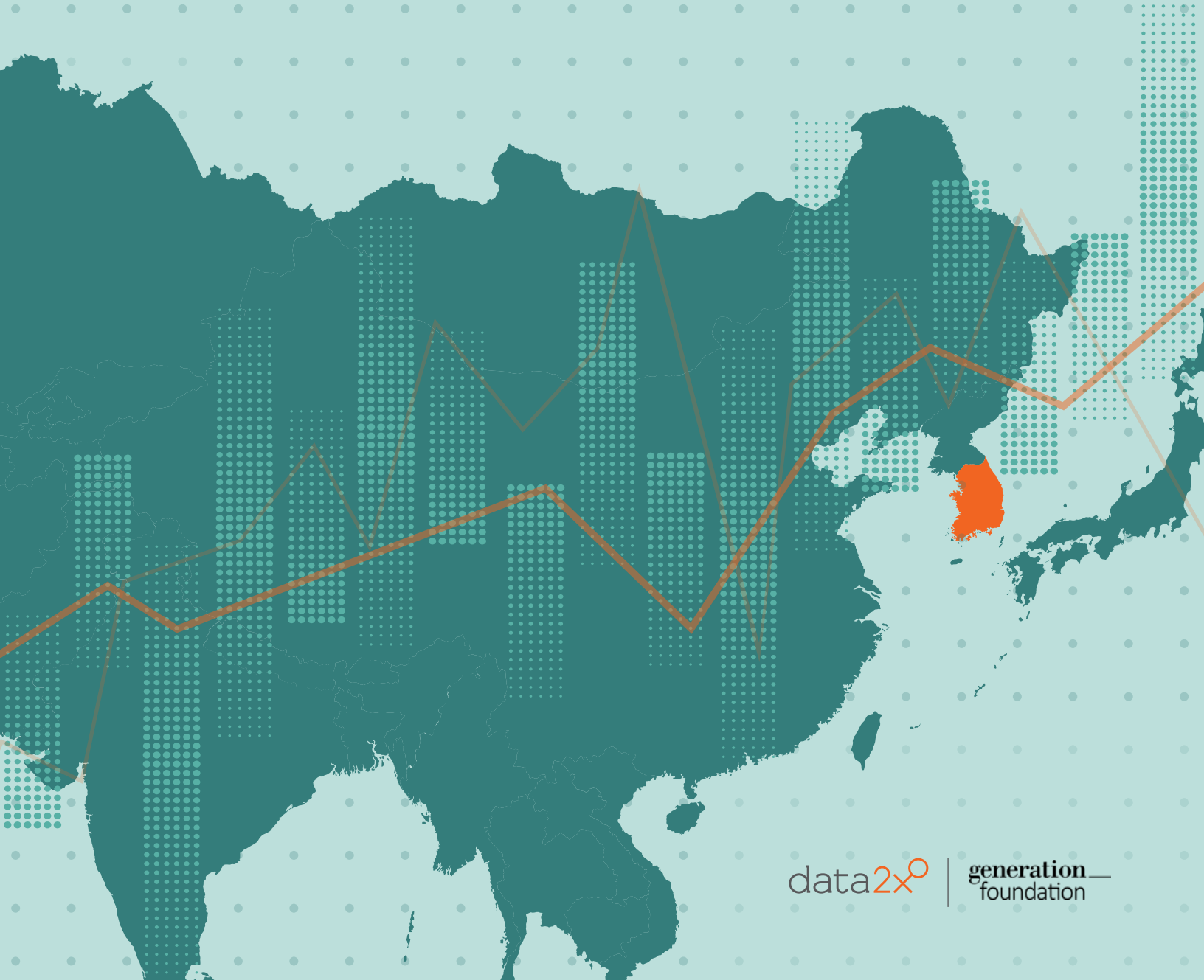
Role of Time Use Data in Policymaking in **South Korea**



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EXECUTIVE SUMMARY

Unpaid care work, mostly done by women and girls, develops human capabilities, maintains the labor force, and enables economies to function and grow. At the same time, unpaid care work is distributed unevenly, constraining the options of women and girls including participation in the labor force and schooling. Time use data, a key instrument for measuring unpaid care work, can significantly contribute to the design and analysis of policy options to address gender inequalities, redistribute this work, reduce women's workload, promote their labor force participation, and build strong economies. Data2X has commissioned a series of country case studies to examine the country's experience in collecting time use data and the role of time use data in policymaking under varied settings. Each of the four country cases—Kenya, Mongolia, Senegal, and South Korea—explores the motivation for and key features of national time use surveys, and analyzes the policy influence of time use data and data uptake in policymaking and policy discourses. The case studies then identify the enabling factors as well as challenges in the use of this data at the country level. This case study examines South Korea's experience implementing time use surveys and its efforts to use that data for policymaking.

International influence leading to a national mandate underpin South Korea's remarkable trajectory in undertaking nationally representative time use surveys (TUSs) every five years since 1999. The country's motivation to collect national time use data is closely linked to the international influence of the UN and the global women's movement. The Beijing Platform for Action adopted by consensus at the UN's Fourth World Conference on Women in 1995 called for counting and valuing women's unpaid labor. Following this consensus agreement, Korea's first Basic Plan for Women's Policies in 1997 mandated national TUSs to evaluate household labor and integrate them into national accounts by creating a satellite account for household production.

Further, Korea's adoption of the Household Production Satellite Account was influenced by the UN's recommendation of adopting these accounts to get a more comprehensive measure of the economy and the implementation of such accounts in other countries, such as France, Finland, Switzerland, the UK, Canada, and Japan.

Korea has conducted five TUSs, with the first survey in 1999 and thereafter every 5 years:

Year		1999	2004	2009	2014	2019
Sample	Number of Households	17,000	12,750	8,100	12,000	12,435
	Number of Respondents (Approx.)	46,000	32,000	21,000	27,000	29,000
Number of Diaries (Approx.)		92,000	64,000	42,000	34,000	38,000
Survey Months		September	September	March September	July, September, November-December	July, September, November-December

The 2019 KTUS employed a stratified two-stage cluster sampling design to ensure a representative sample of the Korean population 10 years and older, sampling 12,435 households across the nation, yielding valid responses from 12,388 households and 26,091 individuals. The 2019 survey reveals enduring gender disparities in the division of paid and unpaid work: In 2019, Korean women aged 19 and above spent an average of 3 hours and 13 minutes per day on unpaid work, a slight decrease from 3 hours and 25 minutes in 2014. During the same period, men increased their unpaid work by 10 minutes daily, from 46 minutes in 2014 to 56 minutes in 2019.

The KTUSs have had both direct and indirect influence on policy. The direct policy influence has been through increased awareness of the unequal distribution of unpaid work taking place in the context of South Korea's low fertility and population aging crisis. South Korea's 3rd Gender Equality Basic Plan and the 3rd and 4th Basic Plans for Low Fertility and Aging Society (2021-2025), for instance, used the 2019 KTUS data on gender inequality in unpaid work among dual earner couples to set policy directions to enhance work-family balance and better childcare support. These policy directions have been taken up by local governments.

The grandparents' allowance policy, being adopted by an increasing number of local governments, use the National Time Transfer Accounts (NTTA), derived from KTUS data, to determine the size of the allowance. The Seoul Metropolitan Government, for instance, provides an allowance of approximately KRW 300,000 per child to grandparents or other relatives (a majority women) who care for children for more than 40 hours per month.

The Household Production Satellite Accounts have indirectly influenced economic policies by quantifying the economic value of unpaid work. The 2019 reported valuation of household labor at 490.9 trillion KRW became a significant topic during the 2022 local elections, with the proposal of a household labor allowance gaining attention as a key policy idea. In Gwangju Metropolitan City, this valuation led to detailed research into eligibility criteria and payment structures, with legislative efforts now underway to potentially establish the allowance.

