress in maternal mortality ratio (MMR) with a 27% decline. Remarkably, the Gulf Cooperation Council (GCC) countries have halved their already relatively low MMR and reached 15 per 100,000 livebirths in 2010. A decline of over 60% was reported in Mashreq and Maghreb countries reaching 64 and 92 per 100,000 livebirths in same period, respectively. The least developed Arab countries showed modest decline of 18% and remaining at the unacceptably high MMR of 676 per 100,000. The decline in MMR continued during the most recent period to reach 162 per 100,000 for the Arab region (table 5).

Another relevant impact measure of SRH is the neonatal mortality rate. This measure is closely related to pregnancy and delivery. It is generally believed that more than 50% of neonatal mortality is related to preterm birth complications and complications during birth[37]. Figure (3) confirms the same previous message of MMR that shows overall appreciable progress and diversity in speed of progress and the level of challenge.

Figure 3: Trend in selected SRH impact measures



Source: UN, LAS, 2013.[33]

[f] The League of Arab States and the United Nations have agreed on the following regional classification of Arab countries:
the Cooperation Council for the Arab States of the Gulf (GCC): Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates;
the Least Developed Countries (LDCs): the Comoros, Djibouti, Mauritania, Somalia, the Sudan and Yemen;
Maghreb: Algeria, Libya, Morocco and Tunisia;
Mashreq: Egypt, Iraq, Jordan, Lebanon, Palestine and the Syrian Arab Republic.

The trend in other impact measures of SRH is more difficult to establish, given the paucity of data. In terms of progress in SRH risk factors, Figure (4) supports the picture of progress in selected SRH risk factors between 1990 to 2010.

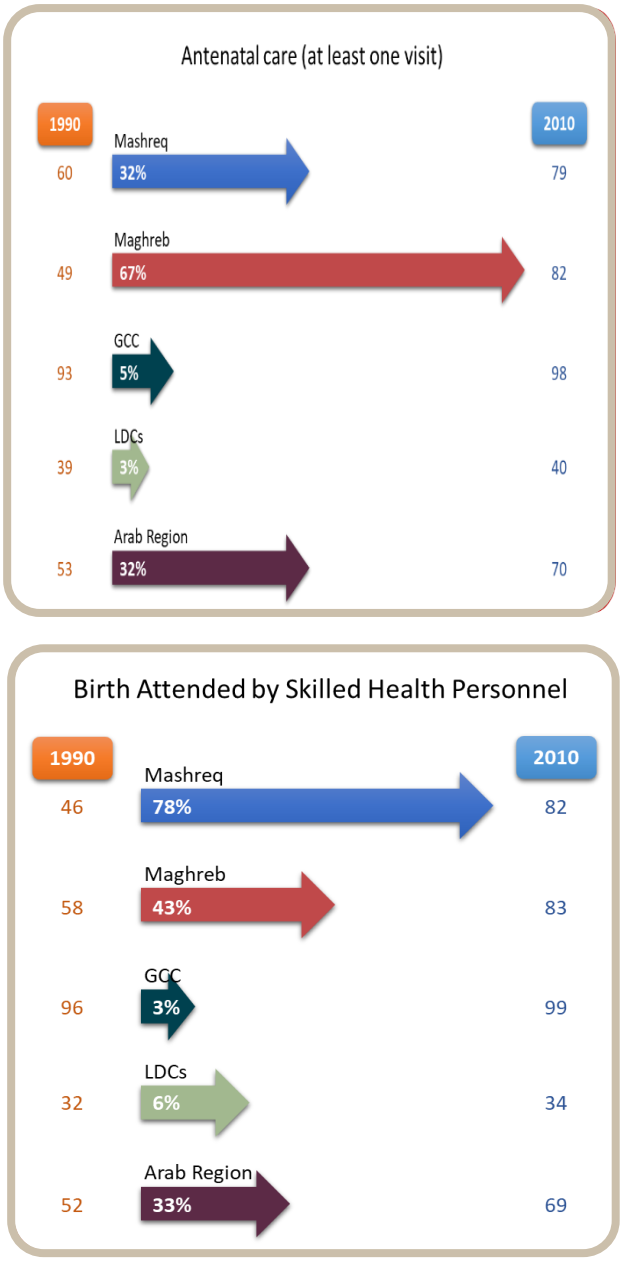
- Current levels of SRH

On the country level, the available data confirm the uneven distribution among countries in SRH challenges with a clear economic gradient disfavoring the poor countries. A glance at the MMR in Arab States (Table 6) clearly shows the uneven levels of achievements between countries. The high income GCC countries have the least MMR, while middle income Mashreq and Maghreb countries tend to have much higher MMR ranging from 4 to 30 folds. The MMR remains unacceptably high in the least developed countries. Furthermore, despite that high income GCC countries have least MMR in the Arab States, only the United Arab Emirates, Kingdom of Saudi Arabia and Kuwait have lower ratios than the global average for high income countries (12 per 100,000 livebirths).

The health system's response appears to be relatively improved as the proportion of birth attended by skilled providers ranges between 74%-100% except for Yemen, where around half of the births occur in the hands of unskilled providers.

The available data confirm the uneven distribution between countries in SRH challenges with a clear economic gradient disfavoring poor countries

Figure 4: Trend in selected SRH risk factors



Source: UN, LAS, 2013.[33]

However, the SRH social risk indicators appear to be lagging behind in all countries even the GCC countries. Child marriage still exists and ranges from 4%-34%, adolescent child bearing ranges from 7-87 per 1,000 and the contraceptive prevalence rate is still very low in several countries.

Table (6) Selected SRH indicators in 13 Arab countries

	Maternal mortality ration (per 100,000 live births) 2015	Skilled birth attendance (%) 2006-2016	Contraceptive prevalence rate (%) 2017		Child marriage (%) 2008-2016	Adolescent birth rate per 1000 girls aged 15-19 2006-2015
			Any	modern		
GCC countries						
Bahrain	15	100	65	45	-	14
Kuwait	4	99	56	49		7
Oman	17	99	36	24		13
Qatar	13	100	47	41	4	13
Saudi Arabia	12	98	30	26		7
UAE	6		50	42		34
Mashreq countries						
Egypt	33	92	61	59	17	56
Jordan	25[a]	100	62	46	8	26
Lebanon	15		62	46	6	
Maghreb countries						
Morocco	72.6[b]	74	68	61	13	32
Tunisia	62	97	70	50	15	29
Least developed countries						
Sudan	311	78	12	11	34	87
Yemen	385	45	40	34	32	67
Aggregated						
Arab States	162	79	53	47	19	52
World	216	77	63	58	28	44

Source: UNFPA, 2017, a: Department of Statistics (Jordan) 2016[38], b: Ministry of Health (Morocco) 2018[39]

For the identification of SRH priority, the analysis in the 5-country reports used 20% or more as the cutoff point to indicate SRH priority. Neonatal and infant mortality were considered priority if the neonatal mortality exceeded 12 per thousand which is the threshold for SDG target for neonatal mortality. Table 7 demonstrates several SRH challenges. Neonatal and infant mortality are priority in these countries with the exception of Oman. STIs is a priority in Egypt. FGM/C still exists in the region and remains priority in Sudan. Consanguinity, early age at marriage, multiparity, risky birth interval and marital violence are priority social risk factors. While anemia among women in the reproductive age is a priority in Egypt and Jordan, and low birthweight is a priority in Sudan.

Table (7) Sexual and reproductive health challenges in Arab countries (%)

	Egypt	Jordan	Morocco	Oman	Sudan
Impact	2014& 15	2012	2011	2008	2014
Neonatal mortality rate (per 1000)	14	14	21.7	4.2	32.6
Infant mortality rate (per 1000)	22	17	28.8	8.7	52.0
Delayed primary fertility (>24months)	2.4	3.6	3.6		3.5
HBV infection in males (1-59years)	1.2				
HBV infection in females (1-59years)	0.8				
Self-reported STIs	32.0		12.2		
Social and psychological risk factors					
Female genital cutting (1-14 years)	14.1				31.5
Consanguinity	31.5	34.6	28.8		
Early marriage among ever married women (<18years)	27.3	20.5	28.8		51.3
Adolescent child bearing (15-19)	10.9	4.5	6	1.2	15.1
Multiparity (5+ children)	13.0	31.7	18.7	43.7	39.8
Risky birth interval (<24months)	19.6	31.9		25.2	
Marital violence	30.3	31.7			
Marital physical violence during pregnancy	6.6	7			
Biological risk factors					
Anemia Among women in reproductive age	25.2	33.5			
Low Birthweight (<2.5 kg)	15.5	13.8	12.1		32.3

Sources: National Country Reports[1-5]
Red colored cells indicate prevalence or incidence ≥20. The only exception is neonatal mortality which considered priority if exceeded 12 per thousand (the SDG target for neonatal mortality). In Jordan, infant mortality was considered a priority due to the high priority assigned to neonatal mortality.

III.2. Sexual and reproductive health inequalities

III.2.1. Positive changes on the visibility, conceptualization and action fronts of SRH inequalities

In terms of the inequalities challenges, positive changes on many fronts are witnessed. First, the visibility of these challenges has considerably improved. Second, the appreciation of the role of social determinants in shaping them has benefited from improved conceptualization. As a result, these changes manifested themselves in a flurry of actions and initiatives targeting the disadvantaged groups of society adopting an empowerment model.

The recognition of health inequality among social groups is not new. Disparities within countries and the fact that they are shaped by different social conditions have always been expected and even implicitly normalized as part of living socio-economic realities. What is new is that health inequalities have moved from being presented as anecdotal side pieces of information to being centrally placed as the focus of concern. This is evident by the recent increase in the number of studies solely driven

by the investigation of inequality. A flagship among these is the UNFPA 2017 report that speaks to: "WORLDS APART; Reproductive Health and Rights in Age of Inequality"[34].

Similarly, the recognition of the SDH dates back to the early seventies. The Alma Ata (1978)[10] did establish that health is a social phenomenon and that its promotion invites the action on more than one social front. What is new is the move away from the exaggerated focus on behavioral changes through the adoption of socially sensitive interventions and simplistic awareness campaigns. The lessons from practice demanded changing the context that is governing the high-risk behaviors. The lessons demanded empowerment of the disadvantaged and "making health choices easy choices". Indeed, all Arab countries can now list major programmes for poverty alleviation and improving socio-economic conditions of disadvantaged communities. Targeting and empowerment initiatives, in collaboration with civil society, proliferated the action scenes.

III.2.2. Significant inequalities

There are many studies providing examples of inequalities across social stratifiers that can be cited[40,41,42]. They mostly provide a graph of the distribution of SRH across social groups for visual impact, and choose the gap between most and least advantaged as the summary measure. They also mainly use the two traditional stratifiers of geographic place of residence (rural/urban) and socio-economic status (wealth and education). The findings show that the stratifiers always demonstrate a gap that tend, with very few exceptions, to be quite large. Such a gap occurs within all countries regardless of their economic levels.

It should be noted also that the use of the term inequality in this part of the report is a conscious choice. The introduction of the equity term will be made once the fairness concern is introduced.

Table (8), (9), and (10) allow a more systematic analysis of inequality using the selected inequality summary measures and applied on the three key stratifiers.

