

RISE 2020

REGULATORY INDICATORS  
FOR SUSTAINABLE ENERGY



# SUSTAINING THE MOMENTUM



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The Energy Sector Management Assistance Program (ESMAP) is a partnership between the World Bank and 18 partners to help low- and middle-income countries reduce poverty and boost growth through sustainable energy solutions. ESMAP's analytical and advisory services are fully integrated within the World Bank's country financing and policy dialogue in the energy sector. Through the World Bank Group (WBG), ESMAP works to accelerate the energy transition required to achieve Sustainable Development Goal 7 (SDG7) to ensure access to affordable, reliable, sustainable, and modern energy for all. It helps to shape WBG strategies and programs to achieve the WBG Climate Change Action Plan targets. Learn more at: <https://esmap.org>

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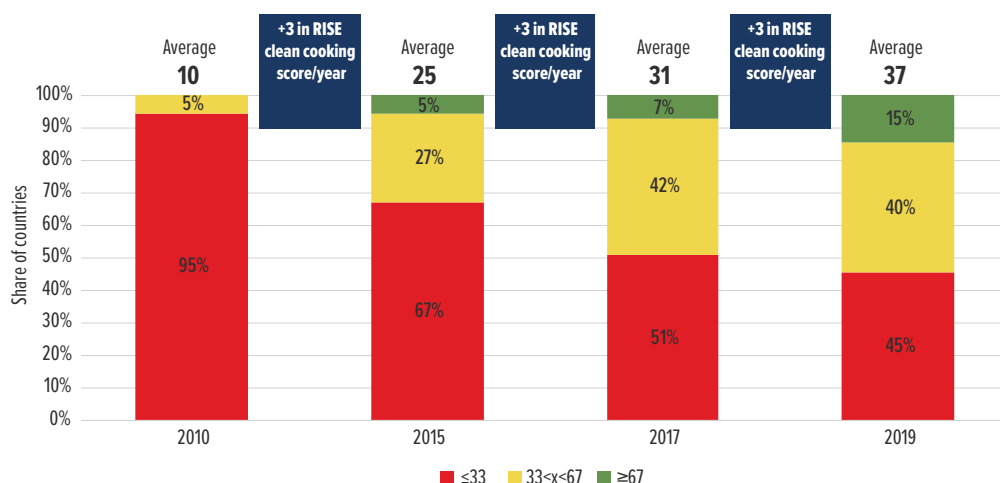
Editor | Steven Kennedy  
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# CLEAN COOKING: STEADY PROGRESS SINCE 2010

Of the four pillars of sustainable energy, clean cooking is the most often overlooked when it comes to policy making. Yet RISE scores have improved consistently across the 55 countries reporting on deficits in access to clean cooking since 2010 (figure 16). The number of countries with advanced policy frameworks rose from zero in 2010 to eight in 2019, moving 15 percent of access-deficit countries into the green zone on the RISE index. Of the remainder, 22 countries made moderate progress; in 25, the policy apparatus remains nascent.

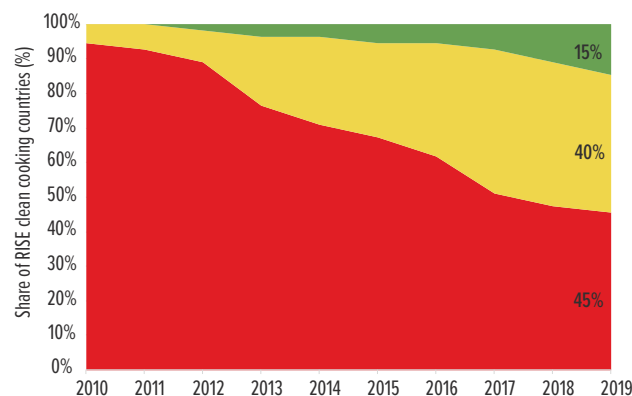
**FIGURE 16. CLEAN COOKING: PROGRESS IN RISE SCORE FOR PILLAR, 2010 –19**



Source: World Bank, RISE 2020.