The factors that motivated the use of time use data, include, first, South Korea's demographic challenges—a rapidly aging population and declining fertility rates—that created an urgent need for policies that support work-life balance. Data use was further supported by the availability of high-quality, reliable data providing detailed information, and public support. Effective dissemination of this data and media attention, thanks to explanatory materials made available by the NSO to aid understanding complex data sets, strengthened public support.

Challenges that have limited the use of time use data for policymaking in Korea include: data demands considerable effort from respondents and both data collectors and coders to produce; the comparative infrequency of data collection which does not allow for the evaluation of the impacts of current events, for instance, the Covid pandemic; and insufficient recording of concurrent activities and contextual information needed to enhance the policy value of this data. Additionally, policymakers, researchers, and other stakeholders do not always have the necessary training to understand time use data and its policy implications when it is disseminated.

To maximize this data's policy use, South Korea's experience highlights the importance of:

- Aligning time use data with specific policy objectives: By framing data within the context of demographic challenges and urgent policy needs, time use data has been instrumental in driving targeted policy changes.
- Collecting high quality data and the need for technological innovations to streamline data collection processes and reduce burdens on respondents.

- Clear communication and collaboration in maximizing the impact of time use data: Effective dissemination of time use data findings and continuous stakeholder engagement have been crucial in building public support and awareness.
- Enhancing the capacity of stakeholders through targeted training and resources. Addressing capacity constraints helps ensure that the data's full potential is realized in policy development.

INTRODUCTION

Time use surveys (TUSs) provide detailed insights into how individuals allocate their time across activities within a 24-hour period. This information is crucial for understanding people's daily lives and uncovering disparities in time allocations, which are essential for informed policymaking. Since 1999, South Korea has systematically collected national time use data (Korean Time Use Survey, KTUS) at five-year intervals. This ongoing effort aims to gather comprehensive data to support policy development and contribute to developing policy on work-life balance, gender equality, and the recognition of unpaid labor.

This case study explores the motivations behind collecting national time use data in South Korea, examines the achievements and constraints in its application, and identifies critical factors that have facilitated or hindered its integration into policymaking. The insights gained provide a foundation for enhancing the future use of time use data in policy development. We also provide a brief overview of the 2019 KTUS to understand KTUS's methodology and scope. To develop this report, we interviewed key stakeholders, including government officials, policymakers, and researchers, to gather qualitative insights. We also reviewed relevant documents, reports, and previous studies to supplement our findings. This methodology enabled us to triangulate data from multiple sources, ensuring a comprehensive and robust analysis.

In the following section, we delve into the specific motivations for South Korea's commitment to collecting and using national time use data.

MOTIVATIONS FOR COLLECTING NATIONAL TIME USE DATA IN KOREA

South Korea's motivation to collect national time use data is closely linked to global efforts to recognize and value unpaid labor, especially the significant contributions of women. According to Statistics Korea (2019), several critical international milestones emphasized the need to quantify and reflect unpaid work in economic statistics and national accounts: the 1975 Mexico World Women's Year Conference, the 1985 Nairobi Conference, and the 1995 Beijing Fourth World Conference on Women. The 1995 UNDP Human Development Report further highlighted the importance of assessing the value of unpaid labor for legal and economic recognition. These international trends influenced the implementation of Korea's national time use survey. Interviewee A, who observed the initiation of the KTUS, recalls:

> "I think the fact that the international organizations such as [the] UN acknowledged time use data influenced South Korea to collect time use data. From the beginning, there was an awareness that women's unpaid labor was not being recognized and must be measured. Therefore, I believe that the initiation of the Korean Time Use Data was significantly influenced by initiatives from feminist groups and the UN." (Interviewee A)

In response to these international calls to recognize the economic value of unpaid labor—including housework, volunteer work, and caregiving for the elderly and sick—South Korea implemented KTUS as one of the designated national statistics by law. The 1997 First Basic Plan for Women's Policies (1998-2002) mandated nationwide time use surveys to evaluate household labor and integrate these findings into national accounting systems, specifically by creating a satellite account for household production. Pilot surveys were conducted in 1998 and 1999, leading to the first comprehensive survey in September 1999. Since then, South Korea has conducted national time use surveys every five years, with the current survey being conducted for 2024. Table 1 provides information on the sampling design for the five KTUS conducted between 1999-2019.

TABLE 1. KOREAN TIME USE SURVEY

Year		1999	2004	2009	2014	2019
Sample	Number of Households	17,000	12,750	8,100	12,000	12,435
	Number of Respondents (Approx.)	46,000	32,000	21,000	27,000	29,000
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A BRIEF OVERVIEW OF THE 2019 KOREAN TIME USE SURVEY (KTUS)

To understand the scope and methodology of the KTUS, we examine the most recent survey. This section provides an overview of the sampling design, survey methods and care-related activity categorization used in the 2019 KTUS.

Sampling Design

The 2019 KTUS employed a stratified two-stage cluster sampling design to ensure a representative sample of the Korean population aged 10 years and older. The survey sampled 12,435 households across the nation, targeting all individuals aged 10 and above residing in these households. As a result, the 2019 KTUS obtained valid responses from 26,091 individuals in 12,388 households.

Survey Methods

Interviewers collected information on household and individual-level data, such as demographic and socio-economic information, via face-to-face interviews. Participants were then instructed on how to complete the time diary. Participants were required to fill out a time diary for two consecutive days, recording their activities at 10-minute intervals. They documented the main activity, any simultaneous activities, the use of ICT devices during each activity, the location, the mode of transportation, and the people they were with. Interviewers revisited the households after a two-day period to collect the completed diaries.

Interviewers received training from the Social Statistics Planning Division of Statistics Korea to ensure the collection of detailed and accurate time use data. This training included detailed briefings on the survey objectives, methodology, and activity classification guidelines. Additionally, interviewers were given a manual containing examples of various activities and classification criteria to ensure consistent and accurate data recording.

Activity Categorization and Care

The Korean Time Use Survey (KTUS) activity categorization scheme was originally developed in 1999 based on the frameworks provided by EUROSTAT and the United Nations Statistics Division (UNSD). The categorization scheme has been revised and updated every five years to ensure that the survey remains relevant and reflects societal changes. The 2019 revision

incorporated the International Classification of Activities for Time Use Statistics (ICATUS) 2016 of the UN, enhancing international comparability.

One of the significant updates in 2019 involved the categorization of caregiving activities. Previously, adult caregiving activities were classified based on the caregiver's relationship with the person being cared for, such as a spouse, parent, or other household members, and their living arrangements. Starting in 2019, this categorization was refined to distinguish between caring for adults requiring long-term care and caring for independent adults needing physical care or other care. This change aligns with international standards and allows for a more effective exploration of unpaid care work, which is crucial for policy development. Additionally, the definition of 'presence of others' was revised to improve the accuracy of recorded activities.

Before 2019, this term referred to individuals who were physically present and actively engaged in the main activity alongside the respondent. Following international standards, the revised definition now includes anyone who is physically present and aware, even if they are not directly involved in the same activity. This change is particularly important for capturing passive care activities, such as supervising a child, which were often underreported in previous surveys.

Table 2 below displays the codes and categories of care-related activities used in the 2019 KTUS. The data collectors, coders, and data users are provided with detailed examples and explanations of which activities fall under each code. This comprehensive categorization enables the KTUS to measure unpaid care work accurately, thereby facilitating its recognition and valuation in economic and social policy development.

