Summary Report of Update on Labour-Related Databases:

Their Existence, Utilization, and Future Directions

Based on a Seminar on Labour-Related Databases: Their Existence, Utilization, and Future Directions

A Collaboration Between:

Labour Research and Coordination Research Unit (CU-Collar)
(College of Population Studies & Social Research Institute, Chulalongkorn University)

The National Labour Research Center, Ministry of Labour (NLRC)

The Global Labour Organization (GLO), South-East Asia, and Thailand Chapter

For the Week of National Labour Day and International Workers' Day

2024

รายงานสรุป
ฐานข้อมูลที่เกี่ยวข้องกับแรงงาน: ที่มีอยู่ การนำไปใช้ และแนวทางต่อไป

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(NLRC)

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This summary report in Thai and in English at
https://www.cu-collar.org/labourdata

Documents can be found at https://shorturl.at/e2VRO
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Preface

In an era characterized by rapid technological advancements and significant socio-economic shifts, the need for robust, comprehensive, and accessible labour-related databases has never been more critical. These databases play a pivotal role in formulating evidence-based policies that effectively respond to the complexities of modern labour markets.

The "Seminar on Labour-Related Databases: Their Existence, Utilization, and Future Directions," held on May 3, 2024, was a collaborative effort between the Labour Research and Coordination Research Unit (CU-COLLAR), the National Labour Research Centre (NLRC), and the Global Labour Organization, South-East Asia and Thailand Chapter (GLO). This seminar marked an important step in addressing the dynamic and evolving challenges in the labour markets in Thailand and beyond.

The discussions were structured around the current state of labour-related databases and the agencies managing them, the scope and accessibility of these databases, and the utilization of data for policy-making while addressing issues related to the Personal Data Protection Act (PDPA). Each session provided valuable perspectives on how existing data can be leveraged to enhance labour research, policy formulation, and ultimately enhance decent jobs, productive jobs, and the social justice.

We were privileged to have distinguished speakers from various organizations share their expertise and experiences in utilizing labour data. Their contributions highlighted the importance of interdisciplinary collaboration and the need for continuous improvement in data governance and accessibility. This activity was suggested by CU-COLLAR advisors, 2023 – 2024, including Mr. Jarin Chakkaphark, Ms. Sirilak Chakanan, Assoc. Prof. Dr. Kiriya Kulkolkarn, Prof. Dr. Supang Chantavanich, and Assoc. Prof. Dr. Smith Boonchutima. We are grateful to the CU-COLLAR team, including Dr. Chadatan Osatis, Dr. Chonticha Asavanirandorn, and Dr. Montakarn Chimmamee for their technical contributions. Special thanks to Ms. Pichayanin Chuaynukoon, Ms. Ketchuda Rodngern, Mr Jintatat Chaiyapuck, Ms. Nalat Chillananda, and Mr. Chanthanin Saikaew for their support in organizing this event and finalizing this summary. Most importantly, we extend our deepest gratitude to all participants for their active engagement.

As we look to the future, it is clear that the successful utilization of labour-related databases will require ongoing cooperation among agencies. This seminar has strengthened a foundation for such collaboration, and we hope it will lead to meaningful advancements in labour research and policy. We look forward to continued collaboration and dialogue as we work towards creating a more informed and resilient labour market.

Ruttiya Bhula-or, Assoc. Prof. PhD.

Director, Labour Research and Coordination Research Unit (CU-COLLAR)

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Executive Summary

The seminar on Labour-Related Databases aimed to achieve several key objectives. Firstly, it sought to provide a comprehensive understanding of current labour-related databases, the agencies responsible for their maintenance, and effective utilization strategies, as well as potential research topics that can be derived from these databases. Secondly, the seminar facilitated the exchange of academic experiences related to the use of existing labour databases. This included discussions on initiating research topics, selecting appropriate databases, managing data from diverse sources, and employing various data analysis methods. Finally, the seminar aimed to promote the development and enhancement of significant research topics on labour by leveraging existing databases to their fullest potential. By addressing these objectives, the seminar aimed to foster a collaborative environment for stakeholders to share knowledge and insights, ultimately improving the quality and impact of labour research and policy development.

Session 1: Opening Remarks

The seminar began with opening remarks that highlighted the evolving and complex challenges faced by labour, including job insecurity, climate change, and the integration of AI. Emphasis was placed on the need for robust data linkages to inform evidence-based labour policies. Dr. Pannee Cheewinsiriwat, Assistant Vice President for Research Affairs at Chulalongkorn University, underscored the commitment to developing future leaders, fostering impactful research, and engaging with local and global communities. The Ministry of Labour's collaboration with the university focuses on enhancing research capacity, developing labour policies, and improving labour data infrastructure.

Mrs. Napasorn Toongsooksai, an Academic Labour Advisor at the Ministry of Labour, stressed the importance of reliable and up-to-date data for effective policymaking and decision-making. She highlighted the importance of facilitating knowledge exchange and improving labour databases to support national development strategies. Efficient databases are crucial for both public and private sectors to make informed decisions and enhance business practices.