It should be noted first that the summary measures of inequality equal zero in case of equality and any value higher than zero indicates inequality. In the 5-country reports a cutoff point of 10% was used to indicate sever inequality.

Table (8), (9) and (10) showed that the summary inequality measures are not available for a number of indicators and stratifiers. In particular, the analysis of SRH inequality for Oman is missing for almost all stratifiers. Also, Morocco did not apply gender stratifier. Clearly, the unavailability of data and the cyclical nature between absence of information and invisibility of the challenge is operating. A country like Oman with its impressive health gains can benefit from documenting inequalities and assessing its magnitude.

Despite the many constraints related to the availability, comprehensiveness, accessibility, as well as periodicity of the data sets, yet a number of significant findings can be cited as follows:

- The level of inequalities in the three countries of Egypt, Morocco and Sudan are much higher than the corresponding level of inequalities in Jordan.

- The level of inequality is quite high for the three countries of Egypt, Morocco and Sudan. The measures of inequality are higher than the cut-off point of 10% for several indicators across the stratifiers investigated. This measure reaches as high as 24.4%, 19.6 and 27.2 for Egypt, Morocco and Sudan, respectively.
- The geographic area inequality[g] for Egypt and Morocco is more severe than wealth and gender inequality. Also, the severe level of geographic area inequality in Egypt and Morocco affects a larger number of indicators than wealth and gender.
- The indicators reflecting severe levels of inequality encompass both impact and risk factors of both social and biological nature. However, the consistency between the inequalities in risk factors and impact measures is not demonstrated for all stratifiers. Clearly, the available SRH impact measures do not capture social and mental dimensions of health.
- Jordan SRH measures do not reflect a degree of inequality that was considered severe (above 10%) except for wealth stratifier and the two indicators of infant mortality and marital physical violence during pregnancy.

Also contrary to the other countries where the geographic area inequality is higher than the other stratifier, in Jordan, the wealth stratifier is the one portraying higher inequality.

Table (8) Summary measures of sexual and reproductive health inequalities (ID%) by geographic area in Arab countries

	Egypt	Jordan	Morocco	Oman	Sudan
Impact	2014& 15	2012	2011	2008	2014
Neonatal mortality	10.0	4.6	14.3		7.7
Infant mortality	11.4	4.8	19.6		9.7
Delayed primary fertility (>24months)	7.6	1.7	8.4		17.0
HBV infection in males (1-59 years)	17.7				
HBV infection in females (1-59 years)	15.4				
Self-reported STIs	2.6		3.0		
Social and psychological risk factors					
Female genital cutting (1-14 years)	17.3				27.2
Consanguinity	13.8	1.5	7.0		
Early marriage among ever married women (<18years)	14.0	1.1	7.4		7.3
Adolescent child bearing (15-19)	19.5	3.9	19.0		6.9
Multiparity (5+ children)	23.5	2.0	10.3		6.5
Risky birth interval (<24months)	6.3	0.5		3.2	
Marital violence	3.0	1.8			
Marital physical violence during pregnancy	7.5	2.6			
Biological risk factors					
Anemia Among women in reproductive age	8.2	1.9			
Low Birthweight (<2.5 kg)	4.8	2.4	17.7		8.6

Sources: National Country Reports[1-5]

[g] See Annex 4 for definition of geographic administration stratifiers for the 5 countries

Table (9) Summary measures of sexual and reproductive health inequalities (rCI%) by wealth in Arab countries

	Egypt	Jordan	Morocco	Oman	Sudan
Impact	2014& 15	2012	2011	2008	2014
Neonatal mortality	7.1	8.9	5.6		7.8
Infant mortality	8.0	11.6	11.6		9.2
Delayed primary fertility (>24months)	4.4	0.9	2.2		11.5
HBV infection in males (1-59 years)	11.8				
HBV infection in females (1-59 years)	9.2				
Self-reported STIs	1.6		0.4		
Social and psychological risk factors					
Female genital cutting (1-14 years)	16.4				1.3
Consanguinity	11.5	6.7	6.8		
Early marriage among ever married women	18.2	8.8	6.3		9.6
Adolescent child bearing (15-19)	3.5	7.1	9.3		12.9
Multiparity (5+ children)	24.4	6.2	15.3		6.1
Risky birth interval (<24months)	9.1	5.7			
Marital violence	5.1	7.0			
Marital physical violence during pregnancy	5.5	15.2			
Biological risk factors					
Anemia Among women in reproductive age	2.7	3.6			
Low Birthweight (<2.5 kg)	5.4	2.6	15.0		6.6

Red colored cells indicate server inequality (measure of inequality≥10%)
Sources: National Country Reports[1-5]
Red colored cells indicate server inequality (measure of inequality≥10%)

Table (10) Summary measures of sexual and reproductive health inequalities (rCI%) by the gendered cultural context index in Arab countries

	Egypt	Jordan	Morocco	Oman	Sudan
Impact	2014& 15	2012	2011	2008	2014
Neonatal mortality	10.1	3.0			4.8
Infant mortality	10.3	1.9			8.2
Delayed primary fertility (>24months)	2.0	0.3			13.3
HBV infection in males (1-59 years)	4.9				
HBV infection in females (1-59 years)	2.1				
Self-reported STIs	0.01				
Social and psychological risk factors					
Female genital cutting (1-14 years)	16.5				4.1
Consanguinity	12.9	1.8			
Early marriage among ever married women	14.4	1.0			9.7
Adolescent child bearing (15-19)	15.6				11.9
Multiparity (5+ children)	20.9	1.9			6.0
Risky birth interval (<24months)	4.1				
Marital violence	2.4	2.3			
Marital physical violence during pregnancy	1.7	0.01			
Biological risk factors					
Anemia Among women in reproductive age	3.8	0.7			
Low Birthweight (<2.5 kg)	4.5	0.9			

Sources: National Country Reports[1-5]
Red colored cells indicate server inequality (measure of inequality≥10%)

III.2.3. Trend in sexual and reproductive health inequalities

The findings demonstrate that the improvement across time does not guarantee improvement in the inequality distribution. The availability of data only allowed the analysis of trend for SRH inequality for Egypt and Jordan. The trend analysis showed that improvement in some SRH indicators was accompanied by improvements in their inequality measures. For example, in Egypt, the decline in infant mortality from 40 per thousand in 2005 to 26 per thousand in 2014 was accompanied with an improvement in the inequality measure by the geographic area from 12.8% in 2005 to 11.4% in 2014 (Figure 5). For other indicators, improvements in their levels was not accompanied with improvements in their measures of inequality. For example, in Egypt, improvement in neonatal mortality from 23 per thousand in 2005 to 16 per thousand in 2014 was not accompanied with similar declines across the five geographic regions (Figure 6). Declines in neonatal mortality was much slower in both rural Upper Egypt and urban governorates. This slow declines produced higher levels of inequality as indicated by an increase in the inequality summary measure from 4.7% in 2005 to 10% in 2014. Similarly, in Jordan, improvement in multiparity (having 5 children or more) which declined from 38.1% in 2002 to 31.8% in 2012 was accompanied with an increase in the inequality measure from 1% in 2002 to 3.9% in 2012 (Figure 7).

Figure 5: Levels of infant mortality in Egypt for different geographic regions and their summary inequality measure for 2005-2014

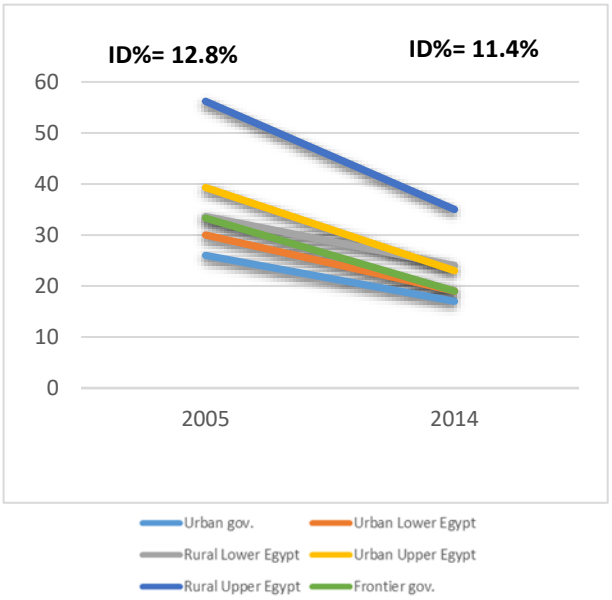
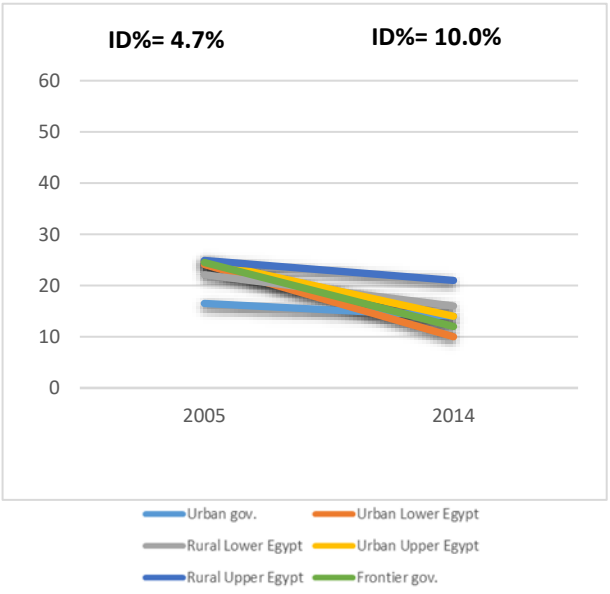
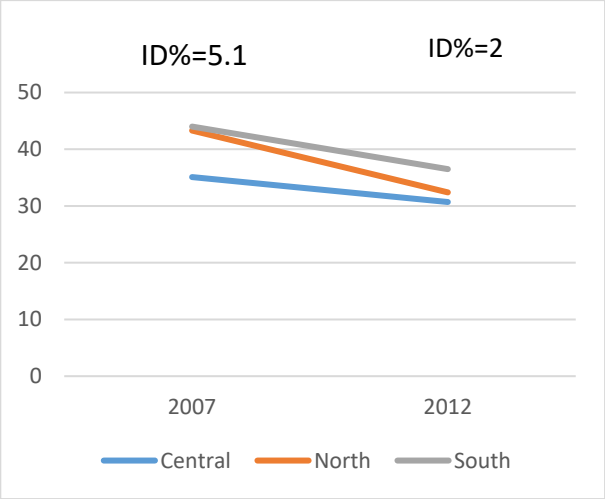


Figure 6: Levels of neonatal mortality in Egypt for different geographic regions and their summary inequality measure for 2005-2014



Source: Shawky , Rashad, Khadr, 2018.[1]

Figure 7: Levels of multiparity (5+ children) in Jordan for different geographic regions and their summary inequality measure for 2002-2012



Source: Zoubi, Elmoneer, 2018.[2]

The trend analysis is not just an important tool to measure change across time in summary index of inequality. It provides evidence on which social group benefited more or less than the other social groups. The analysis does indicate that some social groups experienced a higher burden across time. These detailed pieces of information are very relevant for policies and actions.