TABLE 2. UNPAID CARE WORK ACTIVITY CATEGORIES IN 2019 KTUS

4	Household Care		
41	Food preparation	411	Meal preparation
		412	Snack and non-routine food preparation
		413	Cleanup
42	Clothing management	421	Laundry
		422	Drying laundry
		423	Ironing and organizing clothes
		424	Clothing repair and maintenance
43	Cleaning and organizing	431	Cleaning
		432	Tidying up
		433	Sorting and taking out the trash
44	Home maintenance		
45	Vehicle maintenance		
46	Care for pets and plants	461	Care for pets
		462	Care for plants
		463	Receiving services for pets and plants
47	Purchasing goods and services	471	In-store shopping
		472	Online shopping
		473	On-site service purchase
		474	Online service purchase
		479	Other activities related to shopping
49	Other household care		

5	Family and Household Member Care		
51	Caregiving for children under 10	511	Physical care (routine care)
		512	Nursing household children
		513	Activities related to household children's education
		514	Reading to and talking with household children
		515	Playing with household children and attending household children's sport events
		516	Counseling with children's teacher or visiting school for a counseling purpose
		519	Other care
52	Caregiving for children age 10 years and above	521-529	The same as caregiving for children under 10's categories
53	Caregiving for adults who need long-term care	531	Physical care and help with daily activitiy
		532	Nursing
		539	Other care
54	Caregiving for independent adults	541	Physical care (including temporary nursing)
		549	Other care

Progress Made, But Disparities Persist: Gender Gap in Paid and Unpaid Work in Korea

The 2019 KTUS revealed enduring gender disparities in the division of paid and unpaid work, highlighting progress and ongoing challenges in achieving gender equality. While the data reflected some improvements, it also underscores the persistent imbalance in the distribution of domestic responsibilities.

In 2019, Korean women aged 19 and above spent an average of 3 hours and 13 minutes per day on unpaid work, slightly decreased from 3 hours and 25 minutes in 2014. During the same period, men increased their unpaid work by 10 minutes daily, from 46 minutes in 2014 to 56 minutes in 2019 (Figure 1). The burden of unpaid work remains disproportionately shouldered by women, indicating that progress has been modest.

The disparity is even more pronounced among parents of young children. Mothers of children under the age of 10 spent an average of six hours and 11 minutes on unpaid work in 2019, including 3 hours and 13 minutes on childcare. Fathers, by contrast, spent 1 hour and 44 minutes on average per day on unpaid work, with only 1 hour and 2 minutes dedicated to childcare. Compared to 2014, mothers have reduced their unpaid work by 26 minutes, while fathers have increased theirs by 25 minutes (Figure 2). Although these shifts reflect a move toward more equitable sharing of responsibilities, the overall division of labor remains heavily skewed.

The disparities persist even in dual-earner households, where both partners are employed. In 2019, husbands spent 5 hours and 50 minutes on paid work, while their wives spent 4 hours and 37 minutes. When it comes to unpaid work, the gap widens significantly—husbands contributed only 54 minutes per day, whereas wives spent 3 hours and 7 minutes, more than three times the amount of their husbands (Figure 3). This imbalance highlights many women's dual burden, balancing professional and domestic responsibilities.

These statistics from the 2019 KTUS illustrate that while there have been improvements in the distribution of unpaid and paid work between genders, the disparities are still significant. The data underscores the need for continued efforts to address these imbalances and support policies that promote greater gender equality.

FIGURE 1. OVERALL GENDER GAP IN PAID AND UNPAID WORK TIME, 2014 AND 2019

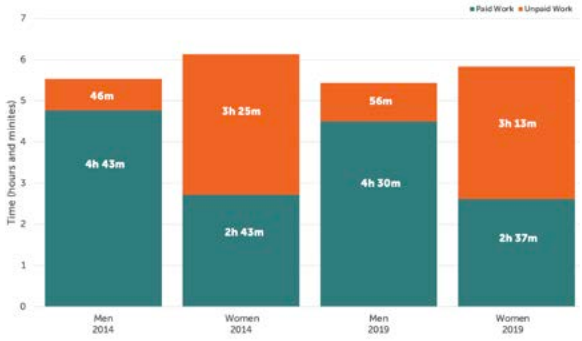

FIGURE 2. UNPAID WORK AMONG PARENTS OF YOUNG CHILDREN AGED BELOW 10, 2014, 2019

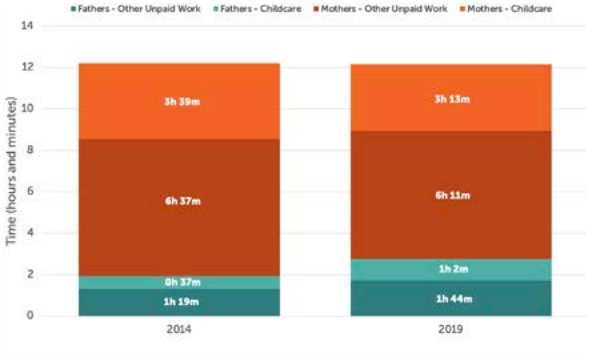

FIGURE 3. TIME SPENT ON PAID AND UNPAID WORK IN DUAL-EARNER HOUSEHOLDS, 2019

ACHIEVEMENTS AND FACILITATING FACTORS IN THE USE AND INTEGRATION OF TIME USE DATA IN POLICYMAKING

Since the 2000s, South Korea has experienced rapid demographic changes, including a significant drop in the total fertility rate from 1.48 in 2000 to 0.72 in 2023. This demographic shift prompted the Korean government to implement various care and gender policies (Appendix I, II). Time use data became increasingly important in these policy developments as it is the only comprehensive source for measuring and estimating unpaid work.

According to the Data-to-Policy framework developed by Data2X (Buvinic and King, 2018), the impact of data on policy can be either direct or indirect. Direct impacts occur when data plays an instrumental role in changing policies. Indirect impacts arise when data influences the understanding or conceptualization of policy issues among stakeholders and the general public, often through media dissemination, research reports, and public discourse. While it is challenging to attribute direct policy changes in Korea to time use data, there are several policies where time use data has likely played a significant role, especially in terms of justification and providing rationale. Over time, time use data has had a substantial indirect influence on policymaking, providing critical insights that have helped to shift both the public and policymakers' mindsets. The following sections illustrate how time use data has influenced specific policy areas in Korea, and the achievements and facilitating factors in its use and integration.

Examples of Achievements in the Use and Integration of Time Use Data in Policymaking

ADVANCING WORK-LIFE BALANCE AND GENDER EQUALITY POLICIES

One of the areas where time use data has been instrumental is in shaping policies aimed at improving work-life balance (work-family balance) and promoting gender equality. The continued dissemination of time use data findings through research publications and media (Appendix IV, V) effectively highlighted the issue of gender disparities in household work and caregiving responsibilities, fostering a broader societal understanding and support for policies aimed at reducing and redistributing the burden of unpaid work. As one interviewee noted, "The findings from time use data showed numerically what we've been intuitively feeling about the gendered division of labor, often with sensational numbers, which resulted in raising awareness" (Interviewee B). This increased awareness and South Korea's low fertility and population aging crisis, laid the groundwork for developing work-life balance and gender equality policies. In particular, it led to the creation of policies addressing the household and childcare burdens faced by dual-income families.

An example of the rather direct influence of time use data can be seen in the 3rd and 4th Basic Plan for Low Fertility and Aging Society (2016-2020, 2021-2025), announced by the Presidential Committee on Aging Society and Population. For instance, in the 4th Basic Plan, outcomes from the 2019 KTUS that demonstrate substantial disparity in unpaid work among dual-earner couples provided a strong rationale to set policy direction to enhance gender equality, work-family balance, and better childcare support. Similarly, in the 3rd Gender Equality Basic Plan (2023-2027) by the Ministry of Gender Equality and Family, time use data provided empirical evidence to use the maternal and paternal protection schemes better and reduce the long-paid work hours to increase men's participation in unpaid care work, emphasizing that women in dual- income households spent more than three times on household labor compared to men.