Associate Professor Ruttiya Bhula-or, Deputy Dean at the College of Population Studies and Director, Labour Research and Coordination Research Unit (CU-COLLAR), elaborated on the seminar's focus on labour-related collaboration and research. She emphasized the comprehensive scope of "labour," including physical, mental, and intellectual resources, and the importance of developing a framework that benefits both the country and the world. The seminar's framework involved data mapping and life course data for detailed individual-level analysis.

Dr. Chonticha Asavanirandorn, a researcher at the College of Population Studies, categorized current Thailand's labour-related data into four main types: labour-related data (individual level), social and health-related data (individual level), employer-related data, and labour-related data (national level). She noted the importance of analyzing and utilizing this data to inform policymaking, improve working conditions, and enhance access to suitable jobs.

Session 2: Existing Labour-Related Databases and Agencies; The Discussion of the Scope and Accessibilities of Labour-Related Databases; and The Utilization of Labour Databases: Policy Makings and Addressing PDPA Issues

The session, moderated by Dr. Montakarn Chimmamee, began with an overview from Mr. Natthapol Hachanda, Director of the Research and Innovation Centre for Labour at the Ministry of Labour. He highlighted the role of the National Labour Research Centre (NLRC) in promoting efficient labour research and increasing qualified labour research for Thailand. He outlined the Ministry's Big Data program, emphasizing its potential through activities, including Data Lab and academic exchanges. The datasets within the Ministry of Labour span several departments, including Employment, Skill Development, Welfare and Labour Protection, and the Social Security Office. These datasets cover a wide range of information, from job seekers and foreign workers to labour inspections and social security benefits. Mr. Natthapol provided examples of how these datasets are used, such as in national workforce planning and determining hourly wages. He emphasized the importance of anonymizing personal data to comply with the PDPA.

Mr. Saratrai Watcharaporn, Director of Statistics and Information Utilization Promotion and Development Group, Forecasting Division, National Statistical Office of Thailand (Survey Data and Database Development), Office, discussed the Labour Force Survey (LFS) and other related surveys, detailing their methodologies and the types of data collected. The LFS includes extensive data on employment, wages, and household demographics, collected from a large sample size monthly and quarterly. He highlighted the NSO's efforts to make data accessible through services like the Interactive Dashboard and the Statistical Sharing Centre, which integrate data from various sources for public use.

Pol. Lt. Col. Thienrat Wichiansan, a member of the Personal Data Protection Committee, explained the PDPA's impact on data collection and utilization. He clarified that while the PDPA introduces strict penalties for non-compliance, it also allows for data usage in research, historical, or statistical contexts with proper safeguards. The PDPA mandates consent for data collection but provides exceptions for specific purposes, ensuring data protection without hindering valuable research.

The session underscored the collaborative efforts required to enhance data utilization while maintaining compliance with data protection laws. The Ministry of Labour and the National Statistical Office aim to support policy-making through accessible and well-managed databases. The discussion also highlighted the importance of anonymizing data and promoting interdisciplinary approaches to harness the full potential of Big Data for labour research and policy development. The PDPA's guidelines ensure that data can be used effectively for the public good while protecting individual privacy rights.

Session 3: Exchanging Academic Work Experience through the Use of Existing Labour-Related Databases and Future Directions of Data Utilization

The third session, moderated by Dr. Chadatan Osatis and Dr. Chonticha Asavanirandorn, emphasized exchanging academic work experience using existing labour-related databases and future directions of data utilization. The session began with experiences on how labour databases benefit research, including insights shared by the Ministry of Labour and other key organizations. For example, the Ministry of Labour highlighted its use of MOL Big Data, National Statistical Office data, and data from the National Economic and Social Development Council to study labour productivity, especially during digital transformation and post-COVID-19 recovery. This research underscores the importance of enhancing labour productivity through public and private sector cooperation.

The session also explored the experiences of other organizations, such as the Bank of Thailand (BOT) and Thammasat University, in using labour data. The BOT uses data from various sources, including the Social Security Office and National Statistical Office, to monitor employment status, job creation, unemployment rates, and income growth. They also developed new indicators during the COVID-19 pandemic to track vulnerable workers and labour mobility using mobile phone usage data. Thammasat University focused on international labour, studying the impact of foreign workers on Thai wages and unemployment, and analyzing how international migrant workers can mitigate the effects of Thailand's ageing society.

Dr. Nuttanan Wichitaksorn of Auckland University of Technology and Thailand Development Research Institute (TDRI) emphasized the importance of advanced data analysis tools and non-traditional data sources, such as job application data from JobsDB. The TDRI highlighted the need for frequent, reliable data to support labour market analysis and policy-making. They also stressed the importance of enhancing collaboration between academia and government agencies to maximize the utility of labour data.

The session concluded with suggestions for future data utilization strategies. The Ministry of Labour outlined short-term goals, including academic knowledge exchange, improved data access, and network meetings for researchers. Long-term goals involve streamlining data access, developing longitudinal studies, and enhancing policy-oriented knowledge through collaborative research. Emphasis was placed on making data more accessible, especially for studying the freelance workforce, which constitutes a significant portion of Thailand's labour market. The importance of leveraging micro-level data for deeper labour market analysis was also highlighted.

Overall, the session underscored the need for increased communication and collaboration between stakeholders, enhancing data accessibility, and utilizing comprehensive labour data for effective policy-making. The participants agreed on the importance of integrating academic and practical perspectives to address labour market challenges and improve labour productivity and quality of life for all diverse groups of labours. The seminar aims to foster ongoing dialogue and cooperation to leverage labour data for societal and economic benefits.