III.3 SRH challenges vs SRH inequality challenges

This section compares the priority SRH challenges with the priority SRH inequality challenges. The objective is to investigate the configurations of priorities, since each configuration requires different policy and action approaches. Table (11) provides measures allowing this comparison. Boxes 2-5 provide different configurations of priority SRH and priority SRH inequalities in Egypt, Jordan, Morocco and Sudan[h].

The information provided shows four types of configuration. The first configuration is where some priority SRH challenges are also priority SRH inequality challenges across all stratifiers. For example, consanguinity is quite high in Egypt at the national average but also reflects very significant inequalities across the three stratifiers, clearly national interventions are called for, coupled with extra efforts for the disadvantaged social groups. This approach has been referred to in the literature as "*proportional universalism*".

A second configuration is when the SRH dimension is not a national level challenge but its distribution reflects significant inequalities. Examples of this configuration are shown for hepatitis B infection for males and females in Egypt, as well as delayed pregnancy in Sudan. In this case, a focus on policies producing the distribution of social groups complemented with targeting is the recommended approach. Another important configuration is when a priority SRH challenge is not reflecting severe inequality across social groups. For example, in Jordan, there are a large number of SRH national level challenges that are not significantly unequal. Clearly, in this case universal policies and actions are the recommended approach.

The last configuration shows that SRH and its inequality level are not priorities. Example includes low birthweight in Egypt and Jordan. This demonstrates success of current approaches and the need to continue the effort .

[h] Oman was not considered in these tables since the SRH inequality measures were not analyzed due to lack of data.

Table (11) Priority sexual and reproductive health vs. priority sexual and reproductive health inequalities

	Egypt 2014 & 15				Jordan 2012				Morocco 2011				Sudan 2014			
Impact	Priority challenges	Priority inequalities challenges			Priority challenges	Priority inequalities challenges			Priority challenges	Priority inequalities challenges			Priority challenges	Priority inequalities challenges		
		Geographic (ID% ≥ 10%)	Wealth (rCI%≥10 %)	Gender (rCI%≥10%)		Geographic (ID% ≥ 10%)	Wealth (rCI%≥1 0%)	Gender (rCI%≥1 0%)		Geographic (ID% ≥ 10%)	Wealth (rCI%≥1 0%)	Gender (rCI%≥1 0%)		Geographic (ID% ≥ 10%)	Wealth (rCI%≥1 0%)	Gender (rCI%≥1 0%)
Neonatal mortality	14	10.0	7.1	10.1	14	4.6	8.9	3.0	21.7	14.3	5.6		32.6	7.7	7.8	4.8
Infant mortality	22	11.4	8.0	10.3	17	4.8	11.6	1.9	28.8	19.6	11.6		52.0	9.7	9.2	8.2
Delayed primary fertility (>24months)	2.4	7.6	4.4	2.0	3.6	1.7	0.9	0.3	3.6	8.4	2.2		3.5	17.0	11.5	13.3
HBV infection in males (1-59 years)	1.2	17.7	11.8	4.9												
HBV infection in females (1-59 years)	0.8	15.4	9.2	2.1												
Self-reported STIs	32.0	2.6	1.6	0.01					12.2	3.0	0.4					
Social and psychological risk factors																
Female genital cutting (1-14 years)	14.1	17.3	16.4	16.5									31.5	27.2	1.3	4.1
Consanguinity	31.5	13.8	11.5	12.9	34.6	1.5	6.7	1.8	28.8	7.0	6.8					
Early marriage (<18years)	27.3	14.0	18.2	14.4	20.5	1.1	8.8	1.0	28.8	7.4	6.3		51.3	7.3	9.6	9.7
Adolescent child bearing	10.9	19.5	3.5	15.6	4.5	3.9	7.1		6	19.0	9.3		15.1	6.9	12.9	11.9
Multiparity (5+ children)	13.0	23.5	24.4	20.9	31.7	2.0	6.2	1.9	18.7	10.3	15.3		39.8	6.5	6.1	6.0
Risky birth interval (<24months)	19.6	6.3	9.1	4.1	31.9	0.5	5.7									
Marital violence	30.3	3.0	5.1	2.4	31.7	1.8	7.0	2.3								
Marital physical violence during	6.6	7.5	5.5	1.7	7	2.6	15.2	0.01								
Biological risk factors																
Anemia Among women in reproductive	25.2	8.2	2.7	3.8	33.5	1.9	3.6	0.7								
Low Birthweight	15.5	4.8	5.4	4.5	13.8	2.4	2.6	0.9	12.1	17.7	15.0		32.3	8.6	6.6	

Sources: National Country Reports[1-5]

Red colored cells indicate high priority/severe inequality. High priority SRH is defined as a prevalence ≥20% for SRH morbidities and risk factors. The only exception is neonatal mortality which is considered priority if it exceeds 12 per thousand livebirths (the SDG target for neonatal mortality). Infant mortality was considered a priority given the high priority assigned to neonatal mortality. Severe inequality is defined as a measure of inequality≥10.

Box (2) Different configurations of priority SRH and priority SRH inequalities, Egypt

		Priority SRH inequality concerns	
		Yes	No
Priority SRH concerns	Yes	• Neonatal mortality (2 stratifiers) • Infant mortality (2 stratifiers) • Consanguinity (3 stratifiers) • Early age at marriage (3 stratifiers)	• Self-reported STIs • Anemia in women in reproductive age • Marital violence
	No	• HBV (2 stratifiers) • FGM/C 1-14years (3 stratifiers) • Adolescent childbearing (2 stratifiers) • Multiparity (3 stratifiers)	• Delayed primary fertility (>24months) • Low birth weight • Marital physical violence during pregnancy • Risky birth interval

Box (3) Different configurations of priority SRH and priority SRH inequalities, Jordan

		Priority SRH inequality concerns	
		Yes	No
Priority SRH concerns	Yes	• Infant mortality (1 stratifier)	• Neonatal mortality • Consanguinity • Early age at marriage • Risky birth interval • Multiparity • Marital violence • Anemia in women in reproductive age
	No	• Marital physical violence during pregnancy (1 stratifier)	• Delayed primary fertility (>24months) • Adolescent childbearing • Low birth weight

Box (4) Different configurations of priority SRH and priority SRH inequalities, Morocco

		Priority SRH inequality concerns	
		Yes	No
Priority SRH concerns	Yes	• Neonatal mortality (1 stratifier) • Infant mortality (2 stratifiers)	• Consanguinity • Early age at marriage
	No	• Adolescent childbearing (1 stratifier) • Multiparity (2 stratifiers) • Low birthweight (2 stratifiers)	• Delayed primary fertility (>24months) • Self-reported STIs

Box (5) Different configurations of priority SRH and priority SRH inequalities, Sudan

		Priority SRH inequality concerns	
		Yes	No
Priority SRH concerns	Yes	• FGM (1-14years) (1 stratifier)	• Neonatal mortality • Infant mortality • Early age at marriage • Multiparity • Low birthweight
	No	• Delayed primary fertility (>24months)(3 stratifiers) • Adolescent childbearing (2 stratifiers)	

Part Four: SRH- related health system performance and capacities: levels and inequalities

Part Four investigates health system (HS) capacity and performance in relation to SRH. Guided by the WHO operational Health System Strengthening (HSS)[23] Monitoring Framework, the health system available indicators can simply be grouped into two broad dimensions. The first is a HS performance dimension which relates to overall coverage of SRH-related services and includes prevention programs, family planning and perinatal services. The second is a HS capacity dimension which relates to availability, accessibility and affordability of services.

The HS faces three major performance challenges. First, the family planning programs are still a concern. Second, the perinatal services show high priorities in four out of the five countries. Third, the prevention programs remain insufficient

The current section assesses these two dimensions and identify their main challenges, main inequality challenges and their trend over time. It further compares priority HS challenges with priority HS inequality challenges.

IV.1. Priority SRH-health system challenges

The previous part has identified priority SRH challenges. These challenges call for efficient health system programs and adequate health services.

The following two subsections explores the overall SRH-related health system challenges in the previously defined two dimensions, namely performance and capacities.

IV.1.1. Health system performance challenges

The HS faces three major performance challenges (Table 12). First, the family planning programs are still a concern as from 30% to over 40% of non-pregnant currently married (15-49 years) women in Egypt, Jordan and Morocco, as well as at least 75% in Oman and Sudan do not use a contraception method. Furthermore, over half of the women in Oman and over a quarter of women in Sudan have family planning unmet need. Second, the available data show that the maternal services show high priorities in four out of the five countries. Particularly in Sudan, over 40% of currently married (15-49 years) women do not receive regular ANC and are not vaccinated against tetanus during pregnancy. Furthermore, 71% of women deliver at home and 22.5% deliver in the hands of unskilled providers. In Morocco, at least one quarter of currently married 15-49 years women do not receive ANC, do not receive tetanus vaccine during pregnancy and deliver at home in the hands of unskilled

providers. Egypt and Jordan suffer from high proportions of C-section deliveries (51.8% and 28.0% respectively) and insufficient tetanus vaccination during pregnancy (25.6% and 69.1% respectively). Third, the prevention programs remain insufficient, as at least 87% of women do not have HIV/AIDS comprehensive knowledge in Egypt, Jordan and Sudan. In Egypt, also, 90% of men do not have HIV/AIDS comprehensive knowledge. Furthermore, data on breast cancer screening was only available in two countries and show that 98% of ever-married 15-49 years old women in Egypt and 81% in Jordan never had breast cancer screening.

IV.1.2. Health system capacity challenges

The HS challenges reside in its capacity and planning to run the healthcare services.

It is evident from the available data for only three countries (Table 12) that the healthcare services are not always available, accessible or affordable. In Egypt, health care accessibility and availability appear to be major issues. Around half of the women reported the unavailability of medication and health care providers and one fifth reported difficulty in finding transportation to reach the healthcare facilities. In Jordan, around one third of women claimed inaccessible services and one fifth reported unaffordable healthcare. In Morocco, 40% of women claimed distant healthcare facilities and 63% complained of unaffordable health care. It is worth noting that in the three countries, around one third of women complained of the unavailability of female healthcare providers.

Table (12) Health system challenges in Arab countries (%)

Health system performance	Egypt	Jordan	Morocco	Oman	Sudan
	2014& 15	2012	2011	2008	2014
No contraceptive method used	41.5	38.8	32.6	75.6	87.8
FP unmet need	12.6	11.7		55.9	26.6
No antenatal care (≤ one visit)	9.7	0.9	22.9	2.2	19.9
No regular ANC (<4 visits)	17.2	5.5	57.4	5.7	48.3
Birth not protected against tetanus	25.6	69.1	27.5		41.8
Home delivery	13.3	1.2	27.3	1.3	71.3
Birth not attended by skilled provider	8.5	0.4	26.4		22.5
Caesarean section delivery	51.8	28.0	11.7		9.1
No postnatal checkup	16.5	13.9	78.1		73.4
No HIV/ AIDS comprehensive knowledge in females	93.8	87.1	15.5		91.1
No HIV/ AIDS comprehensive knowledge in males	90.5				
Never had clinical breast examination	97.9	81.0			
Health system capacity					
Distant healthcare facility	18.2	26.4	39.8		
Difficult transportation	20.9	28.6			
Unavailable provider	47.5				
Unavailable female provider	28.9	29.5	26.1		
Unavailable medication	54.0				
Unaffordable healthcare services	10.5	22.5	63.0		

Sources: National Country Reports[1-5]
Red colored cells indicate high priority where prevalence/ incidence ≥20%

IV.2. SRH-related health system performance and capacity inequalities

This section investigates the SRH-related performance and capacity of the health system within each of the three stratifiers used in the analysis and provides summary measures for their inequalities. This section allows establishing links between the inequalities in HS performance and capacity to the consequent SRH impact/outcomes previously presented.