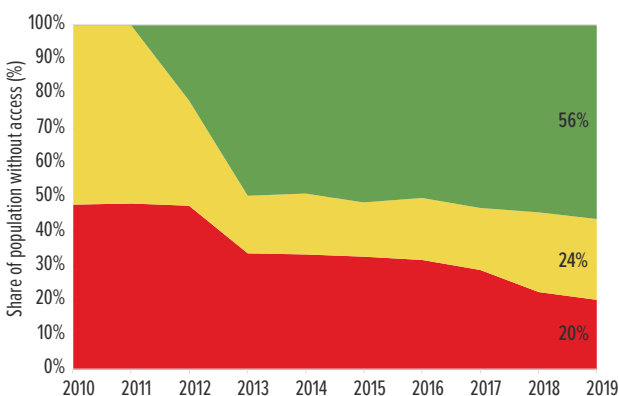
Less than a quarter of the access-deficit countries, but half of the population without access to clean cooking have advanced policy frameworks for clean cooking. Although only eight of these countries are in the green zone; of them, China, Ethiopia, India, Indonesia, and Kenya made particularly great strides in clean cooking policymaking. These countries are home to 1.4 billion people who lack access, more than half the global population in that situation (figures 17, 18).

**FIGURE 17. CLEAN COOKING: RISE SCORE, 2010–19**



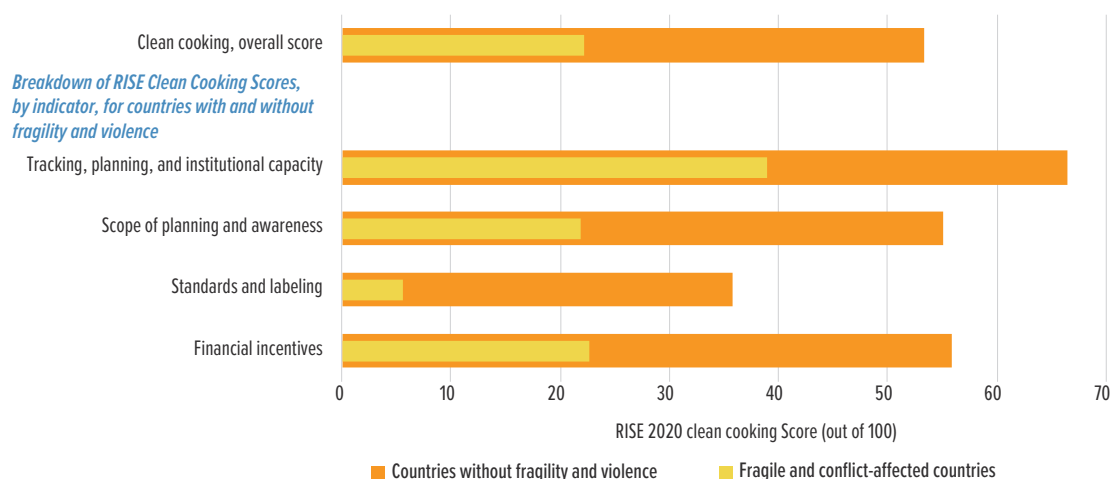
Source: World Bank, RISE 2020.

**FIGURE 18. CLEAN COOKING: RISE SCORE WEIGHTED BY POPULATION WITHOUT ACCESS, 2010–19**



**Countries experiencing fragility and conflict have seen few if any policy improvements in clean cooking.** On every indicator and in their overall scores for policy making, countries marked by fragility have on average half the score for clean cooking of nonfragile countries. Standards and labeling are particularly weak in fragile countries; average scores on this indicator are 15 percentage points lower than scores of nonfragile countries (figure 19). There is an urgent need for cooking interventions in countries marked by fragility and conflict, where fuel-collection tasks not only expose women and girls to violence but also damage the environment. Yet the clean cooking agenda is largely ignored in this group of countries.