Next Steps

This seminar emphasized the importance of ongoing exchanges and highlighted the need for continuous stakeholder collaboration. Plans were announced for annual labour-related database seminars to be held during National Labour Week each year to foster valuable policy discussions. The proposal included strengthening a research group on labour and socio-economic issues to enhance data utility. Additionally, the necessity of continuous feedback for societal development was stressed, with a call for increased stakeholder involvement in future initiatives. This collaborative effort is expected to drive significant advancements in labour research and policy formulation, ensuring that data-driven decisions effectively address the complexities of modern labour markets.

Recommendations

Based on the post-conference analysis, the following key recommendations are made:

1. Integrating Big Data Sources with Labour Market Analysis and Promoting Data Access

Labour market analysis can provide deep insights and aid in decision-making. Advanced data analysis tools and infrastructure are essential for efficiently managing large datasets. The primary sources for policy analysis and research using microdata include (1) survey and census data from the National Statistical Office, (2) data from research project surveys or social media, and (3) government data for labour management and policy. Supporting the use of Data Labs for research and policy development, a collaboration between the Ministry of Labour and Chulalongkorn University, is crucial. Additionally, regular evaluations are needed to ensure labour data is up-to-date and effective.

2. Promoting Interagency and International Collaboration

Collaboration between government agencies, academic institutions, and international organisations is vital for advancing labour market research. Establishing networks for sharing labour market data, research findings, and best practices will foster innovation and improve policy-making. Regular joint meetings will facilitate knowledge exchange and collaborative projects. Creating a centralised database accessible to all stakeholders can enhance data sharing and collaborative research efforts. International collaboration will bring diverse perspectives and methodologies, improving research quality. Regular discussions, at least annually, are recommended.

3. Utilising Data for Policy Development and Disseminating Academic Research and Publications

Policymakers should use labour databases to identify trends. Data analysis helps assess the impact of existing policies and identify areas needing intervention. Establishing a feedback loop between researchers and policymakers will ensure research findings translate into actionable policies. Regular policy reviews using the latest data will help adapt to changing labour markets. Seminar reports and research findings should be disseminated through multimedia channels to make information more accessible to the public and facilitate the practical application of research.

Meeting Report

A Seminar on Labour-Related Databases:

Their Existence, Utilization, and Future Directions

A collaboration between

The Collaborating Center for Labour Research (CU-Collar), College of Population Studies, Chulalongkorn University

The National Labour Research Center (NLRC)

The Global Labour Organization, South-East Asia, and Thailand Chapter (GLO)

May 3rd, 2024 (8.30 a.m.–12.00 p.m.)

Online Zoom Meeting

Session 1: Opening Remarks

Associate Professor Dr. Pannee Cheewinsiriwat, Assistant Vice President for Research Affairs, Chulalongkorn University, welcomed everyone on behalf of Chulalongkorn University to the seminar on labour-related databases: their existence, utilization, and future directions. The event was organized by the Collaborating Center for Labour Research (CU-Collar) at the College of Population Studies, Chulalongkorn University, the National Institute of Social Research (NLRC), and the Global Labour Organization (South-East Asia and Thailand Chapter) to mark Thailand's National Labour Week.

She remarked on the challenges facing labour and their livelihoods as rapidly "evolving" and complex." The urgent challenges are 1) changes in work, 2) increases in job insecurity, 3) climate change, 4) evolving work landscapes, and 5) the integration of Artificial Intelligence (AI) into the labour market, which leads to job displacement. In response to these challenges, Assoc. Prof. Pannee expressed the importance of research data linkages that are crucial for the development of evidence-based labour policies. She further calls for collaborative action from key stakeholders, including the government sector, private sector, and civil society organizations, to construct a sustainable policy framework that meets the current demand for labour.

In alignment with Chulalongkorn University's three missions:

1. Develop Future Leaders: To create a culture of lifelong learning through academic programs that promote entrepreneurship and sustainability.

2. Create Impactful Research and Innovations: To stimulate innovative enterprises for society by creating research that is in-depth and extensive and adding innovative curricula and interdisciplinary fields.

3. Guide and Move Forward with Local and Global Engagement: To engage in partnerships with local and global communities, governmental agencies, industries, and universities for a more sustainable society and economy.

The Ministry of Labour has collaborated with the university in four main areas:

1. The development of research capacity and data utilization.

2. The development of labour research policies aimed at supporting efficient work practices and adapting to economic, social, and technological changes.

3. The enhancement of academic and international cooperation.

4. The development of labour data infrastructure and its utilization for collaborative research efforts with educational institutions and governmental and non-governmental organizations, both locally and internationally.

Assoc. Prof. Pannee highlights the need for creative utilization of labour data and an interdisciplinary approach for Big Data and AI to effectively anticipate and respond to changes in labour market trends. Furthermore, she ensures Chulalongkorn University's recognition and commitment towards continuous improvement in data governance and digital transformation, which is necessary to better understand and anticipate the dynamic changes in the labour market.