Tables (13), (14) and (15) provide summary measures of inequalities for the five countries using the selected three stratifiers geographic area, wealth, and gendered cultural context . It should be noted for Oman, where the SRH inequality measures were not analyzed due to lack of data, the inequality measures for health system performance were provided for geographic area and wealth stratifiers only.

The inequality measures provided show very severe health system performance and capacity inequality for Egypt, Morocco and Sudan. The degree of significant inequality in system performance ranges from 10.0% to 36.5%.

For Jordan, the degree of significant inequality is again reflected on in the wealth stratifiers and is ranging between 13.5% to as high as 35.2%.

Oman limited available information, point that even in countries where important achievements are realized on the physical health front, health system inequalities could be a concern. The inequality in HS is only captured in geographic area variations but disappears on the wealth front.

Table (13) Summary measures of SRH-related health system inequalities (ID%) by geographic area in Arab countries

	Egypt	Jordan	Morocco	Oman	Sudan
Health system performance	2014 & 15	2012	2011	2008	2014
No contraceptive method used	7.6	0.1	5.6	3.5	2.9
FP unmet need	10.0	2.6		3.7	5.6
No antenatal care (≤ one visit)	21.0	2.4	17.3	24.4	14.3
No regular ANC (<4 visits)	17.0	3.9	9.0	15.9	8.3
Birth not protected against tetanus	8.2	1.8			6.6
Home delivery	24.8	2.8	15.4	29.4	9.3
Birth not attended by skilled provider	30.6	6.2	16.1		28.6
Caesarean section delivery	6.8	1.7	13.7		29.6
No postnatal checkup	22.4	10.1	6.3		6.1
No HIV/ AIDS comprehensive knowledge in females	1.2	0.3	27.8		2.0
No HIV/ AIDS comprehensive knowledge in males	0.9				
Never had clinical breast examination	0.6	0.7			
Health system capacity					
Distant healthcare facility	10.7	0.7	15.3		
Difficult transportation	9.7	0.7			
Unavailable provider	7.7				
Unavailable female provider	7.2	3.8	12.2		
Unavailable medication	6.5				
Unaffordable healthcare services	17.2	2.3	7.1		

Sources: National Country Reports[1-5]
Red colored cells indicate server inequality (measure of inequality≥10%)

Table (14) Summary measures of SRH-related health system inequalities (rCI%) by wealth in Arab countries

	Egypt	Jordan	Morocco	Oman	Sudan
Health system performance	2014 & 15	2012	2011	2008	2014
No contraceptive method used	2.1	2.0	2.8	0.4	3.9
FP unmet need	5.9	6.8		2.4	
No antenatal care (≤ one visit)	17.9	35.2	31.9	1.3	24.4
No regular ANC (<4 visits)	17.7	26.2	15.2	0.8	13.6
Birth not protected against tetanus	5.7	4.3	11.7		10.2
Home delivery	25.4	28.8	31.1	4.4	11.2
Birth not attended by skilled provider	29.7	30.9	33.2		34.2
Caesarean section delivery	8.4	4.0	26.6		32.2
No postnatal checkup	21.6	13.5	6.3		7.7
No HIV/ AIDS comprehensive knowledge in females	1.3	1.9	34.0		3.1
No HIV/ AIDS comprehensive knowledge in males	1.3				
Never had clinical breast examination	0.6	2.0			
Health system capacity					
Distant healthcare facility	10.8	8.6	24.6		
Difficult transportation	10.3	8.9			
Unavailable provider	4.2				
Unavailable female provider	5.9	4.7	2.4		
Unavailable medication	3.8				
Unaffordable healthcare services	15.9	18.1	11.7		

Table (15) Summary measures of SRH-related health system inequalities (rCI%) by gendered cultural context index in Arab countries

	Egypt	Jordan	Morocco	Oman	Sudan
Health system performance	2014& 15	2012	2011	2008	2014
No contraceptive method used	9.4	0.4			3.4
FP unmet need	12.9	1.5			
No antenatal care (≤ one visit)	16.1	0.2			15.2
No regular ANC (<4 visits)	18.6	8.7			4.1
Birth not protected against tetanus	11.4				
Home delivery	26.3	2.7			9.6
Birth not attended by skilled provider	30.4	1.8			31.3
Caesarean section delivery	17.5	1.9			36.5
No postnatal checkup	0.0				
No HIV/ AIDS comprehensive knowledge in females	6.3				2.7
No HIV/ AIDS comprehensive knowledge in males	3.0				
Never had clinical breast examination	18.0	0.6			
Health system capacity					
Distant healthcare facility	4.7	1.3			
Difficult transportation	7.1	0.9			
Unavailable provider	10.7				
Unavailable female provider	13.2	0.9			
Unavailable medication	9.8				
Unaffordable healthcare services	5.0	3.5			

Sources: National Country Reports[1-5]
Red colored cells indicate server inequality (measure of inequality≥10%)

IV.3. Trend in HS inequality

Figures (8) and (9) show trend in summary measures of inequality for different components of HS (performance, capacity) for both Egypt and Jordan. The inequality trend shows different patterns for different components. For some of them, inequalities have decreased and showed a positive change has occurred. This was observed in indicators such as difficulty to take transport in Egypt, and no ANC, birth not attended by skilled provider, distance to health facility and no current use of contraception in Jordan. While for the others the inequalities have increased which is seen in the case of no ANC in Egypt, as well as no postnatal care and concern there may not be a female provider in Jordan.

Figure 8: Levels of no antenatal care and problems in accessing health care: Difficult to take transport in Egypt for different geographic regions and their summary inequality measure for 2005-2014

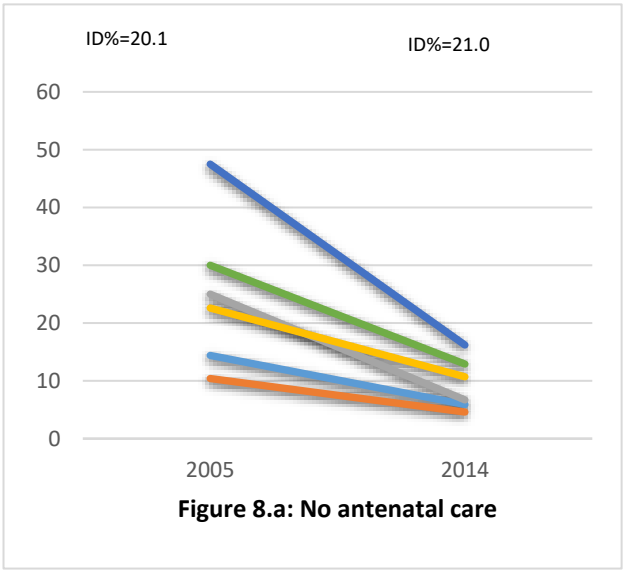


Figure 8.a: No antenatal care

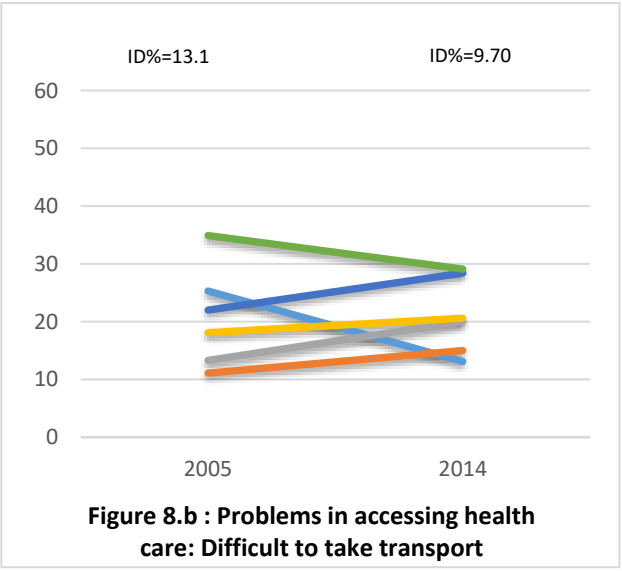


Figure 8.b : Problems in accessing health care: Difficult to take transport

Source: Shawky, Rashad, Khadr, 2018.[1]

Figure 9: Levels of for health system indicators in Jordan different geographic regions and their summary inequality measure for 2005-2014

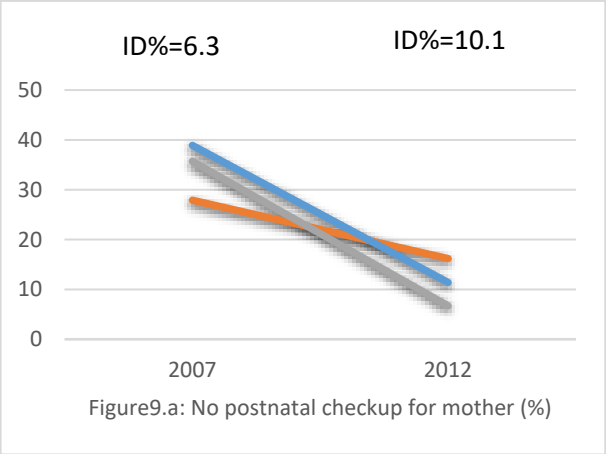


Figure9.a: No postnatal checkup for mother (%)

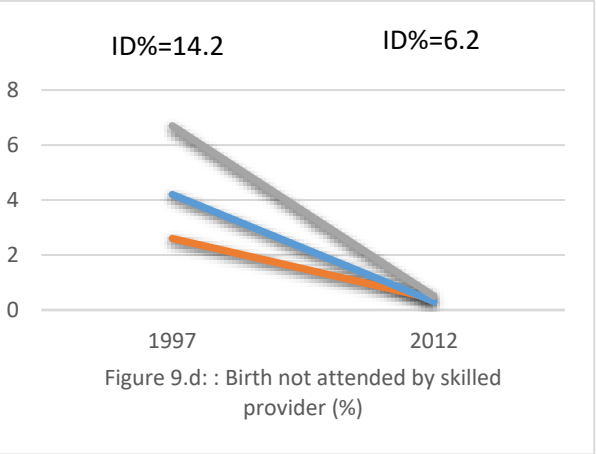


Figure 9.d: : Birth not attended by skilled provider (%)

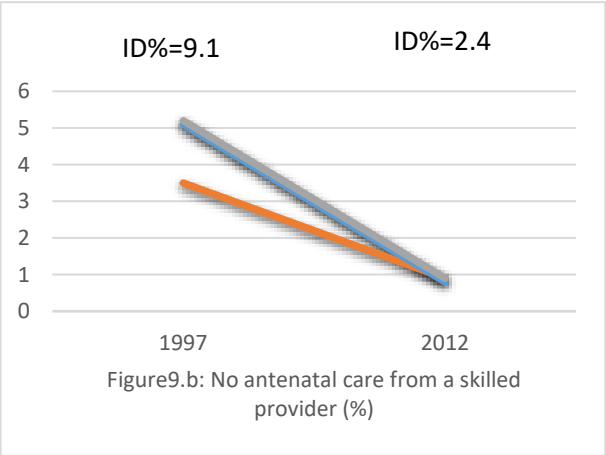


Figure9.b: No antenatal care from a skilled provider (%)