**FIGURE 19. CLEAN COOKING: RISE SCORES IN FCV AND NON-FCV COUNTRIES, BY INDICATOR, 2019**

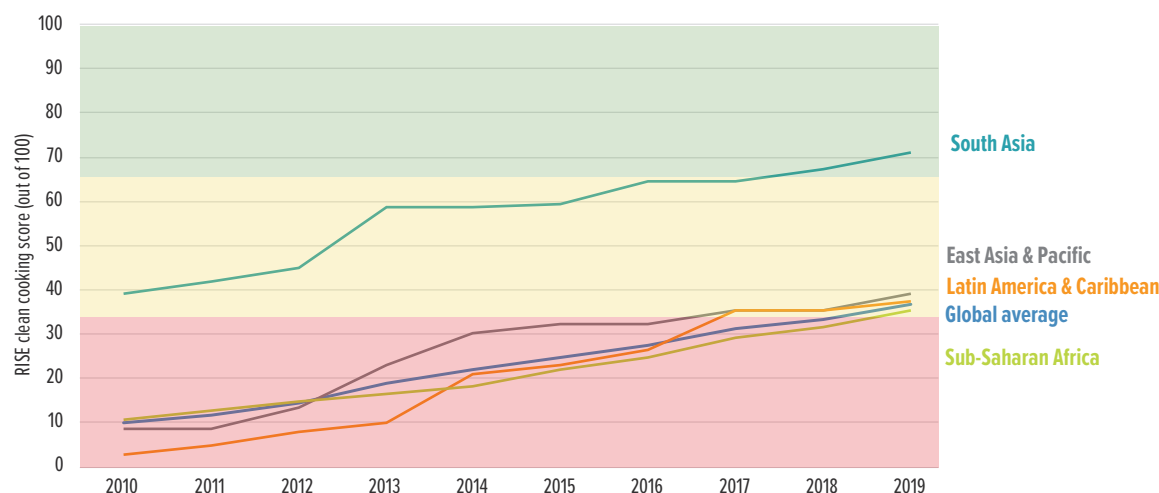


Source: World Bank, RISE 2020.

Note: FCV = fragility, conflict, and violence.

**There are policy-making disparities in clean cooking within and between regions.** While Latin America and the Caribbean has shown the greatest gains since 2010, South Asian countries are leading on policy and regulatory frameworks, where progress continues driven by consistent progress by Bangladesh, India and Nepal (figure 20). Although Sub-Saharan Africa has the lowest regional average, since 2010 it has shown a consistent uptick, albeit from a lower starting point. In three out of four access-deficit regions—East Asia and Pacific, South Asia, and Sub-Saharan Africa—RISE scores range from 0 to 83. In Latin America and the Caribbean, where only four countries have a significant access deficit (Guatemala, Haiti, Honduras, and Nicaragua), country-level scores on the pillar are less uneven, ranging from 24 to 53.

**FIGURE 20. CLEAN COOKING: EVOLUTION OF RISE SCORES BY REGION, 2010–19**



Source: World Bank, RISE 2020.



The top regional performers on the RISE index are also among the fastest improvers, gaining six to eight points annually since 2010 (table 1). But the concerted policy push seen in certain low-access countries (Lao People's Democratic Republic, Nigeria, and Tanzania) is particularly noteworthy.

**TABLE 1. CLEAN COOKING: FASTEST IMPROVERS, BY REGION**

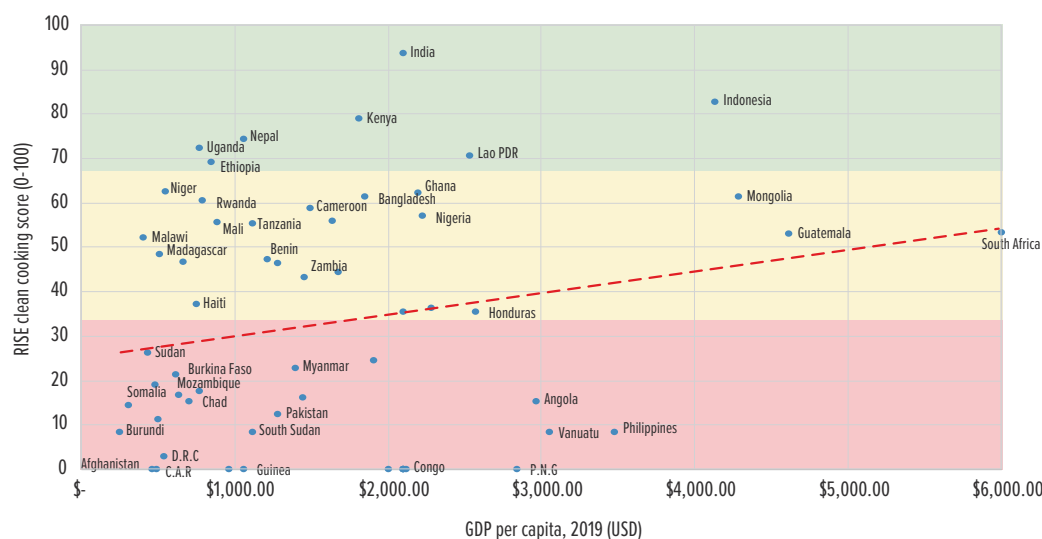
(RISE score on pillar in 2020, annual rate of improvement in RISE score 2010–19, 2018 access rate)