The outcomes of today's discussions include summary insights and recommendations from policymakers, researchers, and practitioners regarding labour-related databases so that they can conduct collaborative strategic development between key stakeholders for labour and their livelihoods. In addition, the recording of the seminar will be disseminated to facilitate and enable a broader understanding and engagement of the labour-related database.

She firmly believes that every participant in today's seminar will demonstrate collective efforts to enhance the quality of labour-related databases and research to ultimately improve the quality of life for all labourers. Essentially, this resulted in the creation of a flexible, adaptive, inclusive, and sustainable labour market. In her closing remarks, she says, "Chulalongkorn University is proud to be part of this dialogue and warmly welcomes everyone to the seminar."

Mrs. Napasorn Toongsooksai, Academic Labour Advisor, Ministry of Labour, opened the seminar by expressing her delight at the diverse expertise and specialists that were presented among the attendees. She informed all participants that this seminar is extremely significant as it brings together experts, professionals, and academics from all sectors, including public, private, and educational institutions. They all contributed to the creation and utilization of labour-related databases to foster a collaborative exchange of knowledge, past experiences, and future recommendations from all stakeholders.

It is well understood that any research or academic endeavour must be accurate, comprehensive, and publicly accepted. She stressed that the data used must be reliable, complete, and up to date. This is pivotal because any research or academic work utilizing quality data will gain public trust and can lead to effective policymaking and decision-making in both the governmental and private sectors, which ultimately aligns with national development strategies.

Thus, having efficient and effective databases is the starting point for developing policies that respond to public needs. She hopes that this seminar will facilitate learning exchanges regarding data usage, research work experiences, data access, and utilization for labour-related research. This will contribute to improving labour databases, developing

analytical tools for more efficient data analysis, and ultimately assisting in decision-making and planning.

From the perspective of the public sector, having efficient data can lead to effective decision-making, and the same applies to the private sector, where accurate and up-to-date data can improve business decisions. Essentially, it would be beneficial for both sectors.

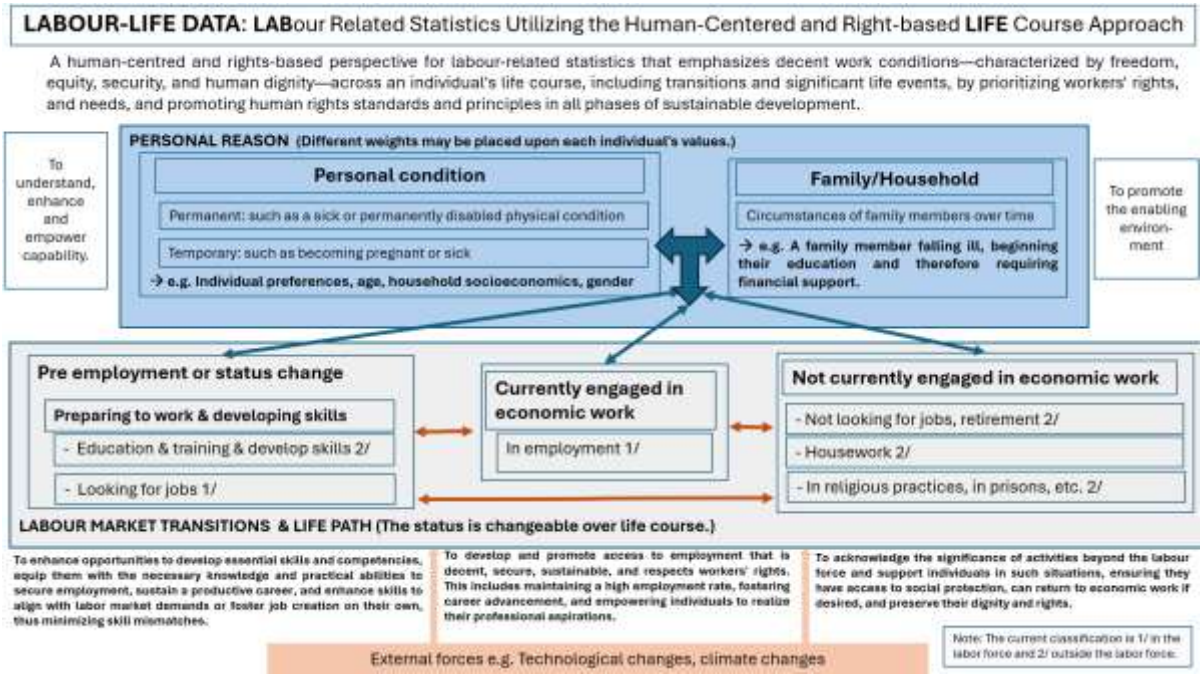
As the Ministry of Labour plays a central role in establishing databases, we hope that this seminar will foster learning exchanges and contribute to the development of efficient labour-related databases which enables widespread usage and continuous improvement, making labour-related databases a fundamental resource for all stakeholders.

Associate Professor Ruttiya Bhula-or, Deputy Dean of the College of Population Studies at Chulalongkorn University and Director of the Collaborating Centre for Labour Research at Chulalongkorn University (CU-COLLAR), along with the Social Research Institute explained the scope of the seminar, which focuses on labour-related collaboration and labour research. In this context, the term "labour" does not only refer to *labourers* but encompasses a broader spectrum of labour, it accounts for the development of data infrastructure and current labour-related research, which is being utilized in various forms of collaboration, including partnerships between the Ministry of Labour and Chulalongkorn University.