These policy directions subsequently led to enhanced parental leave policies (Appendix II), including measures to promote a more equitable sharing of childcare responsibilities between men and women. For example, the '3+3 Parental Leave Policy' that was introduced in 2022 allowed for special provisions (e.g., 100 percent of the regular salary for the first three months and 80 percent of the regular salary for the additional 3 months) when both parents use parental leave either concurrently or sequentially for children under 12 months.[1] Also, Korea's National Assembly approved a bill in February 2018 amending the Labor Standards Act (the 'LSA'), Korea's main employment law statute by reducing the weekly paid work hours from maximum 69 to 52 hours to improve work-life balance. More supportive childcare policies, such as the expansion of public daycare centers and workplace childcare facilities and family care leave that can be used for up to 10 days, were also introduced.[2]

RECOGNITION AND VALUATION OF UNPAID WORK

Another important contribution of time use data is its role in recognizing and valuing unpaid work, which has traditionally yet to be accounted for in economic statistics. The regular collection and analysis of Korean Time Use Survey data has been crucial in building the

1 In 2024, this has been updated to '6+6 Parental Leave Policy', which provides 100 percent of the regular salary for 6 months for concurrent or sequential utilization of parental leave for children aged under 18 months.

2 For examples of gender and care policies, see Appendix I.

Household Production Satellite Account,[3] which measures and monetizes unpaid work, such as cooking, cleaning, and childcare. By highlighting the substantial economic value of these activities, the Household Production Satellite Account has made the significant contribution of unpaid work to the national economy visible, influencing economic policies and frameworks. For instance, according to Statistics Korea (2021), in 2019, the economic value of unpaid household labor was estimated at 490.9 trillion KRW, representing 25.5 percent of nominal GDP. This value marks a 35.8 percent increase from 2014. On a per capita basis, the value of unpaid household labor in 2019 was 9.49 million KRW, a 33.3 percent increase in five years. Gender disparities remain evident, with the per capita value of unpaid household labor for men at 5.21 million KRW (a 49.6 percent increase) and for women at 13.8 million KRW (a 27.9 percent increase).

Although its impact is often indirect, the visibility of unpaid labor's economic value has been instrumental in raising awareness among policymakers, prompting discussions about the need for more inclusive economic policies that recognize unpaid labor. For instance, the 2019 valuation of household labor at 490.9 trillion KRW, as reported in the Household Production Satellite Account, became a significant topic during the 2022 local elections, with the proposal of a household labor allowance gaining attention as a critical policy idea. In Gwangju Metropolitan City, this valuation has led to detailed research into eligibility criteria and payment structures, with legislative efforts now underway to potentially establish the allowance. Interviewee A stated, "These statistics have heightened the recognition of the value of unpaid household labor. They are not only initiating discussions in local governments but are also referenced in various areas, such as recalculating the value of housework in divorce settlements, private insurance, and discussions on updating criteria for the national pension, alongside efforts to develop concrete legal and policy measures."

Like the motivation behind initiating KTUS, Korea's adoption of the Household Production Satellite Account was influenced by the increasing recognition and emphasis on the value of non-market household work by international organizations such as the UN. The UN has recommended the adoption of alternative household production satellite accounts to complement traditional economic indicators. Additionally, implementing such accounts in other countries, such as France, Finland, Switzerland, the UK, Canada, and Japan, also motivated Korea to develop its satellite account (Statistics Korea, 2018).

The National Time Transfer Accounts (NTTA) is another significant application of KTUS data. The Korean NTTA, published for the first time in June 2023, was developed to analyze the age- specific distribution of the production, consumption, and transfer of unpaid household labor using 2019 KTUS data. KTUS data is crucial in building NTTA as it provides detailed information on how individuals allocate their time across various activities. Household survey data is then used to assess the production and consumption patterns across different age groups and genders.

In this way, NTTA illustrates the distribution of lifecycle deficits and surpluses that arise from the difference between the consumption and production of unpaid work, and the flow of resources used to offset these deficits and surpluses by gender and generation. For instance, the NTTA statistics for 2019 revealed that Korean men had a lifecycle deficit of 91.6 trillion KRW in unpaid work, while women had a surplus of the same amount. Children (0-14 years) were found to have

3 The Household Production Satellite Account is constructed using detailed data from time use surveys. This process involves selecting specific unpaid activities from the time use data, estimating the time spent on these activities, and assigning a monetary value based on equivalent market wages. By applying these values, the account translates unpaid labor into economic terms providing a more comprehensive picture of national productivity and economic health. In Korea, the Household Production Satellite Account has been calculated using data from 1999, 2004, 2009, 2014, and 2019.

the most significant deficit of 131.6 trillion KRW in unpaid work, while older adults (65+ years) had a small surplus of 3.5 trillion KRW (Statistics Korea, 2023).

These detailed statistics enable policymakers to design and evaluate policies related to social spending, childcare support, and other measures to address challenges posed by rapid demographic changes, such as ultra-low fertility. An example of NTTA's practical application is highlighted by Interviewee E, who stated, "There have been policy inquiries about using NTTA to create informal care policies. For example, this statistic was used as a basis when determining allowances for grandmothers taking care of grandchildren. It helps understand the value of grandmothers' caregiving contributions and provides a foundation for policy development."

INITIATIVES BY LOCAL GOVERNMENTS

There has been a growing awareness of the value of care work among local governments in recent years, leading them to introduce various initiatives to provide allowances for household labor. As previously mentioned, Gwangju Metropolitan City is in the process of implementing a household labor allowance to recognize and socially distribute the value of unpaid domestic work. Specifically, Gwangju is developing a "Gwangju-style household labor allowance model," targeting the 40-59 age group—a demographic often overlooked in other policy subsidies within the city. The development of this model has been significantly influenced by the economic contributions of unpaid labor, as highlighted by the Household Production Satellite Account. Additionally, the detailed data from the Time Use Survey has also been instrumental in designing this model.

Interviewee A noted, "The Women's Policy Department in Gwangju City researched the feasibility and implementation plans for a household work allowance system. This system aims to recognize the value of household labor and, when discussing its implementation, I used time use data analysis results to show how much more household labor women perform. Similarly, Gyeonggi Province is exploring ways to enhance the social importance and value of unpaid household labor. These initiatives have been greatly influenced by time use data, which concretely illustrates unpaid work time."

Other local governments are also implementing policies recognizing the value of care work. For example, many local governments, including Seoul, Gyeonggi, Gwangju, Gyeongnam, and Busan, are adopting the grandparents' allowance policy. The Seoul Metropolitan Government, for instance, provides an allowance of approximately KRW 300,000 per child to grandparents or other relatives who care for children for more than 40 hours per month. The time use data has contributed significantly to these initiatives, providing both the background and motives, and the basis for estimating and determining the criteria and conditions for such measures.

Facilitating Factors

The integration of KTUS data into policymaking in South Korea can be attributed to several key facilitating factors.

HIGH-QUALITY DATA

Policymakers and data experts we interviewed cited high quality, concrete details, and reliability of time use data as advantageous factors in its effective use for policy development. Interviewee A noted, "The Time Use Survey provides detailed insights into time use patterns by age, employment status, and presence of children, which significantly enhances the credibility of the results. When I was discussing policies with the local government, demonstrating the difference in the average household work time across Korean cities and districts was highly effective."