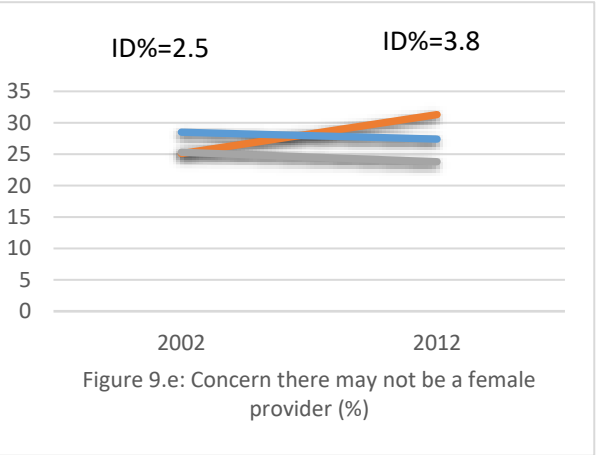


Figure 9.e: Concern there may not be a female provider (%)

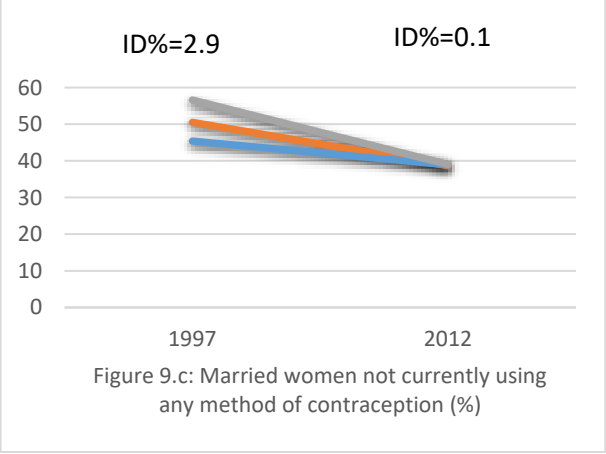


Figure 9.c: Married women not currently using any method of contraception (%)

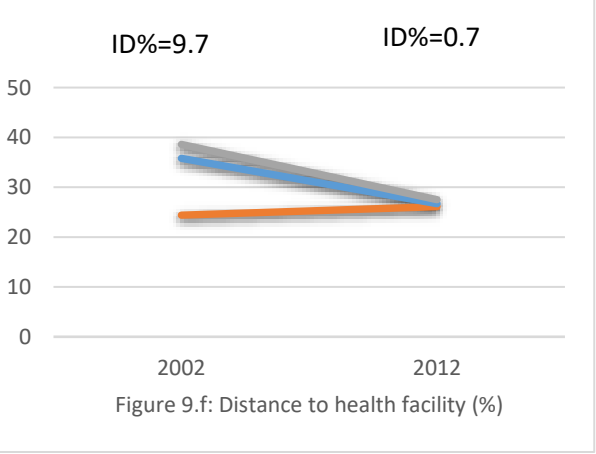


Figure 9.f: Distance to health facility (%)

Source: Zoubi, Elmoneer, 2018.[2]

IV.4. Priority HS challenges vs priority HS inequalities

Table (16) shows that, similar to SRH challenges, there are different configurations of priority HS challenges and priority HS inequality challenges.

The information provided show several types of configuration. First, some priority HS challenges are also priority HS inequality challenges across all stratifiers. For example, birth not attended by skilled provider in Morocco is quite high at the national average but also reflect very significant inequality across the geographic and wealth stratifications, clearly national interventions are called for, coupled with extra efforts for the disadvantaged social groups.

A second configuration is when the HS dimension is not a national level challenge but its distribution reflects significant inequalities. Examples of this configuration is shown for family planning unmet need in Egypt, as well as lack of ANC in Sudan. In this case a focus on interventions targeting the disadvantaged social groups is the recommended approach.

Another important configuration is when a priority HS challenge is not reflecting severe inequality across social groups. For example, never had breast examination and no HIV/AIDS comprehensive knowledge in Egypt, Jordan and Sudan, constitute national level challenges that are not significantly unequally distributed. Clearly, in this case universal interventions are the recommended approach.

The last configuration shows that HS and its inequality level are not priorities. Example, FP unmet need in Jordan. This demonstrates success of current efforts.

A summary example of these configurations is provided for Morocco in the Box 6.

Box (6) Key findings of priority health system challenges in Morocco

		Priority HS inequality concerns	
		Yes	No
Priority HS concerns	Yes	• No ANC (geographic, wealth) • No regular ANC (wealth) • Birth not protected against tetanus (wealth) • Home delivery (geographic, wealth) • Birth not attended by skilled provider (geographic, wealth) • Distant health care facility (geographic, wealth) • Unavailable female provider (geographic) • Unaffordable health care (wealth)	• No contraception method used • No postnatal checkup for mothers
	No	• Cesarean section delivery (geographic, wealth) • No comprehensive AIDS knowledge in female (geographic, wealth)	

Table (16) Priority of health system vs. priority of health system inequalities

	Egypt 2014 & 2015				Jordan 2012				Morocco 2011				Sudan 2014			
	Priority challenges	Priority inequalities challenges			Priority challenges	Priority inequalities challenges			Priority challenges	Priority inequalities challenges			Priority challenges	Priority inequalities challenges		
Health system performance		Geographic (ID% ≥ 10%)	Wealth (rCI%≥10%)	Gender (rCI%≥10%)		Geographic (ID% ≥ 10%)	Wealth (rCI%≥10%)	Gender (rCI%≥10%)		Geographic (ID% ≥ 10%)	Wealth (rCI%≥10%)	Gender (rCI%≥10%)		Geographic (ID% ≥ 10%)	Wealth (rCI%≥10%)	Gender (rCI%≥10%)
No contraceptive method used	41.5	7.6	2.1	9.4	38.8	0.1	2.0	0.4	32.6	5.6	2.8		87.8	2.9	3.9	3.4
FP unmet need	12.6	10.0	5.9	12.9	11.7	2.6	6.8	1.5					26.6	5.6		
No antenatal care (≤one visit)	9.7	21.0	17.9	16.1	0.9	2.4	35.2	0.2	22.9	17.3	31.9		19.9	14.3	24.4	15.2
No regular ANC (<4 visits)	17.2	17.0	17.7	18.6	5.5	3.9	26.2	8.7	57.4	9.0	15.2		48.3	8.3	13.6	4.1
Birth not protected against tetanus	25.6	8.2	5.7	11.4	69.1	1.8	4.3		27.5		11.7		41.8	6.6	10.2	
Home delivery	13.3	24.8	25.4	26.3	1.2	2.8	28.8	2.7	27.3	15.4	31.1		71.3	9.3	11.2	9.6
Birth not attended by skilled provider	8.5	30.6	29.7	30.4	0.4	6.2	30.9	1.8	26.4	16.1	33.2		22.5	28.6	34.2	31.3
Caesarean section delivery	51.8	6.8	8.4	17.5	28.0	1.7	4.0	1.9	11.7	13.7	26.6		9.1	29.6	32.2	36.5
No postnatal checkup	16.5	22.4	21.6	0.0	13.9	10.1	13.5		78.1	6.3	6.3		73.4	6.1	7.7	
No HIV/ AIDS comprehensive	93.8	1.2	1.3	6.3	87.1	0.3	1.9		15.5	27.8	34.0		91.1	2.0	3.1	2.7
No HIV/ AIDS comprehensive	90.5	0.9	1.3	3.0												
Never had clinical breast	97.9	0.6	0.6	18.0	81.0	0.7	2.0	0.6								
Health system capacity																
Distant healthcare facility	18.2	10.7	10.8	4.7	26.4	0.7	8.6	1.3	39.8	15.3	24.6					
Difficult transportation	20.9	9.7	10.3	7.1	28.6	0.7	8.9	0.9								
Unavailable provider	47.5	7.7	4.2	10.7												
Unavailable female provider	28.9	7.2	5.9	13.2	29.5	3.8	4.7	0.9	26.1	12.2	2.4					
Unavailable medication	54.0	6.5	3.8	9.8												
Unaffordable healthcare services	10.5	17.2	15.9	5.0	22.5	2.3	18.1	3.5	63.0	7.1	11.7					

Source: National Country reports

Red colored cells indicate high priority/sever inequality. High priority SRH is defined as a prevalence/ incidence ≥20% and sever inequality is defined as the measure of inequality≥10%

Part Five: Fairness of upstream determinants and policy implications

Part five returns to the SDHI frame and links it to the many findings of the report to provide broad recommendations on three policy domains. It investigates the fairness of the structural determinants, the fairness of the intermediary determinants and draws on all findings to propose broad policy implications.

V.1 The fairness of structural determinants

According to the SDHI framework, discussed in part two of this report, the root causes of health inequalities should be traced to their structural determinants. These structural determinants are defined as the socioeconomic and political context that shape the social stratification and define individuals' social position within the society. These structural determinants also influence the functioning of health care system and other intervening forces. The focus of this section is on the investigation of the fairness of structural determinants producing social stratification and also influencing the responsiveness of the health system.

The investigation of fairness of structural determinants uses the six domains described in Solar and Irwin (2010)[43]. These domains are : (1) governance in the broadest sense with particular emphasis on accountability/ transparency and participation of the different stakeholders in the society; (2) macroeconomic policy, including fiscal, monetary, balance of payments and trade policies and underlying labor market structures; (3) social policies affecting factors of social welfare; (4) relevant public policy such as education, medical care, water and sanitation; (5) culture and societal values; and (6) epidemiological conditions. These factors are shaping the societies ability to (re)distribute material resources among their members.

The questions that are posed in this part are whether, within each of these six factors, the approach, policies and actions are succeeding in ensuring: the achievement of a **FAIR distribution of resources, opportunities, services** as well as **FAIR distribution of power relations, inclusiveness and voice among social groups.** The questions also investigates whether policies and actions aim to **change the environment (circumstances and conditions) of behaviors** to enable those in disadvantaged positions to adopt choices and enjoy services to improve their lives, including their health.

In terms of the SRH inequality challenges and the four intermediary determinants investigated (geographic distribution, distribution of wealth, gender norms stratifier and the performance and capacity of health system), the questions are rephrased as follows for each of the six domains of structural determinants.

- Is the distribution of social groups within each stratifier a fair distribution? In other words, are the adopted policies and actions that

shape the distribution of stratifiers provide equal chances (in terms of resources, opportunities, services, power relation, inclusiveness, voice, …) so that the resulting social distribution can be considered fair manifestation of differences in individual level forces (agency, efforts, endowments,).

- Are policies and actions fairly responding to the existing social distribution? In other words, are they aiming to change the environment of behaviors (proximate conditions) to enable those in disadvantaged groups to avoid risky SRH practices and to promote their SRH? In particular: Are policies and actions responding adequately to the differentiated SRH needs and behavioral risks of more disadvantaged social groups. For example, do policies and actions attempt to change or to confront the higher area deprivation, the worse living conditions of lower wealth status groups, and the riskier health damaging behaviors of the negative gendered context? Also, do policies support the success of health care system to meet the higher SRH needs of disadvantaged groups?