She emphasized the goal of developing a comprehensive framework that benefits both the country and the world. More specifically, defining “scope of labour” as the utilization of physical, mental, and intellectual resources in production or service provision. Hence, the discussion involves a wide framework, including individuals who may not currently be part of the labour force but could potentially join in the future.

The database being discussed covers a wide spectrum and aims to involve people from all sectors in today's discussion framework. Therefore, the frame of our seminar consists of two parts: 1) life course data and 2) data mapping, which are pivotal for a more detailed analysis of individual-level data.

Figure 1 Concept of Labour Data and Related Data following the Multi-Stage Life Approach



Source: Bhula-or, R. (2024). *Summary Report of Update on Labour-Related Databases: Their Existence, Utilization and Future Directions*. CU-COLLAR.

Dr. Chonticha Asavanirandorn, a Researcher at the College of Population Studies, concluded the first session by highlighting Thailand's current situation that it has been collecting and compiling labour-related data to a reasonable extent. However, today's materials are based on searches from only some of the main databases. These searches include both the organizations that collect data themselves and the organizations that use this data for analysis and index creation. The analysis and synthesis of these data illustrate four main categories of labour-related data:

1. Labour-related data (individual level): This includes personal characteristics, basic demographic data, employment-related information, working conditions, income, working hours, as well as issues such as indebtedness and access to digital technology.

2. Social and Health-related data (individual level): This category encompasses various aspects not directly related to work, such as health and reproductive health, particularly focusing on female workers regarding pregnancy and childcare. Additionally, social aspects such as poverty, social welfare benefits, and overall quality of life are also included.

3. Employer-related data: This data focuses on businesses or employers, including the number of establishments, number of employees, basic characteristics of businesses, and workplace safety or environmental conditions.

4. Labour-related data (national level): This includes comprehensive data on the labour force, such as specific groups within the Thai workforce, including women, children, elderly workers, and disabled individuals. It also covers job vacancies, job applicants, various social security schemes, and beneficiaries. Additionally, it includes statistics on international migrant workers in Thailand.

The objective here is to collectively understand what data we have available for discussion and how it can be further supplemented, reinforced, and exchanged. Moreover, it's crucial to note that data alone, if left unused or unanalysed, holds little value. Therefore, it's essential to analyse and bridge policymaking to understand how to enhance capabilities, improve the environment, develop skills, promote access to suitable jobs, and acknowledge the importance of informal labour activities. This is the comprehensive framework that will guide our discussion today's discussion.

Figure 2 Speaker in Session 1

Source: Seminar on Labour-Related Databases: Their Existence, Utilization, and Future Directions A collaboration betweenThe Collaborating Center for Labour Research (CU-Collar), College of Population Studies, Chulalongkorn University The National Labour Research Center (NLRC) The Global Labour Organization, South-East Asia, and Thailand Chapter (GLO)May 3rd, 2024 (8.30 a.m.–12.00 p.m.) Online Zoom Meeting

Figure 3 Ambience in the first session

Source: Seminar on Labour-Related Databases: Their Existence, Utilization, and Future Directions A collaboration between the Collaborating Centre for Labour Research (CU-Collar), College of Population Studies, Chulalongkorn University, the National Labour Research Centre (NLRC), the Global Labour Organization, South-East Asia, and Thailand Chapter (GLO) May 3rd, 2024 (8.30 a.m.–12.00 p.m.) Online Zoom Meeting

Session 2: Overview of Labour Databases: Scope, Accessibility, Policy Utilization, and PDPA Compliance

Moderated by Dr. Montakarn Chimmamee

The seminar's second session focused on existing labour-related databases and the agencies managing them. It explored the scope and accessibility of these databases and their utilization in policy-making. Additionally, the session addressed the Personal Data Protection Act (PDPA) issues related to data handling. Discussions included the role of various databases in supporting labour research, methods to enhance data accessibility, and strategies for using data to inform policy while ensuring compliance with data protection laws. This comprehensive approach aimed to maximize the effectiveness of labour databases in shaping evidence-based policies (Appendix 2: Seminar's documents and presentations).

Figure 4 Speaker in Session 1

Source: Seminar on Labour-Related Databases: Their Existence, Utilization, and Future Directions A collaboration between the Collaborating Centre for Labour Research (CU-Collar), College of Population Studies, Chulalongkorn University, the National Labour Research Centre (NLRC), the Global Labour Organization, South-East Asia, and Thailand Chapter (GLO) May 3rd, 2024 (8.30 a.m.–12.00 p.m.) Online Zoom Meeting

1) An Overview of Existing Labour-Related Databases and Agencies, 2) The Discussion of the Scope and Accessibilities of Labour-Related Databases; and 3) The Utilization of Labour Database: Policy Makings and Addressing PDPA Issues

Mr. Natthapol Hachanda, Director of the Research and Innovation Center for Labour, Department of Labour Economics, Office of the Permanent Secretary, Ministry of Labour introduces the role of the Research and Innovation Center for Labour of the Department of Labour Economics, that is to promote and support labour research to be more efficient and to increase its quantity. However, it is not responsible for controlling and managing the database. Currently, the center is seeking individuals to help utilize the Ministry of Labour's Big Data program to promote the center's mission of enhancing labour research efficiency and increasing the number of the research.