ENABLING ENVIRONMENT: COUNTRY CONTEXT

The relevance of data for policymaking is influenced by the overarching national context, including the demographic, economic, and social challenges specific to the country (Buvinic and King, 2018). South Korea's demographic challenges, including a rapidly aging population and declining fertility rates, have created an urgent need for policies that support work-life balance and gender equality. The use of time use data in policies, especially since the 2000s, is closely related to this context. Policymakers and data and gender experts we interviewed acknowledged that as the care provision and work-family balance became important policy agendas, time use data came to be noticed as a crucial reference for policy as "a unique source that concretely shows how time allocation and work-life balance have changed over the long-term in Korean society" (Interviewee D). Additionally, the country's sensitivity to international pressures and commitments, such as those from the UN, OECD, and other global organizations, is one of the influential factors that pushed for the adoption and use of comprehensive time use data.

CONTINUED DISSEMINATION AND EFFORTS TO WORK WITH STAKEHOLDERS

The dissemination of time use data findings through research publications and media has played a critical role in raising public awareness about gender disparities and the value of unpaid work. This media attention has helped build public support for policies addressing these issues. One interviewee noted, "The issue of inequality in unpaid work has been constantly published and emphasized in Korean media, so that even the general public knows well how many hours women spend on household work compared to men" (Interviewee G). Efforts to engage and support stakeholders such as researchers and policymakers, are worth noting. Interviewee H recalled, "For better utilization, we (Statistics Korea) have made explanatory materials for complex data to aid understanding and offered tailored data tables when requested by stakeholders." Interviewee C explained her efforts to persuade policymakers by providing the outcome of her analysis and building networks: "When we had a goal to formulate a policy, we meticulously analyzed the specific data, sent the results to the policymakers, persuaded them together, supplemented their inquiries with additional information, and discussed the findings together. Through this process, we worked hard to ensure that the results of data analysis were reflected in the policy." Efforts from individuals such as Interviewee C, who are committed to gender equality and know the value of having hard to collect time use data have been important in disseminating findings with key stakeholders.

ENHANCING THE USE OF TIME USE DATA IN POLICYMAKING: CONSTRAINTS AND OPPORTUNITIES

The achievements in the previous section underscore the value of time use data for informing policies in South Korea. However, several constraints have limited its broader impact and effectiveness, preventing its full potential in policymaking from being realized. This section examines the key challenges that have hindered the effective use of time use data and explores opportunities and lessons learned to enhance its use in policy development.

Data-Related Challenges

Through interviews with government officers who collected and worked with KTUS, the following challenges were identified:

Challenges Due to Detailed Data Collection and Coding Complexity: Time use diaries require recording activities at 10-minute intervals throughout the day, along with other contextual variables such as location and the presence of others. Recent versions also require recording

ICT use. While this detailed information is a unique advantage of time use data, it demands considerable effort from respondents and data collectors. Interviewers noted that time use data has a reputation for being particularly challenging to collect, deterring participation and cooperation from local offices and surveyors. Accurate recording and classification of each activity require extra vigilance from surveyors to maintain data reliability.

Difficulties with In-Person Surveys: With the rise of dual-income and single-person households, conducting in-person interviews has become increasingly difficult. Entry into such households is often challenging, and coordinating schedules can be problematic. Privacy concerns and respondents' reluctance to participate in face-to-face interviews further hinder data collection efforts.

Infrequency of Time Use Data Collection: The five-year interval between time use data collections is seen as too infrequent. For instance, the COVID-19 pandemic was not captured in KTUS, missing significant shifts in time use patterns, especially regarding care provision. Policymakers and researchers argue that a shorter interval, such as every two years, would make the data timelier and more relevant for policy development. Interviewee F noted, "Collecting time use data every 5 years hinders data utilization in policy development. It also negatively affects its visibility. Other policies with more frequent data collection cite recent figures, while the most recent time use data available for use is from 2019, which affects its impact and usability."

Insufficient Recording of Concurrent Activities and Contextual Information: Simultaneous activities and contextual information, such as the presence of other people (especially children or the elderly), are important features of time use data. These factors help in identifying and measuring unpaid work, which often involves supervision and multitasking. However, such information is often underreported, and interviewees expressed concern that this trend is more noticeable in recent surveys, potentially leading to inaccuracies in the data.

Lack of Non-Time Use Variables: Researchers pointed out that the insufficient inclusion of demographic, socio-economic, and outcome variables limits the policy use of time use data. While time use data provides rich information about how people use time, there is not sufficient information about wages, types of occupations, and other variables that can be used as outcome measures. Consequently, even though time use data yields information on time use, ministries, such as the Ministry of Labor, often rely on other data sources like the Labor Force Survey or Business Survey to design employment policies.

Possible Solutions to Data-Related Challenges

These challenges are not easy to tackle, as they are common to most survey data, and time use data's complexity adds to the difficulty. However, this complexity provides valuable information that should not be sacrificed. Almost everyone we interviewed agreed that more frequent data collection would be beneficial. Still, the high cost—both financial and human—hinders this.

One suggested solution is technological innovation in data collection, making it less burdensome for respondents and more efficient for surveyors. Interviewee B argued, "This is a difficult survey, so we should consider adopting new technology. For example, we can use microphones in smartphones to record activities using voice. Modern technology makes voice recognition and automatic coding easy. Such innovations can reduce costs and logistical challenges associated with in-person surveys. They should allow more frequent data collection, providing timelier data."

In line with this, the International Labor Organization (ILO) has developed a 15-minute light time use module with 40 pre-coded activities, designed to integrate with labor force surveys. A possible approach could be to conduct a full time use data survey every five years while incorporating the ILO's light module into more frequent major surveys, such as the Labor Force Survey. Other technological innovations, such as the Extended Light Digital Diary Instrument (ELiDDI) tool developed by the Centre for Time Use Research (CTUR) and the self-administered smartphone-based pictorial time diary (TimeTracker app) developed by the World Bank, can also serve as useful references.

Additionally, linking time use data with other national survey data that includes useful demographic and socioeconomic variables could enhance usability by allowing for more extensive and in-depth analysis. Lastly, increasing the budget for better promotion and awareness campaigns is essential. Actively promoting the importance and value of the data can improve its visibility and encourage greater participation.

Data Use-Related Challenges

Data and gender experts and policymakers we interviewed believed that time use data has much more potential for policy development than its current status. In particular, the gap between public perception and policy implementation, limited capacity for data analysis and policy development, and lack of exploration of various policy themes were identified as significant constraints.

Gap Between Public Perception and Policy Implementation: Despite increasing public awareness and advocacy for recognizing unpaid care work, policy responses have been slower and less comprehensive. Interviewee E reported that while there have been frequent inquiries and requests from the National Assembly or the Ministry of Economy and Finance about National Transfer Accounts (NTA), queries or requests about NTTA were rarer, especially concerning fiscal policy or macroeconomic policy. Interviewee A referred to this phenomenon as 'the policy gap.' Demonstrating gender disparities and other phenomena is meaningful. Still, it is necessary to take a step further and approach the issue with a framework and purpose, using data to drive specific changes and implement policies effectively.

Limited Capacity for Data Analysis: One interviewee shared her experience of helping colleagues use time use data in policy development, noting that the complexity and vastness of the data can be overwhelming. "We collected all the time use data, but the question was what it meant and how to use it. If you don't know what to do with the data, time use data can become overwhelming due to its vastness, much like getting lost in a maze at a department store." (Interviewee D) This highlights the pressing need for capacity-strengthening initiatives to enhance stakeholders' ability to effectively analyze and interpret time use data. Even those who initially intended to use the data often struggled with its complexity, leading them to rely on secondary sources rather than conducting primary analysis. Experts noted that, "while other data can be easily analyzed, time use data requires additional learning to utilize its potential fully." They also pointed out that despite its rich potential, time use data is often limited to being analyzed and used merely about how much time is spent on something, without considering the complex contextual information (Interviewee G).