Good governance is manifested in a commitment to fairness and a concern with inequitable distribution of health.

The following preliminary analysis suggests that there are many fairness concerns on the fronts of producing the distribution of social groups, and of dealing with unfavorable proximate conditions that are experienced by those in disadvantaged groups.

In terms of the first key domain of **governance**, part one of this report explained that good governance is manifested in a commitment to fairness and a concern with inequitable distribution of health. Health equity is now firmly placed as a pillar of development and measure of social success. SDG goal 10 is but one expression of this. Part one of this report showed that at the level of political discourse and also international commitments the concern with SRH and the fairness of structural forces is evident in the Arab region.

However, the commitment to fairness in society and the prioritization of HE cannot be confined to the statement of a national vision and to endorsements of international conventions and goals. The commitment can only be demonstrated through the existence and proper utilization of an adequate information system for health equity. Also, the prioritization of health equity requires adopting a corporate responsibility and an accountability process.

The following suggests that at the level of governance fairness is not fully embraced as a central pillar of good governance. This is based on the status of information system and the absence of prerequisites of corporate responsibility and accountability to HE in many Arab countries.

In terms of ***information system***, part three of this report showed that the commitments to SRH allowed an improved evidence base covering key dimensions of SRH. Nevertheless, this evidence base while relatively rich, is not fully comprehensive and can benefit from additional pieces of information. Also, the evidence base while allowing the measurement of inequality within some key stratifiers, yet does not cover many dimensions of inequality.

The key concern related to the information system is in the paucity of analytical efforts investigating the links between SRH inequalities and structural forces. This paucity is explained by both the limitations of suitable data for such linkages, as well as the muted concern with ensuring fairness in policies and social arrangements. Clearly, the lack of interest and lack of data are self-reinforcing.

To the authors' knowledge, the current report may be the only one that attempted to apply SDHI frame and adapted it to SRH. This is a first much needed step but **much more is needed on the knowledge and research fronts to support equity investigation.**

The paucity of analytical efforts investigating the links between SRH inequalities and structural forces is explained by both the limitations of suitable data for such linkages, as well as the muted concern with ensuring fairness in policies and social arrangements. Clearly, the lack of interest and lack of data are self-reinforcing.

In terms of ***corporate responsibility and accountability***, these require an institutional structure and financial resources capable of managing and implementing the whole of government responsibility and accountability process to health inequality. **Indeed, many countries in the Arab region have not established such a structure or devoted the needed resources.**

Turning to the remaining domains (macro-economic policies; social welfare policies; relevant public policies such as those, pertaining to social resources (education) and medical care and environment (water), as well as cultural and societal values), it is obvious that the equity lens is not fully integrated. This is evidenced by the fact that the formulation of public policies in the Arab region does not demand a HE impact assessment. Such assessment requires investigating particular policies in terms of whether these policies ensure equal opportunities, guard against differentiated impact on different social groups, as well as target positive discrimination to compensate for the unequal status of social groups.

The formulation of public policies in the Arab region does not demand a HE impact assessment.

The analysis on the fairness of specific polices has not been conducted in this report, such a thorough analysis is very much needed but is beyond the scope of this report. This report however argues that **the unfairness of structural policies can be inferred from their manifestations in unfair intermediary forces.** This argument is provided in the following section.

V.2. The fairness of intermediary determinants

In terms of distribution of stratifiers, it is quite easy to demonstrate that the geographic distribution is unfair in many Arab countries. Indeed, **there is enough evidence to indicate the unequal distribution of resources and health promoting characteristics among the different geographic classifications.** Table (17) is but one example for Egypt that can be easily replicated for many Arab countries.

Table (17) Inequalities in the geographic attributes in Egypt

	Urban gov.	Urban Lower Egypt	Rural Lower Egypt	Urban Upper Egypt	Rural Upper Egypt	Frontier gov.
Percent households with shared sanitation facility	1.2	0.6	1.5	1.3	4.7	0
Percent households with inappropriate water treatment	85.7	82.8	90.3	88.8	94.6	80.9
Percent households with poorest population	0.5	2.7	22	6.1	40.8	21.9
Percent of uneducated women	11.9	11.9	23.3	17.8	38.6	22.9
Percent of unemployed women	83.4	77.1	82.8	82.2	89.1	81.4

Source: Shawky, Rashad, Khadr, 2018[1]

Color codes: The range of the measures was classified into quartiles. Red cells indicate that the measure falls in the worst quartile, pink cells indicate that the measure falls in the second worst quartile, yellow cells indicates that the measure falls in the third quartile and green cells indicates that the measure falls in the fourth and best quartile

Table (17) confirms that the geographic allocation of physical resources for health is a concern. Also it demonstrates that disadvantaged social groups within the wealth and gender stratifiers do cluster in geographic areas deprived of resources.

In addition, part four of this report documented that the – with the data sets available at the time of the analysis - health system (in terms of performance and capacity) has not been attentive enough in responding equally to the different needs of populations in different geographic areas.

Obviously, geographic classifications in many Arab countries manifest the unfairness of structural policies that distribute resources and opportunities for health.

Obviously, geographic classifications in many Arab countries manifest the unfairness of structural policies that distribute resources and opportunities for health.

In terms of other policies for wealth production, the distribution of education services and the distribution of access to quality education as well as distribution of economic opportunities, skill acquisitions, training and financial inclusions by wealth categories are all pieces of information that can demonstrate the fairness or unfairness of structural policies.

The preliminary evidence that exist point to the mal-distribution of opportunities for wealth production by social groups. Data and studies are available to indicate the inequitable: access to early childhood development services, to enrolment in schools, to access higher education, to decent employment, as well as to loans and training by social class.

The failure of policies to prevent or address these inequitable distributions of the different social interventions is clearly harmful to SRH of disadvantaged groups. It was earlier demonstrated that HS in many Arab countries did not respond fairly to different needs of wealth groups.

Many Arab countries are currently placing gender norms as a central challenge. It is clear that, contrary to policies on the geographic and wealth fronts, these norms are the most difficult to deal with by the state as they are socially grounded and have been shaped and evolved across time. Addressing gender norms requires social policies that trace their roots, reveal their link to wrongful interpretation of religion and show their unfair impact on women. Currently, there are indications, in many Arab countries, of high-level political commitments calling for reform of the religious discourse, particularly many of the misconceptions on gender norms. In addition, many efforts are currently underway to tackle gendered-cultural norms practices such as FGM/C, early marriage and violence against women.

Addressing gender norms requires social policies that trace their roots, reveal their link to wrongful interpretation of religion and show their unfair impact on women.

Unfortunately, previous efforts in exploring inequalities in SRH have never paid attention to making the link between the unequal distributions of gender norms and the inequality of SRH. Also, quantifying the relative impact of the distribution of gender norms versus the distribution of other social stratifiers is absent from literature. The paucity of data to capture gender norms and their distribution has added to the challenges of assessing and quantifying their relative impacts on SRH inequalities.

At this stage of analysis, there is no evidence to suggest that there are specific gender policies responsible for the production of the distribution of gender norms. What is suggested is the importance of recognizing that gender norms are not equally distributed and of adopting policies and actions that specifically target and adequately respond to these differences in norms.

This report did show (similar to the geographic and wealth groups) that health policies did not respond fairly to differentiated needs of gender groups.

V.3. Policy implications

This report demonstrated the significant differences in SRH outcome and risk conditions within the social stratifiers of geographic classifications, wealth and gender norms distributions. The recognition of inequalities across traditional social stratifiers (geography and wealth) is not new. However, this report added new evidence to the existing knowledge base and applied a conceptual frame that allows a much more informed policy and action recommendations.

The new analysis contributes to recognizing the unfinished agenda of SRH and the limitations of the information system; documenting the severe levels of SRH social

inequalities; prioritizing the stratifiers and the dimensions of SRH suffering from highest inequalities; introducing the distribution of gender as an important stratifier inviting responsive interventions; clarifying the policy approach to address different configurations of priority SRH and priority SRH inequalities. The improved evidence base also allows identifying the type of HS performance and capacity inequality challenges.

It is important to recognize that the informed policy and actions recommendations do not just draw on the new analysis but are anchored on the SDHI framing. The framing emphasizes the unfairness of the structural determinants. The analytical approach in the report traced the inequality of SRH to the structural and intermediary determinants. It demonstrated the unfairness of these upstream forces.

Now is the time for Arab countries, individually and collectively, to respond to the aspirations of their people and to engage with the current international movement by placing SRHE at the center of their development. They need to commit to reform national policies, build human resources and institutional capacities, produce and implement needed policies and actions.

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The following touches briefly on broad policy implications that are closely linked to the findings in the report. These recommendations are incorporated within the following three domains:

Sectoral-based policies and actions

Health sector

1. **<u>The health sector, in collaboration with other social sectors, needs to expand and improve its SRH-related contributions.</u>**

   The health sector is the one to be called upon to lead prevention of and addressing the high levels of maternal and infant mortality, to responding to the many morbidity challenges of SRH (infertility, sexually transmitted diseases, cancers of reproductive organs, engaging with the many social risk factors of SRH (harmful traditional practices, early marriage, and GBV). The health sector also needs to address the many SRH neglected components within the whole life course, and the many missing SRH dimensions from its agenda of action particularly those related to social risk factors undermining SRH. The health sector is also required to include a broader list of SRH care services and to ensure that these services cater for the needs of special groups (particularly unmarried women and adolescents).

   The health sector while assigned main responsibility for the unfinished SRH agenda, yet the role and contributions of other social sectors are indispensable to achieve the desired impact. This is particularly evident in relation to the realization of gender equity and reproductive rights and those related to non-physical SRH risk factors.

2. **<u>Health sector policies and actions need to integrate a fairness lens in its provision of services and in the evaluation of its performance. it needs to be more sensitive to differentiated health needs of different social groups.</u>**

   Prior to inviting other partners to the table, the health sector needs to put its home in order. The findings in this report demonstrated high levels of inequalities in SRH-related health system performance and capacity. The health system needs to deal with inequalities in its performance and capacity, which eventually translate into meeting the differentiated needs of the different social groups.

3. **<u>The challenge of SRH inequality requires urgent attention and targeted inter-sectoral policies and actions.</u>**

   This is supported by the evidence provided on the severe levels of inequality across social groups and the fact that the priority SRH inequality challenges are different from priority SRH challenges. It is also supported by the appreciation that addressing SRH inequality is a complex and difficult process that require full involvement of the social sectors. Such a challenge cannot be solely shouldered by HS.

4. **<u>The health sector needs the highest level of political support to enable it to play much needed stewardship role.</u>**

   The stewardship role implies redefinition of the role of the body entrusted with health. This body not “Producer of health and health care” but “Purveyor of wider set social norms and values”.[12]

   The stewardship role of the health sector is a crucial element in addressing SRH inequalities and realizing health equity. This role is directed to other social actors, and is influenced by the commitment at the highest political levels. This role includes three dimensions[44]: advocacy, partnership, and leadership.