He further laid out the agenda of the presentation into five parts. The first part defined and explained what “Big Data” according to the Ministry of Labour is. Secondly, he provided some examples from the database. Thirdly, he presented the examples of its utilization. The fourth part proposed activities such as Data Lab, academic exchanges, and potential benefits from the MOL Big Data Analytics database. Lastly, he shared some of his expectations for the future of Thailand's labour-related database.

Figure 5 Dataset categorized by department / supervised by the Ministry of Labour

Source: Presentation and discussion by Mr. Natthapol Hachanda, Director of the Research and Innovation Centre for Labour, Department of Labour Economics, Office of the Permanent Secretary, Ministry of Labour (MOL Big Data Analytics and Data Lab Database)

Part One: Datasets in the Ministry of Labour

From the slide titled "Dataset Overview," the dataset consists of registered data maintained by the Ministry of Labour. The details are categorized into departments as follows:

1. Department of Employment

1.1 Register of job seekers within the country: This includes the number of individuals seeking employment within the country.

1.2 Register of job seekers from abroad: This comprises individuals seeking employment from foreign countries.

1.3 Register of job positions demanded by businesses: This refers to available job positions within businesses.

1.4 Register of working experience for individuals working abroad: This indicates the number of individuals who have work overseas after leaving Thailand, including information on who they are and how many there are.

1.5 Register of immigrant workers: This section likely contains the largest dataset within the Department of Employment, with records of millions of international migrant workers.

2. Department of Skill Development

2.1 Register of individuals undergoing skill training: This mainly involves activities conducted by the Department of Skill Development to provide skill training to individuals.

2.2 Register of businesses certified for training courses and expenses: This includes private companies that have certified courses and provide training to their employees.

2.3 Register of individuals undergoing competency testing: This involves individuals who have undergone competency testing with the Department of Skill Development, whether they have passed or failed. It may also include information on different occupational branches with varying numbers of individuals undergoing testing.

3. Department of Welfare and Labour Protection

3.1 Register of labour inspections at workplaces: This includes records of labour inspections conducted by inspectors from the Department of Welfare and Labour Protection at workplaces to assess the number of workers, whether they are Thai or foreign, and compliance with labour practices.

3.2 Register of workplace safety inspections: Records of safety inspections conducted at workplaces.

3.3 Register of businesses promoting welfare for family and social welfare of workers: This involves activities under the Department of Welfare and Labour Protection aimed at promoting welfare benefits for workers' families and society.

3.4 Register of labour dispute claims: This contains information collected by the Labour Relations Office regarding claims and disputes related to labour issues.

3.5 Register of employer-employee organizations: This pertains to records maintained by the Labour Relations Office.

4. Social Security Office (The Largest dataset)

4.1 Register of employment by employers: This includes data of insured individuals under Sections 33, 39, and 40 of the Social Security Act.

4.2 Register of the insured individuals applying for benefits from the Social Security Fund: This contains information on insured individuals who apply for benefits from the Social Security Fund.

4.3 Register of the status of social security coverage: Records the status of social security coverage for businesses.

4.4 Register of businesses and employers: Contains data of both employers and companies.

In the section of social security, there are approximately 11 million records of the insured individuals under Section 33, and the register of businesses contains over 500,000 records. He further highlights the role of the Ministry of Labour which is involved with individuals at every stage of one's life, from students to retirement. To be more specific, he gave examples of job placement and job search assistance that is handled by the Department of Employment. On the other hand, the Department of Skill Development handled reskilling/upskilling initiatives for career changes as well as skill enhancement of labourers.

Furthermore, he also emphasized that when there are disputes between employers and employees, the Department of Labour Protection and Welfare handles issues related to labour protection under the Labour Protection Act. Thus, highlighting our role to support life at every stage, from employment to retirement.

Part Two: Example of the Datasets

Mr. Natthapol further gave an example of "specific registry data" that can be used to examine the demographics of various target groups, such as gender, age, education level, and province of residence of insured individuals. Moreover, it also entails in-depth information which can be seen through a type of employment that is characterized into daily, monthly, and others. This would further illustrate employment beyond daily or monthly wages, such as weekly, hourly, piece-rate, or contract-based work. Moreover, the "specific registry data" also has a section that indicates industries in which the workers are employed to provide insight into their respective sectors. It is also important to note that the Ministry of Labour also anonymizes personal data (national ID numbers) through hashing ID, allowing for cross-referencing without compromising privacy. Thus, all PDPA-related data will be removed entirely.

Furthermore, Mr. Natthapol gave another example of "specific registry data" that is under the "registry data of employer registration." This includes details such as the size of the establishment, the province of its location, industry code, the total number of employees, and additional data compiled by the social security system to support government policies. In addition, it accommodated the government's industry projections, particularly the ten targeted industries identified as S-curves and New S-curves industries. It should be noted that certain commercial registration numbers would be masked regarding PDPA-related issues, but researchers could still use the database to analyze the data.