Limited Themes and Usages Despite Its Potential: Time use data can be used in exploring emerging policy themes such as gig economy workers, platform labor, and the impact of long-term care insurance on unpaid work. Interviewee B stated, "There is an increasing number of people holding multiple jobs simultaneously. As employment relationships become more

complex, with many short-term and concurrent jobs, time use data can be effectively used to capture these phenomena and develop policies for these workers." Interviewee A also mentioned that time use data can be used to "recognize the value of household labor in pension systems and create policies to support caregivers, such as respite care systems." More importantly,time use data can serve as a valuable monitoring tool, providing ongoing data to assess the existing policies and identify areas for improvement. However, there has been a lack of initiative to explore these diverse themes, limiting the scope of time use data's application in policymaking.

Solutions to Use-Related Challenges

It is essential to present time use data with clear objectives and framing to bridge the gap between public perception and policy implementation. Policymakers require data that highlights issues and provides actionable insights and evidence to support policy decisions. Ensuring that time use data is effectively framed to address specific policy questions and challenges is crucial. For example, time use data played a significant role in improving and expanding parental leave policies in Korea. The Gwangju Metropolitan City initiative for household labor allowance cases shows the importance of clear policy goals using the outcomes of time use data analysis.

Furthermore, enhancing the capacity of policymakers, researchers, and stakeholders through regular training sessions and workshops can significantly improve the use of time use data. These sessions should cover the basics of time use data, its methodology, and practical applications, including hands-on activities for analyzing time use data, interpreting results, and integrating findings into policy recommendations. Such efforts can lower the barriers to entry for using the time use data. Interviewees also emphasized the importance of simplifying and explaining the data to aid understanding. "We have created explanatory materials to help those who find the data content difficult to understand. It would be beneficial to provide more opportunities for detailed explanations like this," noted one interviewee.

Moreover, to encourage the exploration of various policy themes, it is necessary to actively support initiatives such as symposia, grants, and seminar projects that promote the use of time use data. Creating opportunities to stimulate and attract researchers is vital. For example, organizing themed symposia and workshops can bring together experts from various fields to discuss and explore how time use data can be applied to emerging policy issues. Offering grants aimed explicitly at research using time use data can incentivize in-depth studies and innovative applications of the data. Providing funding for pilot projects and collaborative research efforts between government agencies, academic institutions and NGOs can showcase the practical applications of time use data and demonstrate its value in addressing contemporary policy challenges.

In addition, continuous engagement through follow-up seminars and projects is crucial to ensure sustained interest and development. For instance, regular workshops where researchers present their findings and discuss methodological approaches can help build a community of practice around time use data, fostering knowledge exchange and collaborative efforts.

These efforts to stimulate research and collaboration are significant for complex datasets like time use data. Similar initiatives have been successful with panel data and could be adapted to time use data to promote its use. Interviewees involved in data production emphasized the need for more research and better stakeholder collaboration. By lowering the barriers to entry and providing targeted support, these efforts can significantly enhance the use and impact of time use data in policymaking.

CONCLUSION

Time use data offers a comprehensive view of how individuals allocate their time across various activities, providing invaluable insights into daily life and work patterns, particularly in uncovering disparities in unpaid labor. It holds great potential for informing policies aimed to promote gender equality, work-life balance, and the recognition of unpaid work.

South Korea's experience with time use data provides valuable lessons for collecting and using time use data in policy development. This case study explored the motivations behind South Korea's collection of national time use data, examined the achievements and constraints in its application, and identified key factors that have facilitated or hindered its integration into policymaking.

Framing Data within Policy Goals: One of the key takeaways from South Korea's experience is the importance of aligning time use data with specific policy objectives. By framing data within the context of urgent policy needs, such as addressing demographic challenges and promoting gender equality, time use data has been instrumental in driving targeted policy changes. For example, integrating time use data in developing work-life balance policies showcases how data can be used to justify and shape effective interventions.

Ensuring High-Quality Data Collection: Despite the complexity of collecting detailed time use data, South Korea has maintained rigorous standards to ensure the reliability and comprehensiveness of the data. This commitment to high-quality data collection has been fundamental in producing robust evidence for policymaking. However, the challenges associated with the complexity and high cost of time use data have also hindered its policy application due to the infrequent data collection. This highlights the need for technological innovations to streamline data collection processes and reduce the burden on respondents.

Engaging Stakeholders: Effective dissemination of time use data findings and continuous stakeholder engagement has been crucial in building public support and awareness. South Korea's efforts to provide explanatory materials and tailored data tables have facilitated better understanding and use of time use data among policymakers, researchers, and the media. This approach underscores the importance of clear communication and collaboration in maximizing the impact of time use data.

Addressing Capacity Constraints: Enhancing the capacity of stakeholders through targeted training and resources is essential for effective data use. Korea's experience of lacking diverse analysis skills and insufficient exploration of policy areas demonstrates that regular training sessions and workshops can significantly improve stakeholders' ability to analyze and interpret time use data. Addressing capacity constraints helps realize the data's full potential is realized in policy development.

In summary, South Korea's use of time use data highlights both the potential and the challenges of integrating detailed time use data into policymaking. By focusing on clear policy goals, maintaining high data quality, engaging stakeholders, and building capacity, other countries can effectively leverage time use data to develop more inclusive and evidence-based policies. Addressing the identified challenges will further enhance the contribution of time use data to societal well-being and economic progress.

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APPENDIX 1: KEY CHANGES IN CHILDCARE POLICIES IN SOUTH KOREA (2004-2020)

YEAR	CHILDCARE POLICY/PROGRAM
2004-2005	Expansion of childcare services to all infants and young children; Legalization of local child centers; Introduction of after-school care programs and elementary school care classrooms.
2007	Introduction of the Childcare Support Service with part-time home-based care services.
2008	Introduction of reduced working hours for childcare (for workers with children under 3 years old as an alternative to parental leave).
2009	Introduction of childcare vouchers; Introduction of childcare allowance.
2010	Introduction of full-day infant care services for dual-income families.
2011	Expansion of childcare allowance support to a wider age range; Reform of parental leave benefits to a proportional system.
2013	Universal childcare fee support for all children aged 0-5; Childcare allowance for children not attending daycare.
2014	Universalization of after-school care for elementary students; Expansion of parental leave eligibility to children up to age 8; Introduction of 'Daddy Month' for parental leave with special benefits.
2017	Support for extended full-day care for children in dual-income families.
2018	Announcement of the expansion of national and public daycare centers; Introduction of comprehensive care system for elementary students; Introduction of child allowance.
2019	Expansion of child allowance - Universal child allowance for all children under age 7.
2020	Allowance for both parents to take parental leave simultaneously; Removal of restrictions on splitting reduced working hours for childcare; Introduction of family care leave for up to 10 days for urgent childcare needs.

APPENDIX 2: KEY CHANGES IN PARENTAL LEAVE POLICY IN SOUTH KOREA

YEAR	CHANGES IN KOREAN PARENTAL LEAVE POLICY
1988	Introduction of unpaid leave for up to one year, including maternity and postpartum leave, for working women with infants under one year of age.
1995	An exception was made to extend parental leave to fathers, allowing the spouse of a working mother to take leave instead. Extension of parental leave to be taken within one year of the child's birth, regardless of whether it is before or after childbirth.
2001	Introduction of a monthly allowance, and expansion of parental leave eligibility to all workers, regardless of gender. However, both spouses were not allowed to take parental leave simultaneously.
2006	Expansion of parental leave eligibility to cover workers with children under three years of age.
2008	Introduction of the option to split parental leave into separate periods.
2010	Expansion of parental leave to cover workers with children under the age of six who have not yet started elementary school.
2011	Transition to a proportional payment system for parental leave benefits, providing 40% of the monthly ordinary wage (with a minimum of 500,000 KRW and a maximum of 1,000,000 KRW). Additionally, 15% of the parental leave benefit was set aside as a deferred payment, to be received after returning to work and remaining employed for at least six months.
2014	Expansion of parental leave eligibility to cover workers with children under the age of eight or in the second grade of elementary school or below.
	Introduction of a special parental leave benefit (Daddy Month): When both parents take parental leave sequentially for the same child, the first month of leave for the second parent is paid at 100% of the ordinary wage, with a maximum of 1,500,000 KRW.
2015-2019	Increase in parental leave benefits, and other amendments.