   - The advocacy dimension assigns the health sector the responsibility to provide and disseminate evidence on the level of SRH inequalities, to demonstrate the impact of social policies on these SRH inequalities, and to call for social actions.
   - The partnership dimension requires the health sector to engage with the other social partners and other actors in society in supporting the needed equitable integrated and intersectoral policies and actions for health.
   - The leadership dimension is in showing how health sector integrates a fairness lens in prioritizing and in addressing SRH inequalities, as well as the successful demonstration of participatory integrated models that manage to achieve SRH equity. It is also demonstrated in the role of health sector in supporting good governance and a whole government approach to SRH equity.

The reforms in the health sector and the success in its stewardship role can indeed inform the policies of other social sectors. It can also lead the way into the broader policy reforms in governance discussed later.

It should be recognized that currently the health sector, in many Arab countries, is seriously constrained and that the call for its stewardship role may not be welcomed or feasible. At one front the challenges of HS financing and effectiveness of services are being faced. Also the universality of health care coverage (UHC) is currently a central goal on the health sector agenda and rightly capturing a great deal of its attention. In addition, the SRH unfinished agenda and the inequality challenges are areas demanding increased attention and efforts of HS. On another front, the political turmoil in many countries of the Arab region pose emergency demands on a sector already overstretched and under resourced.

The call for stewardship role of HS cannot be realistically heeded without the commitment and support at the highest political level.

Social sector

1. **Holding social sectors accountable for their impact on SRH inequities**

   Social sectors do appreciate the link between social progress and health. Furthermore, social sectors are currently more attentive to "Leaving no one behind". They are adopting targeted policies to address the social disadvantage within their sector. Hence, they believe that going their separate ways and following their sectoral agendas is enough to secure a positive impact on health.

   Social sectors cannot continue to assume their positive impact on health. They also cannot continue to perceive themselves as guests on the health table. They need to be held accountable.

   The **accountability** recommendation goes one step further. It requires the adoption of HEiAP related to SRH. This recommendation expands on the well-known **HiAP** principle. The latter mainly confines itself to ensuring that social policies do not negatively impact health. HEiAP related to SRH implies ensuring that all policies:

   - Provide equal opportunities to all social groups.
   - Guard against differentiated impact on different social groups.
   - Target positive discrimination to compensate for the unequal status of social groups.

   HEiAP also demands a demonstration of positive impact on SRHE as a success criteria for social policies.

Research and non-state sectors

2. **The research and non state sectors are required to move from advocacy to concrete policy and action recommendations**

   The movement from what causes the inequalities in SRH impact and risk conditions to how to address these challenges is very much needed to guide policies and encourage actions.

   Such a movement is not simple. It requires strong research and active civil engagement. The first can probe the evidence base and devote the needed effort for methodological innovations allowing concrete recommendations. The second can demonstrate through pilot interventions the effectiveness of these concrete recommendations.

An illustration of the needed contributions from the research and non-state sectors can be provided in relation to the distribution of gender norms. This report demonstrated that gender norms are a significant stratifier and called for more responsive policies to the unequal distributions of gender norms. What is missing is an improved measurement of the distribution of gender norms and its relative contribution, versus other stratifiers, to the inequality of SRH. Also, what is missing is how to influence the distribution of gender norms and how to effectively address the high level of risk factors among the more negative gendered contexts. Clearly, these gaps in information call for methodological and applied innovations.

The United Nations Population Fund/Arab States Regional Office's current initiative on addressing SRH inequalities is an excellent demonstration of the role of international development partners in supporting the contributions of research bodies. The first year work plan (2018) of this initiative focused on providing the evidence base for advocacy and the call for it allowed the recommendations of broad policies and actions. The movement to more concrete suggestions requires methodological innovations and country level analytical efforts. The current (2019) work plan focuses on methodological contributions to be the subject of forthcoming documents.

Governance and whole of government policy reforms

Embracing fairness as a governance pillar

The international development discourse and the SDGs do recognize fairness as a good governance pillar. There is currently growing appreciation in the development field of the heavy price carried by social injustices. These injustices break the very fabric of a cohesive society, leading to marginalized and disgruntled social groups, and threatening the security of nations. Both the development, the population and health fields are converging in their calls for social justice and equity.

The Arab region, particularly following the many popular expressions of dissatisfactions, is much more sensitive to the importance of fairness and to the role of social justice in addressing the many signals of unrests and polarizations in society.

It should be emphasized that fairness and social justice are not only about socially sensitive interventions attempting to improve the daily living conditions of disadvantaged groups and to respond to their increased needs. It is about a transformative approach aiming to change the distribution of disadvantages. Fairness and social justice are about promoting fair social stratifications in society. **Fairness is "Leaving no one behind" anchored on an ethical imperative of justice and not just on a compassionate model of alleviating suffering. Fairness is concerned with gap**

between the most and least disadvantaged; and is concerned with systematic differences across the hierarchies of social distributions.

Embracing fairness requires integrating an equity lens across the board and in all policies and social arrangements. It requires ensuring fair distributions of power, money, resources and transformative opportunities.

1. **<u>Adopting SRHE as a performance measure of social success and a benchmark for a just and fair society</u>**

Health has always been accepted as an indicator of the wealth of countries and the performance of its health sector. However, it is more and more appreciated, that beyond a certain threshold, the health indicator is closely linked to social determinants and policies.

HE implies that there are no unfair systematic and preventable difference in health and wellbeing among different social groups. HE is now considered not just as a public health goal but a manifestation of fair society and successful social policies.

SRHE is one component of general health that is defined to incorporate not just physical dimensions of mortality and morbidity, but also social and mental wellbeing. Such components, lend themselves more readily to fair gender and social policies.

SRHE as a performance measure of social success and a benchmark for a just and fair society is not yet pushed to the forefront in the Arab region. On the contrary, economic measures continue to dominate the assessment of progress and to attract significant data collection and analytical efforts. Indeed, the mere absence of a systematic assessment and monitoring of SRHE is a clear signal of the non centrality of this performance measure.

2. **<u>Implementing a policy reform movement anchored on fairness and achievement of SRHE</u>**

The responsibility of achievement of SRHE should be placed at the highest level of government. Currently, a global movement is forming to call on governments to take on a comprehensive policy reform to "assess the impact of all their policies and programs on health and health equity" [11] and "make health and health equity corporate issues for the whole of government supported by the Head of State" [11].

These require:

- Articulating SRHE as a whole of government responsibility, and developing SRHE strategies and plans.
- Enforcing SRHE impact assessment in all policy approaches.
- Establishing institutional structure (high-level inter-sectoral HE councils) and availing financial resources to manage and oversee the implementation of the whole of government responsibility and accountability process.
- Adopting policies and devoting resources to support intermediary actors and intervening forces to be responsive to differentiated needs

and higher risks of disadvantaged social groups.

- Developing surveillance systems for routine monitoring and accountability of SRHE, and measuring impact of interventions.
- Ensuring a wide participatory engagement in the development, implementation, monitoring and evaluation of the health equity strategies.

Enablers of policies and actions

3. **Strengthening the health information system and building an information system for health**

   The commitment to addressing SRH inequality needs to be demonstrated through an information system capable of systematically and periodically measuring, and monitoring such inequality. It also requires an information system for health which provides the additional pieces of information and allows tracing and relating inequality to their structural root causes and to the fairness of these causes.

   Data constraints were quite evident in many parts of this report. Such constraints did not allow the full benefits of adaptations and systematic methodology to be gained. They did not allow provision of many SRH indicators (including many SDGs indicators), did not allow trend and gender analysis, and limited many aspects of the current investigation. Investment in data collection and accessibility is very much needed in the Arab region.

4. **Supporting and nurturing research and analytical capacities**

   Assessing and monitoring SRH inequalities calls for well qualified institutions and individuals who are capable to analyze data and information and can draw evidence-based policy recommendations. This calls for institutions and individual capacity building in the area of SRH inequalities, in particular, the concepts of inequality and inequity, their conceptualization and frameworks, their measurement approaches and the translation of the findings to proper policy implications.

5. **Engaging and developing capacities of policy, decision makers, and health managers**

   Arab leaders and policy makers are listening and have committed themselves to act. The SDGs provide an opportunity for emphasizing the importance of fair governance and the need for policy reforms through integrated social policies and inter-sectoral actions anchored on an equity lens. The interpretations of these many concepts, their translation into policies, and the need to demonstrate the impact of policies and programs on well-being require actors that are fully engaged and commanding the needed capacities. Workshops, dissemination seminars and specialized training are very much needed.

6. **Establishing policy dialogue forums and widening opportunities for participation**

   Policy dialogues provide the space for completing the policy cycle for and linking the different stakeholders. They provide

the needed bridge between policies and plans and what is realized on the ground in terms of peoples and achievements of health and well-being. They allow evidence to modify actions and support achieving the desired impact. They create a socially inclusive framework for policy making and enable non-state actors to participate and contribute to the achievement of SRH equity.

7. **<u>supporting informed public demand for fair social policies and HE.</u>**

   The current public outcry for health is focused on blaming health system and on requesting quality health care and sophisticated medical technologies. The request for fairer allocation of resources and fairer social arrangements are not supported by recognition of their role in preventing ill health and promoting well-being.

A final note:

This report demonstrated that – given the data available and accessible at the time of conducting the analysis - the core challenges are generally similar for many Arab countries which allowed for broad policy recommendations. However, the report also pointed to specificities of each country. For example, the data accessible for investigating SRH inequalities were very different in periodicity, coverage and details. Also, the priority stratifiers were not similar (eg: area stratifier in Egypt, wealth stratifier in Jordan). Similarly, the priority inequality challenges and their configurations differed in each country. Needless to say that Arab countries in conflict situations and political upheavals have their own nontraditional categories of disadvantaged groups including refugees and internally displaces persons, and different SRH set of needs and priorities.

Each country needs to conduct its own detailed in-depth and up-to-date analysis and contextualize its findings. The articulation of evidence based country level specific policies and actions still demand improved data, methodological innovations, and further efforts. This report is but one-step in the right direction.