Figure 6 Labour Related Data

Source: Presentation and discussion by Mr. Natthapol Hachanda, Director of the Research and Innovation Centre for Labour, Department of Labour Economics, Office of the Permanent Secretary, Ministry of Labour (MOL Big Data Analytics and Data Lab Database)

Part Three: How are the Datasets being used and their Examples.

In the third part, Mr. Natthapol gave an example of how the datasets are being used through the National Workforce Planning. The specifications are as follows:

Example 1: Derived from the "Analysis of Employment in Target Industries (S-curve and New S-curve)" excluding data from Bangkok (as it would rank first in every sector and thus skews the overall national perspective), it demonstrates the concentration of workers in target industries across different regions. For instance, in the logistics sector, workers are concentrated in Bangkok, Chonburi, and Rayong. The analysis revealed provinces that hold a status of “sandwich generation” presence in Thailand, such as Bangkok as an industrial estate and northern provinces like Chiang Mai and Chiang Rai. While only a few provinces in the southern region exhibit similar characteristics it allowed us to identify areas of disparity and strategize improvements in the targeted province.

Example 2: Under the topic of "Possibilities for Determining Hourly Wages", to address the question of how to determine the number of part-time employees, data from Section 33 indicates the number of individuals working more than one job. We examined the number of part-time employees using data from the Social Security Office, which covers around 11 million individuals. After data analysis, we found that 31,389 individuals, or 0.28%, were part-time employees. However, it is pivotal to note that around 8 million individuals did not provide data.

Part Four: The Exchanges of "Big Data" Usage

In part four, Mr. Natthapol gave an example through the "Data Lab" project, that there's been a significant decrease in labour research, especially since the implementation of PDPA (Personal Data Protection Act), as acquiring data became more challenging and time-consuming. Therefore, Data Lab was established to facilitate convenient access to datasets for all users, not limited to educational institutions. Researchers, students, analysts, and academics, both from the public and private sectors, are encouraged to participate and the goal is to increase research work in labour-related fields. The Ministry of Labour aims to simplify the process, and once the data is utilized effectively, we encourage its dissemination on the National Labour Research Center's website.

Part Five: How will the data be utilized in the end?

Finally, the ultimate goal hopefully in the future, is the integration of "seamless data". It involves linking and connecting data, bridging different agencies or ministries with responsibilities related to each stage of one's life. It is pivotal to note that there is a need to promote more collaborative work between key stakeholders. More specifically, data that illustrates the transition of study-to-work and work-to-retirement is pivotal for policy-making and future development.

Following Mr. Natthapol, **Mr. Saratrai Watcharaporn, Director of the Statistics and Information Utilization Promotion and Development Group, Forecasting Division, National Statistical Office** sectioned his presentation into three parts, consisted of, Part 1: The Production and Collection of Data by the National Statistical Office: Under the Labour Force Survey (LFS), Part 2: The Accessibility and Utilization of Labour-related data at the National Statistical Office, and Part 3: Key Challenges.

The main tasks of the National Statistical Office include 1) production of statistics, 2) management of the country's statistical system, and 3) providing statistical services. When it comes to statistical production, one of the main surveys related to labour is the "Labour Force Survey" (LFS). In the Labour Force Survey, some of the data that is being collected includes household modules, education, employment, and wages. Mr. Saratrai noted that the data collection is conducted monthly at the beginning of each month, with the largest sample size used by the office, approximately 29,000 households per month, and about 87,000 households per quarter. At the end of each quarter, provincial-level data is available due to the sampling method used, which does not cover the entire population.

Since the data from the National Statistical Office is obtained through surveys, the methods used differ from those of the Ministry of Labour, which conducts monthly surveys. Each quarter is categorized into major seasons: the first quarter is off-agricultural season, and the third quarter is off-season, in consideration of the key terminologies, the LFS referred to ILO definition of terms, such as "Employed Individuals" as those who work at least 1 hour per week, even if they work less than 1 hour, as long as they have a regular job. Another example could be "Unemployed individuals," which are those who are not working and do not have a regular job. There are also other specific definitions. Mr. Saratrai further noted, "Why does the unemployment rate remain low when using the definitions?" Thus, questioned the future need for adjustment in the key definitions.

In terms of the outcome, the National Statistical Office mainly illustrates labour force participation rates, employment rates, unemployment rates, rates of different levels of employment, and labour productivity. Despite having LFS as the main survey to explore labour-related issues, there are other surveys conducted alongside the LFS. These include the non-systematic labour force survey in the third quarter and the migration survey in the fourth quarter, as well as an ICT survey.

In terms of how and who is using LFS, Mr. Saratrai confidently answered that the majority of users are from government agencies. When considering the role of the National Statistical Office is responsible for producing fundamental data for the country, there are some basic analyses done within the office but unable to be fully utilized as it is not a policy-making entity, therefore the NSO puts utmost effort into enabling other agencies to utilize the data, some agencies include the Bank of Thailand, the National Economic and Social Development Council, the Ministry of Labour, and the Office of the National Security Council.

He highlighted that the various databases at the National Statistical Office related to labour should be seen as part of the statistical data services. More specifically, when considering labour data as one of the branches among the 21 branches. The services are provided in the form of Excel tables containing time-series data. However, current data requests have changed due to government data governance principles. The office now strives not to request data from agencies but rather to receive data from them.