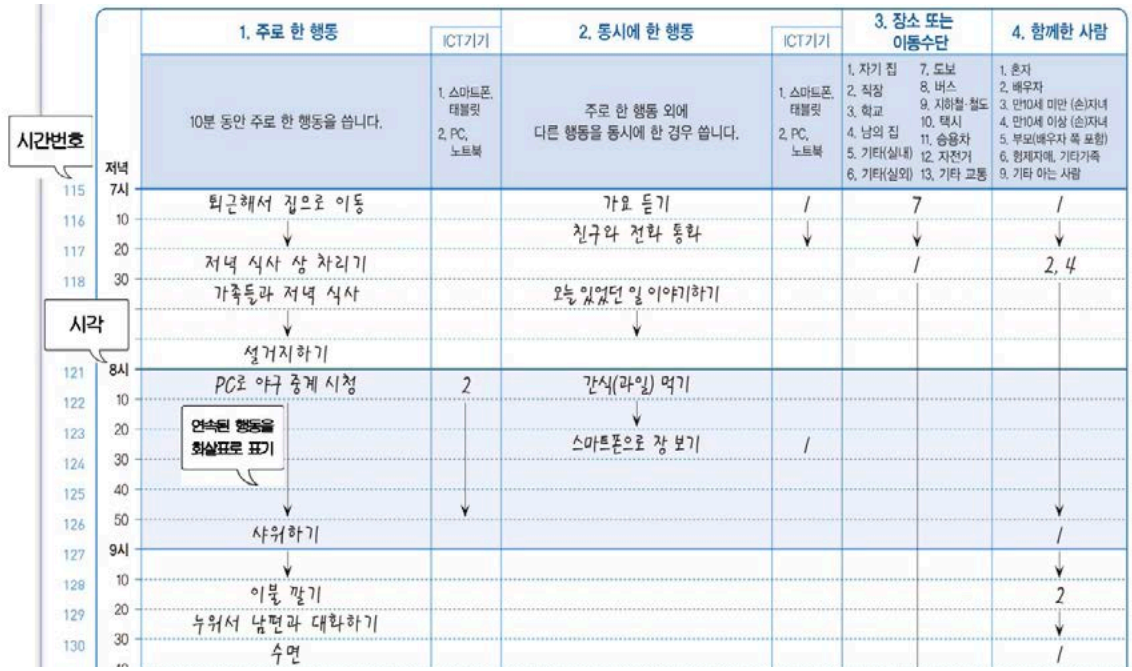
2020	Introduction of the option for both spouses to take parental leave simultaneously. Expansion of the number of times parental leave can be split to two periods.
2022	Increase in parental leave benefits, Introduction of the '3+3 Parental Leave System' for parents with children under 12 months old, allowing both parents to take parental leave either simultaneously or sequentially. For the first three months, the benefit is 100% of the monthly ordinary wage (with a minimum of 700,000 KRW and a maximum that varies depending on the duration of parental leave, capped at 2,000,000 KRW, 2,500,000 KRW, or 3,000,000 KRW). From the fourth month onward, the benefit is 80% of the monthly ordinary wage (with a minimum of 700,000 KRW and a maximum of 1,500,000 KRW).
2024	Enhanced parental leave benefits if both parents (either simultaneously or sequentially) take leave within the first 18 months after the child's birth. For the first six months, the cap on each parent's parental leave benefit is increased, providing a combined maximum of up to 39 million KRW for both parents over the six-month period (Effective January 2024).

APPENDIX 3: 2019 KOREAN TIME USE SURVEY (KTUS) ITEMS AND DIARY EXAMPLE

2019 KTUS Survey Items by Sector (Statistics Korea, 2019)

SECTOR	SURVEY ITEM
Household-related Information	1. Name, 2. Relationship to Household head, 3. Sex, 4. Date of Birth, 5. Marital Status, 6. Reason for Care Needs, 7. Enrollment Status, 8. Type of Daytime Care, 9. Separate Household Status and Reason, 10. Type of Residence and Total Living Area, 11. Occupancy Type, 12. Household Income
Individual-related Information	1. Time Pressure and Desired Time Reduction, 2. Degree and Reason of Fatigue After Work, 3. Subjective Satisfaction, 4. Leisure Satisfaction, 5. Household Chore Satisfaction, 6. Perception of Gender Roles, 7. Education Level, 8. Employment Status and Reason for Not Working, 9. Industry and Type of Business, 10. Occupation, 11. Employment Status and Type of Employment, 12. Primary and Secondary Job Hours, 13. Regular Holidays, 14. Personal Income
Time Use Diary	1. Main Activity, 2. Use of ICT Devices during Main Activity, 3. Concurrent Activity, 4. Use of ICT Devices during Concurrent Activity, 5. Location or Mode of Transportation 6. Person Accompanied, 7. Mood/Feeling about Time Use, 8. Health Status, 9. Working(or School Attendance) Day, 10. Visitors on the Day of Time Use Diary Recording, 11. Person Recording the Time Use Diary

EXAMPLE OF 2019 TIME USE DIARY



TRANSLATION OF THE EXAMPLE TIME DIARY ABOVE

	Main Activity	ICT Devices	Concureent Activity	ICT Devices	Location or Transportation	Person Accompanied
		1.Smart phone, tablet etc. 2. PC, laptop etc.		1.Smart phone, tablet etc. 2. PC, laptop etc.	1. Home 2. Workplace 3. School 4. Other people's home 5. Other (indoors) 6. Other (outdoors) 7. Walking 8. Bus 9. Subway, train 10. Taxi 11. Car 12. Bicycle 13. Other transportation	1. Alone 2. Spouse 3. Child(ren) aged below 10 4. Child(ren) aged 10 or older 5. Parent(s) (including in-law(s)) 6. Sibling(s) and other relative(s) 7. other aquintance(s)
7PM						
7:10PM						
7:20PM						
7:40 PM						
7:50 PM						
8 PM						
8:10 PM						
8:20 PM						
8:40 PM						
8:50 PM						
9 PM						