East Asia & Pacific	Latin America & Caribbean	South Asia	Sub-Saharan Africa
Indonesia (83, 8.5, 80%)	Guatemala (53, 5.9, 46%)	Bangladesh (61, 6.8, 24%)	Kenya (79, 8.8, 10%)
Lao PDR (70, 6.9, 7%)	Honduras (37, 4.9, 57%)	Nepal (74, 6.8, 29%)	Nigeria (57, 6.3, 10%)
Mongolia (61, 6.8, 50%)	Haiti (35, 3.9, 4%)	India (94, 3.5, 49%)	Tanzania (55, 6.1, 4%)

Source: World Bank, RISE 2020.

**Performance on the RISE clean cooking index soars as income rises.** There are notable exceptions, however, to this link between income and mature policy frameworks. Lower-income countries are concentrated in the red zone, suggesting that they have not yet developed policy frameworks for clean cooking. Meanwhile, green zone countries include low-income nations like Ethiopia, Malawi, and Uganda, which have robust policy frameworks (figure 21). While the period between 2010 and 2017 was notable for progress in upper- and lower-middle-income countries in Asia and Latin America (e.g., Bangladesh, Cambodia, China, Guatemala, India, Indonesia, Mongolia, and Nepal), the period between 2017 and 2019 saw large gains in poorer Sub-Saharan Africa countries like Benin, Kenya, Nigeria, and Tanzania. The presence of low-access countries among top RISE performers shows that prioritizing the policy agenda is not enough. Scaling up access on the ground depends on the finer aspects of allocating resources and planning implementation. In low-income countries like Uganda and Ethiopia, scale-up will require gradually stepping away from artisanal production of biomass stoves toward clean solutions (liquefied petroleum gas, biogas, and electricity). As this transition will occur over a longer time period, interim solutions (such as quality-assured biomass stoves) will help to mitigate the worst health impacts of charcoal and firewood.

**FIGURE 21. CLEAN COOKING: RISE SCORES AND GDP PER CAPITA, 2019**



**Even where planning frameworks for clean cooking are present, policies that drive wider adoption and set standards and labeling may lag.** Examining progress at a granular level shows that maximum traction is driven by policies that (i) track household-level access; (ii) establish institutional capacity to create action plans, set science-based standards for solutions, and track adoption; and (iii) increase uptake of clean cooking solutions by raising awareness (figure 22). Whether cooking solutions are clean or not depends on the technical attributes of combustion and heat-transfer efficiency, as well as emissions and safety of use. Less than a third of the countries with significant access deficits have set standards for efficiency, emissions, and safety related to cooking solutions.

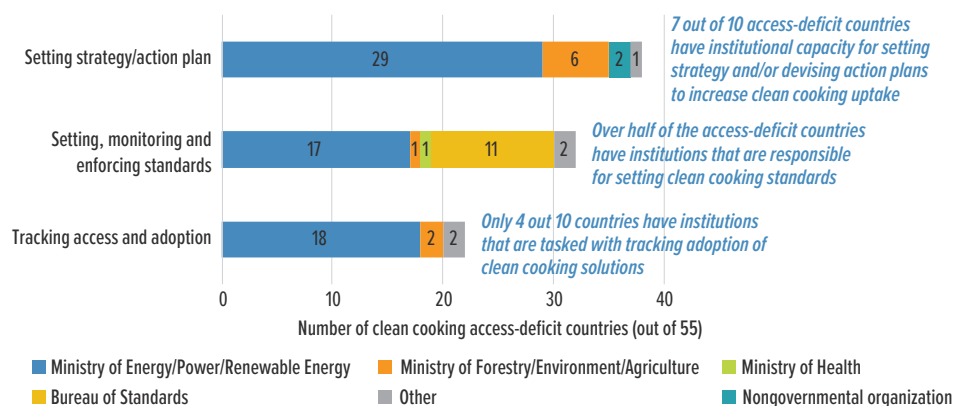
**FIGURE 22. CLEAN COOKING: PROGRESS BY RISE SUB-INDICATOR, 2010, 2017, AND 2019**