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Annex 1: Sexual and reproductive health impact indicators

Indicator	Additional dimension	WHO/EMRO and SDGs Lists
Mortality		
1. Maternal mortality ratio		UNFPA2016 SDG3.1.1 WHO/EMRO2010 WHO/EMRO2016 WHO short list
2. Perinatal mortality rate		WHO/EMRO2010 WHO short list
3. Neonatal mortality rate	Mother education, gender, wealth, rural/urban	SDG3.2.2 WHO/EMRO2010, WHO/EMRO2016
4. Infant mortality rate	Mother education, gender, wealth, rural/urban	UNFPA2016 WHO/EMRO2016
5. Mortality rate attributed to cancer (breast, cervical)		WHO/EMRO2016 SDG3.4.1
Morbidity		
6. Prevalence of infertility in women		WHO/EMRO2010 WHO short list
7. Cancer incidence by type of cancer (breast, cervical)		WHO/EMRO2019
8. Number of new HIV infections per 1,000 uninfected population	Sex, age, key populations	SDG3.3.1 WHO/EMRO2016
9. Estimated number of new HIV infections		WHO/EMRO2016
10. Percent of pregnant women (15-24) attending antenatal clinics, whose blood has been screened for HIV and who are sero-positive for HIV		WHO short list
11. Hepatitis B incidence per 100,000 population		SDG3.3.4
12. Percent of men aged (15-49) interviewed in a community survey reporting episodes of urethritis in the last 12 months		WHO short list

Annex 2: Sexual and reproductive health outcome indicators

Indicator	Additional dimension	WHO/EMRO and SDGs Lists
Social and psychological risk factors		
1. Adolescent birth rate (aged 10–14 years; aged 15–19 years) per 1000 women in that age group		UNFPA2016 SDG3.7.2 WHO/EMRO2010
2. Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18		UNFPA2016 SDG5.3.1
3. Proportion of girls and women aged 15-49 years who have undergone female genital mutilation/cutting	Age	UNFPA2016 SDG5.3.2 WHO/EMRO2010 WHO short list
4. Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence	Age	UNFPA2016 SDG5.2.1
5. Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months	Age and place of occurrence	UNFPA2016 SDG5.2.2
6. Proportion of persons victim of physical or sexual harassment, in the previous 12 months	Sex, age, disability status and place of occurrence	UNFPA2016 SDG 11.7.2
7. Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months		UNFPA2016 SDG16.1.3
8. Proportion of young women and men aged 18-29 years who experienced sexual violence by age 18	Sex	SDG16.2.3
9. Proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms		SDG 16.3.1
Biological risk factors		
10. Anemia among women of reproductive age		WHO/EMRO2010 WHO short list
11. Anemia in pregnant women		WHO/EMRO2010
12. Low birth weight among newborns		WHO/EMRO2010 WHO/EMRO2016 WHO short list

Annex 3: Sexual and reproductive health system indicators

Indicator	WHO/EMRO and SDGs Lists
Input	
1. % Government expenditure directed towards reproductive health	UNFPA2016 WHO/EMRO2010
2. Number of facilities with functioning basic essential obstetric care per 500 000 population	WHO/EMRO2010 WHO short list SDG3.8.1
3. Number of facilities with functioning comprehensive essential obstetric care per 500 000 population	WHO/EMRO2010 WHO/EMRO2010 WHO short list SDG3.c
4. Number of skilled birth attendants per 1000 population	WHO/EMRO2010
5. % Midwives who received evidence-based reproductive health, including family planning, in-service training in a given year	WHO/EMRO2010
6. Notification of maternal deaths is mandatory	WHO/EMRO2010
7. % Primary health care facilities providing at least 3 modern family planning methods	WHO/EMRO2010
8. Delivery points providing necessary medical and psychological services for women with FGM	WHO/EMRO2010
9. Number of countries with laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education	SDG5.6.2
10. Existence of policy on cervical cancer screening	WHO/EMRO2010
11. Existence of policy on breast cancer screening	WHO/EMRO2010
12. % Reproductive health service providers trained in youth-friendly service provision	WHO/EMRO2010
13. Reproductive health service delivery points providing youth friendly services	WHO/EMRO2010
14. Proportion of countries that (a) have conducted at least one population and housing census in the last 10 years; and (b) have achieved 100 per cent birth registration and 80 per cent death registration	UNFPA2016 SDG17.19.2
15. Proportion of sustainable development indicators produced at the national level with full disaggregation when relevant to the target, in accordance with the Fundamental Principles of Official Statistics	SDG 17.18.1
Process	
16. % Women knowing at least three risk factors/danger signals of pregnancy-related complications	WHO/EMRO2010
17. % Women knowing at least three risk factors/danger signals of delivery-related complications (in the countries with lower rates of institutional deliveries)	WHO/EMRO2010
Access/demand	
18. Unmet need for family planning	UNFPA2016 WHO/EMRO2010

19. Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods	SDG3.7.1
20. Demand for family planning satisfied with modern methods	WHO/EMRO2016
21. Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care	UNFPA2016 SDG5.6.1 WHO/EMRO2016
22. Antiretroviral therapy (ART) coverage among all adults and children living with HIV	WHO/EMRO2016
23. Percentage of key populations at higher risk (who inject drugs, sex workers, men who have sex with men) who have received an HIV test in the past12 months and know their results	WHO/EMRO2016
24. Percent of pregnant women (15-24) attending antenatal clinics, whose blood has been screened for syphilis, with positive serology for syphilis	WHO short list
Service use	
25. Antenatal care coverage (1+;4+)	WHO/EMRO2010, WHO/EMRO2016, WHO short list
26. Pregnant women received tetanus vaccination	WHO/EMRO2010
27. Deliveries in health facilities	WHO/EMRO2010
28. Proportion of births attended by skilled health personnel	UNFPA2016 SDG3.1.2 WHO/EMRO2010, WHO/EMRO2016, WHO short list
29. Proportion of caesarean section deliveries	WHO/EMRO2010
Outcome	
30. Contraceptive prevalence rate	UNFPA2016 WHO/EMRO2010
31. Obstetric and gynecological admissions owing to abortion (spontaneous or induced) related complications	WHO/EMRO2010 WHO short list
32. Reproductive age, 15–49 years, screened for cervical cancer during the past five years	WHO/EMRO2010
33. % Young men and women age 15–24 years OR “at risk” groups who have correct comprehensive knowledge on HIV prevention	WHO/EMRO2010 WHO short list

Annex 4: Definitions of indicators

Annex 4 a: Sexual and reproductive health impact indicators

Indicator	Definition
Mortality	
1. Neonatal mortality	Deaths during the neonatal period per thousand livebirths in the five years preceding the survey
2. Infant mortality	Deaths before the age of 12months per thousand livebirths in the five years preceding the survey
Morbidity	
3. Delayed primary fertility	Percent ever married women 15-49 years married for more than 2 years reporting having no children
4. Prevalence of hepatitis B infection in males	Percent hepatitis B surface antigen (HBsAG) positive among 1-59years males
5. Prevalence of hepatitis B infection in females	Percent hepatitis B surface antigen (HBsAG) positive among 1-59years females
6. Prevalence of hepatitis B infection in boys (1-14 years)	Percent hepatitis B surface antigen (HBsAG) positive among 1-14years boys
7. Prevalence of hepatitis B infection in girls (1-14 years)	Percent hepatitis B surface antigen (HBsAG) positive among 1-14years girls
8. Prevalence of hepatitis B infection in men (15-59 years)	Percent hepatitis B surface antigen (HBsAG) positive among 15-59years men
9. Prevalence of hepatitis B infection in women (15-59 years)	Percent hepatitis B surface antigen (HBsAG) positive among 15-59years women
10. Prevalence of self-reported sexually transmitted infections (STIs) in women (15-49 years)	Percent ever married women 15-49years who reported STIs or symptoms (abnormal genital discharge, genital sore/ulcer)

Annex 4 b: Risk factor (outcome) indicators

Indicator	Definition
Psychological	
1. Female genital mutilation/cutting (FGM/C 1-14 years)	Percent girls and women aged 1-14 years who have undergone FGC
2. Female genital mutilation/cutting (FGM/C 15-49 years)	Percent girls and women aged 15-49 years who have undergone FGC
3. Consanguinity	Percent ever married women 15-49years related by marriage to their husbands (consanguinity)
4. Early age at marriage	Percent of ever married women aged 15-49 years who were married before the age of 18years
5. Adolescent childbearing	Percent women aged 15-19 who have begun childbearing
6. Multiparity	Percent ever-married aged 15-49 years who have 5+ livebirths
7. Risky birth interval	Percent non-first births in the five years preceding the survey born <24 months since preceding birth (risky birth interval)
8. Marital violence	Percent ever-married (15-49 years) women who have ever experienced physical, sexual or psychological violence by their husband
9. Marital physical violence during pregnancy	Percent ever-pregnant women (15-49years) who experienced physical violence during pregnancy by their husband
Biological	
10. Anemia in reproductive age	Anemia among women of reproductive age (NP: Hg<11.0g/dl, P:< 12.0g/dl)
11. Low birth weight (LBW)	Low birth weight among newborns (<2.5kg)

Annex 4 c: Health system indicators

Indicator	Definition
Health system capacity	
1. Far distance to healthcare facility	Percent women aged 15-49years who reported serious problems concerning far distance to healthcare facility
2. Difficult transportation	Percent women aged 15-49years who reported serious problems concerning having to take transportation to reach health care facility
3. Unavailable female provider	Percent women aged 15-49years who reported serious problems concerning unavailable female provider
4. Unavailable provider	Percent women aged 15-49years who reported serious problems concerning unavailable provider
5. Unavailable medication	Percent women aged 15-49years who reported serious problems concerning unavailable medication
6. Unaffordable healthcare services	Percent women aged 15-49years who reported serious problems concerning getting money for health services
Access/demand	
7. No current contraception method used	Percent women aged 15-49years who are not pregnant and do not currently use contraceptive method
8. Unmeet need for family planning	Percent women aged 15-49years with unmeet need for family planning
Service use	
9. No antenatal care (ANC)	Percent women aged 15-49years who had a live births in five years preceding the survey who did not receive ANC
10. No regular antenatal care (ANC)	Percent women aged 15-49years who had a live births in five years preceding the survey who did not receive regular ANC (<4 visits)
11. Birth was not protected against neonatal tetanus	Percent women aged 15-49years whose last livebirth was not protected against neonatal tetanus
12. Home deliveries	Percent of livebirths in the 5 years preceding the survey born at home
13. Birth not attended by skilled provider	Percent livebirths in the 5 years preceding the survey who were not delivered by skilled provider
14. Caesarean section delivery	Percent livebirths in the five years preceding the survey that were delivered by caesarean section
15. No postnatal checkup	Percent women aged 15-49years in the two years preceding the survey who had no postnatal checkup
Health system outcome	
16. Never had clinical breast examination	Percent distribution of women aged 15-59years who never had any clinical breast examination
17. No comprehensive HIV/AIDS knowledge in men	Percent men aged 15-49years who have no comprehensive HIV/AIDS knowledge
18. No comprehensive HIV/AIDS knowledge in women	Percent women aged 15-49years who have no comprehensive HIV /AIDS knowledge

Annex 4 d: Geographical region used in the five country reports*

Egypt	Jordan	Sudan	Morocco	Oman
Urban Governorates	**Central**	**North**	Sahara	Muscat
Lower urban	Amman	Northern	Souss-Massa-Draa	Dhofar
Lower rural	Balqa	River Nile	El Gharb-Chrarda Bni Hssen	Ad Dakhliyah
Upper urban	Zarqa	**East**	Chaouia Ourdigha	North Ash Sharqiyah
Upper rural	Madaba	Red Sea	Marrakech-Tensift-El Haouz	South Ash Sharqiyah
Frontier governorates		Kassala	Région Oriental	North Al Batinah
		Gadarif	Grand Casablanca	South Al Batinah
	North	**Khartoum**	Rabat-Salé-Zemmour-Zair	Adh Dhahirah
	Irbid	**Central**	Doukkala-Abda	Musandam
	Mafraq	Gezira	Tadla-Azilal	ALWusta
	Jarash	White Nile	Meknes-Tafilalet	
	Ajloun	Sinnar	Fes-Boulemane	
		Blue Nile	Taza-Al Hoceima-Taounate	
	South	**Kordofan**	Tanger-Tetouan	
	Karak	North Kordofan		
	Tafiela	South Kordofan		
	Ma'an	West Kordofan		
	Aqaba	**Darfor**		
		North Darfor		
		West Darfor		
		South Darfor		
		Central Darfor		
		East Darfor		

* Bold text is used to indicate major geographic regions while normal text indicates governorates

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