APPENDIX 4: EXAMPLES OF KOREAN MEDIA USING KTUS

	Date	Title	Media Agency
Survey Results Use	24.3.14	Even the Construction Worker Dons Apron and Cooks Soybean Paste Stew After Work	KBS News
	23.3.26	Approaching Storm Clouds of '69-Hour Workweeks' in Parenting Households	The Kyunghyang Shinmun
	22.5.30	[Cover Story-Time Property Part 1] Labor Excluded from the 'Life with Dinners'	Maeil Labor News
	22.1.25	Single Woman Households: Decreasing Unpaid Labor Time with Age, Increasing Burden of Household and Care Responsibilities	Daily Pop
	22.10.3	Daughters Who Became Their Parents' Parents: The reality of being the Eldest Daughter (Part 3)	Kuki News
	22.1.20	Single Female Households Spend More Time on Self-Care and Rest Than Males	Yonhap News Agency
	20.8.7	[Newspost Graphic] Young Adults Slpe while Elderly Watched TV and YouTube	Newspost
	20.7.31	The Gender Gap in Household Chores Reduced by Only 22 Minutes Over 5 Years	The Seoul Shinmun
	20.7.30	[Time Use Survey] Women Spend 2 Hours and 17 Minutes More on Household Chores Than Men	Aju Press
	18.5.1	Inequality in Unpaid Labor within Families and Social Policies	People's Solidarity for Participatory Democracy
	16.2.23	[Inequality Revealed in Time Use Survey | Part 1: Inheritance through Education]	Naeil Shinmun
	16.2.24	[Inequality Revealed in Time Use Survey | Part 2: Polarization in Health Management]	Naeil Shinmun
	10.3.30	[2009 Time Use Survey] 70% of Citizens Claim "Not Enough Time"	The Korea Economic Daily
	05.12.27	[Time Use Survey] The Monthly Value of Full-time Homemakers' Household Chores: 1.11 Million Won	The Kukmin Daily
	05.5.26	Statistics Korea's 2004 Time Use Survey... Koreans: Working Less and Resting More	The Kukmin Daily

Press Release on Time Use Survey	24.3.15	Korean Daily Life: Statistics Korea Conducts Time Use Survey in 2024	Newsis etc.
	21.8.9	Statistics Korea Hosts '2021 Time Use Survey Online Seminar'	Aju Press etc.
	19.7.15	Statistics Korea Conducts 2019 Time Use Survey...Results to be Released in the Second Half of Next Year	Edaily etc.
	15.12.3	Statistics Korea Hosts International Workshop on the 2015 Time Use Survey	Etdoay etc.
	09.9.7	Statistics Korea's 2009 Time Use Survey	Seoul Economic Daily etc.

APPENDIX 5: EXAMPLES OF JOURNAL ARTICLES USING KTUS, PUBLISHED IN SOUTH KOREA

Date	Title	Author	Name of Journal
24.2	How do Korean Married Couples with Children Divide Labor between Work, Household Chores, and Family Care? - Analysis of Work-Family Balance Subtypes and Associated Factors Using Latent Profile	Mi Young An & Jieun Choi	Korean Journal of Social Welfare
23.9	Daily Time Use of Dual-earner Couples with Young Children and Their Work-Life Balance in Korea from 2009 to 2019	Sarah Rhee & Ki Soo Eun	Journal of International Area Studies
23.6	A Study on Care Time for Children According to the Socioeconomic Status of Dual-career Couples	Hye-Jeong Yang & Sangjun Kang	The Journal of Humanities and Social Sciences 21
23.3	Changes and Influencing Factors in Paid-Unpaid Work Hours in Couples with Minor Children, 1999-2019	Hye Jung Lee & Da Young Song	Korean Social Policy Review
23.2	Who are the workers who go back to work after work?	Hye Jin Noh	Korean Social Security Studies
22.3	Night Worker's Leisure Time: An Analysis of 2019 Korean Time Use Survey	Woo-Jung Min & Yun-Suk Lee	Korea Journal of Population Studies
22.4	Women and Men's Care Work and Labor Market Participation in South Korea	Mi-Young Ahn	The Journal of Asian Women
22.3	Full-time White Collar Wage Earners' Overtime Work After the Regular Hours in Korea: A Comparative Analysis of 2014 and 2019 Korean Time Use Survey	Jong Ho Kim & Yun-Suk Lee	Korean Social Policy Review
21.5	Single Parent Time Poverty as Seen Through Time Use Survey	Kyung Hye Noh	Gyeonggi-do Women & Family Foundation
20.6	The Effects of Housework, Childcare and Paid-Work Time on Sleep Time for Dual-earner Couples with Preschool Children	Hyung An Jeong & Yoon Seok Lee	Korea Journal of Population Studies
18.2	A Typology of Household Work Times in Korea: A Sequence Analysis Combined with Time Diaries of Married Couples	Mira Cho	Korean Journal of Social Welfare
18.1	Concepts and Measurements of Parental Care Work Using Korean Time Use Survey	Jayoung Yoon	Women's Studies Review

17.12	A study on unpaid work time of Korean married men: Time Use Survey from 1999 to 2014 data	Jin-wook Kim & Jin Kwon	Journal of Korea Social Welfare Research
17.1	Housework burden and Women's replacement behavior in dual-earner families	Jinwoo Lee & Hyunsup Geum	Journal of Family and Culture
17.1	Relative Resources and Gender Stratification within Family in South Korea	Mi Young An	Journal of Women and Economics
16.12	Employment Status and Gender Division of Labour at Home among Dual Earner Couples in South Korea	Mi Young An	Economy and Society
16.3	Determinant Factors of Time Allocation within Married Couples	Sung-Ho Cho	Korean Journal of Labor Economics
15.4	Time Allocation and Work-Life Balance among Korean Married Women: Comparison with 7 nations in MTUS (Multinational Time Use Studies) Data	SeungEun Cha, Ki-Soo Eun & Jiweon Jun	Statistics Research
15.1	The Effects of Wives' Income Contribution on Their Housework Time	Ik Hyun Joo	Social Science Research Institute, Yonsei University
14.6	Changing Differences by Educational Attainment in Fathers' Family Work- Domestic Labour and Child Care	Mira Cho & Sookyung Yoon	Korean Journal of Family Welfare
14.1	Time Use and Psychological Characteristics of Part-time Female Paid Workers by the Typology of Work-Life Balance	Chengyeul Park, Young Mi Sohn & Sae Sook Oh	Journal of Leisure Studies
14.1	The Gendered Division of Housework in Dual-Earner Households in Korea	Chang soon Lee	Social Science Journal
11.12	Gender Unpaid Labor Participation and National Policies in OECD Major Countries: Focusing on Time Use Survey Data	Moon-Geum Son	Report of Seoul Foundation of Women and Family
11.1	Unpaid work and leisure time shared with dual-earner couples: Focusing on Statistics from Time Use Survey	Moon-Geum Son	Journal of The Korean Official Statistics
10.12	Daily Life and Family Shared Time of Dual-Income Couples: A Focus on Time Use Survey Data	Moon-Geum Son	Report of Seoul Foundation of Women and Family
10.4	Gender Differences in Mobility Patterns among Seoul Citizens: A Focus on Time Use Survey Data	Moon-Geum Son	Korea Journal of Population Studies

09.12	Household Division of Labor for Married Men and Women in Korea	Ki Soo Eun	Korea Journal of Population Studies
07.4.	Housework and Economic Dependency among Dual-Earner Couples in Korea: Economic Exchange or Gender Compensation?	Sujeong Kim & Eunji Kim	Korea Journal of Sociology
07.1	Analysis of The Time Use of Working Women and Housewives Having Preschool Children - Centering on the Data of The Time Use Survey conducted by the National Statistical Office in 2004	Yeong-Hwan Lee & Soo-Jae Lee	Journal of Home Economics Research
05.10	An Empirical Study on Unpaid Work Time of Dual-Earner Couples: Focusing on Statistics from Lifetime Use Survey	Moon-Geum Son	Issues in Feminism
05.8	An Empirical Study on the Dual Burden of Married Working Women: Testifying the Adaptive Partnership, Dual Burden and Lagged Adaptation Hypotheses	Jin-Wook Kim	Korean Journal of Social Welfare

APPENDIX 6: LIST OF INTERVIEWEES ORGANIZATIONAL AFFILIATIONS

- Economic Statistics Bureau, Statistics Korea
- Korea Employment Welfare Pension Institute
- Korea Institute Child Care and Education Research
- Ministry of Employment and Labor (Former)
- Social Policy Research Division, Korea Labor Institute
- Social Statistics Bureau, Statistics Korea
- Statistics Korea (Former)
- University of Suwon