Source: World Bank, RISE 2020.

**Clean cooking is a cross-sectoral issue. It requires an institutional champion to help coordinate clean cooking efforts across the sectors of energy, health, gender-inclusion, and climate change.** Given the significant implications of cooking practices on outcomes in all four areas, the responsibility for policy making and implementation must be shared by government and nongovernment actors, engaging multiple government ministries/departments (figure 23). Even the strategies deployed to build awareness and drive adoption are multifaceted. Most countries build their awareness strategy on the health aspects of clean cooking; half use income, geography, and gender in their campaigns. In many countries, the ministry of energy is involved in all aspects of policy making for clean cooking—from creating an action plan for uptake to setting standards and monitoring progress, emphasizing the need for a coordinating institution that can lead policy deployment. Bangladesh has demonstrated the effectiveness of having such an institution. The Infrastructure Development Company Limited, a government-owned development finance institution, coordinates with nongovernmental organizations to strengthen the commercial market for clean cooking solutions, acting as a hub for the testing of improved cookstoves and setting technical specifications.

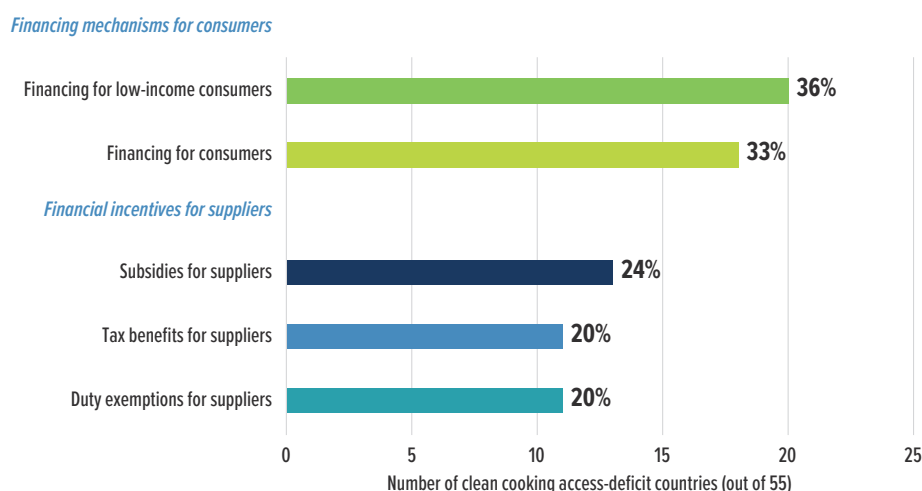
**FIGURE 23. CLEAN COOKING: INSTITUTIONAL RESPONSIBILITY FOR CLEAN COOKING, 2019**



Source: World Bank, RISE 2020.

**If the overall cooking ecosystem is to improve, financial incentives must receive greater emphasis.** Financial incentives for consumers and suppliers of solutions are available in about a third of the access-deficit countries. Overall, there is greater support for consumers of clean cooking solutions than for suppliers. Only a quarter of the countries in which significant populations lack access provide financial incentives to suppliers (figure 24). Subsidies are the most common incentive, followed by tax benefits and duty exemptions. These incentives are usually directed toward biogas, liquefied petroleum gas, and solar cookstoves.

**FIGURE 24. CLEAN COOKING: SHARE OF COUNTRIES OFFERING INCENTIVES FOR SUPPLIERS AND FINANCING FOR CONSUMERS, 2019**



Source: World Bank, RISE 2020.