METHODOLOGICAL NOTE FOR

Women and the Environment: An Asia-Pacific snapshot

The brief aims to illustrate some of the connections between gender and the environment in Asia and the Pacific using data from official statistics. To the extent possible, internationally agreed indicators were used to illustrate the gender-environment nexus across six priority areas. Where the topics considered mirror those of the Sustainable Development Goals (SDG) monitoring framework, the selected indicators align with official SDG indicators, and data were sourced from the Global SDG database. To illustrate the gender-environment nexus across other areas, additional statistics were sourced from databases of international agencies (such as the International Labour Organization (ILO), the World Health Organization (WHO) and the World Bank), and in some instances microdata analysis was conducted.

Key considerations about these data sources include:

A. SDG indicator data: The Global SDG database was accessed on 22 February 2022. Only data for countries within the Asia-Pacific region, per UN Women regional groupings, were considered.

B. Data for other internationally agreed indicators: Data from the ILOSTAT database and from the WHO Global Health Observatory database were accessed on 22 February 2022 for countries in the Asia-Pacific region, per UN Women regional groupings. Data from the World Bank Global Findex database were accessed on 22 December 2021. Estimates on the proportion of women in

various decision-making roles (infographic 3), were provided by the International Union for Conservation of Nature (IUCN) and the United Nations Environment Programme (UNEP).

C. Microdata analysis: Where internationally comparable country estimates were not readily available, microdata analysis was conducted. For figures 4, 7, 9, 10, 11, and 15, this was achieved by integrating Demographic and Health Survey (DHS) data with geospatial information from the DHS Geocovariates data set and Global Self-consistent, Hierarchical, High-resolution Geography Database. For each country, the latest available data sets were considered for both survey and geospatial data, even when these did not allude to the same reference period. Tests of two-sample proportions were conducted to test the statistical significance of the estimates produced (99 per cent confidence interval) and, where differences appeared insignificant, this was flagged in figure notes. As this analysis built on a forthcoming UN Women publication that uses logistic regression and random forest models to evidence the connections between climate change and gender outcomes, these links need to be understood as associations and not causations. Links to methodology, caveats and other details about the analysis are provided in endnotes. The full publication with additional methodological details and information on all tests conducted will be released in May 2022.

For analyses related to water (figure 5) microdata from DHS and Multiple Indicator Cluster Surveys (MICS) were used. In each case, the latest available data set was considered, and indicators were calculated, to the extent possible, following SDG definitions. In some cases, age groups or other parameters were adjusted to improve sample sizes. In other cases, only responses from women (rather than heads of households) were considered, to better illustrate gender issues. As such, some of the estimates on water may differ slightly from official SDG estimates that rely on household-level information.

Solar energy use estimates were derived from Household Income and Expenditure Survey data and Population Housing Censuses, analyzed in collaboration with the Pacific Community (SPC).

Finally, estimates on sources of COVID-19 information (figure 8) were calculated using data from two rounds of the UN Women Rapid Assessment Surveys on the consequences of COVID-19. The first round was conducted in 2020 in 11 countries in Asia-Pacific, and the second round was conducted in 2022 in 7 countries in the region, often in partnership with national Governments. The sample size for each Asia-Pacific country ranged between 145 and 8,198 respondents in the first round and between 2,032 and 3,636 respondents in the second round.

When the brief presents aggregates for the Asia-Pacific region, regional groupings follow UN Women's regions unless otherwise noted, which may differ from SDG regional groupings. In most cases, aggregates are representative of the region (e.g. covering at least 50 per cent of countries or 50 per cent of the population). In instances when data were not available for many countries, this was flagged in endnotes. Where subregional aggregates are presented, Australia and New Zealand are separated from the rest of Oceania. For the calculation of aggregates, population estimates were extracted from the World Population Prospects (2020 estimates) for specific age groups of relevance in each case. On an exceptional basis, the aggregates presented were extracted from existing repositories, such as the Sendai Framework, the International Telecommunication Union (ITU) (Infographic 2), the International Renewable Energy Agency, and other sources (figure 2), and this was flagged in endnotes.