Mr. Saratrai gave an example of the "Interactive Dashboard," in which the data are processed through the Power BI program to provide basic data visualization. This involves transforming the data into dashboards so that users can select what they want to know. They can choose from aspects such as workforce structure, employment opportunities, unemployment rates, working hours, and wages. It ultimately contained both national overview data and data specific to individual provinces.

In terms of the operation of the NSO Data Catalog, under the Digital Government Administration and Service Act of 2019 by the Digital Government Development Agency (DGA). This law mandates government agencies to undertake the establishment of data governance. It starts by having government agencies establish data governance committees, manage data lists of each agency, upload agency data to the data inventory system, and register the data. The DGA aims to ensure data interoperability, thus the Excel format could not be used. Instead, they set criteria for assessing whether the data is machine-readable or not. The National Statistical Office (NSO) then adjusts the data service format to CSV files to enable data linkage. In this setup, agencies or users can directly access the data through Application Programming Interfaces (APIs).

In addition to the NSO Data Catalogue, the National Statistical Office (NSO) has been designated by the Digital Government Development Committee to serve as the registrar of the Government Data Catalogue (GD Catalogue). It oversees the country's data and manages the registration of datasets and metadata, which are detailed descriptions of the data. The datasets are not housed at the NSO; instead, each dataset remains with the respective data owner agency, adhering to the principle of a single source of truth as advised by the Digital Government Development Agency (DGA). This means that there should be only one database for each dataset. Users accessing the GD Catalogue will see the names of datasets and their metadata, and when they want to use them, they must click on the links that lead directly back to the respective data owner agencies.

Currently, the NSO, Digital Government Development Office (Public Organization) (DGA), and the Government System Development Committee (GSDC) collaborate to encourage state agencies to develop their data systems and register datasets in the government data inventory system. Presently, approximately 280 state agencies, including each province, have data systems, totalling about 20,000 datasets. However, nearly 10,000 datasets are registered in the data inventory system, leaving some gaps because while the NSO manages registrations, there is no mandate requiring all datasets to be registered. Hence, it functions more as a directory indicating which datasets belong to whom, allowing agencies to access and view them.

Mr. Saratrai noted the advancement of the National Statistical Office's Data Catalogue that has led to the creation of another service, known as the Statistical Sharing Centre (Stathub). It involves retrieving data from the Data Catalogue and organizing it into series, categories, and variables. This process integrates data from the National Statistical Office's database with data from other agencies listed in the Data Catalogue. As the statistics are in open-source format, this service focuses solely on statistical data and does not involve personal data protection regulations.

Additionally, for in-depth analysis or research purposes, microdata services are provided. Before accessing the data, users are encouraged to study the Data Dictionary, which provides descriptions of various variables, as well as the detail of questionnaire. Those interested in using the data can contact the Data Service and Dissemination Division or the Email Service for requests and information submission. Services are provided free of charge for students, researchers, and public sector agencies, with fees applicable to private sector agencies.

To leverage the database effectively, supporting a Data Lab is essential. This is because many users are unaware of where the database they need is located. Additionally, agencies need to present databases in a ready-to-use format, following the guidelines set by the Digital Government Development Agency (DGA). More importantly, public sector agencies must be prepared to share data following data governance principles.

Pol. Lt. Col. Thienrat Wichiansan a member of the Personal Data Protection Committee, and chairman of the advisory committee of both public and private sector organizations regarding databases and issues related to personal data protection expressed that while the definitions of "personal data" are quite similar, the PDPA introduced a significant increase in criminal penalties, both in terms of fines and imprisonment. This has raised awareness and concern among all sectors, whether public or private, about compliance with this law. The origin of the PDPA legislation follows the provisions of the Constitution of the Kingdom of Thailand, Article 26, which restricts individuals from infringing upon others' data to prevent past incidents of data breaches causing significant harm. Therefore, the PDPA aimed to establish standards for data protection and provide remedies for damages caused by breaches.

About the PDPA, Pol. Lt. Col. Thienrat defines personal data as "information about an identifiable individual, whether directly or indirectly, but excluding information concerning the deceased." This definition is broad and encompasses anything that can lead to the identification of an individual, thus differing from previous laws governing government information, which focused solely on personal information that directly identified individuals.

The fundamental principle of personal data protection dictates that any collection or disclosure of an individual's data must be done with their consent, which must be freely given and informed. The individual must be aware of the purposes for which their data will be collected, used, or disclosed, and there should be no deception involved. However, there are exceptions in cases where contracts or laws allow other individuals to access and use the data owned by the data subject.

He further explained that the PDPA provides exceptions to the disclosure of personal data, where the principle is that the data owner must consent. The PDPA also reveals numerous exceptions, which are legal exemptions. Due to the unclear and ambiguous nature of the law, there has been a significant amount of discussion and inquiry directed to the Personal Data Protection Office since the law was enacted in the year 2019. It was apparent through the website of the Personal Data Protection Office that many doubts and questions were raised.

He acknowledges that the utilization of labour data would bring about benefits that contribute to further advancement for the collective well-being, serving the interests of the nation as a whole. It leads to significant developments in various data management aspects within both governmental agencies and private sectors. In this regard, the PDPA establishes provisions for the committee to issue announcements regarding appropriate measures for the collection of personal data to achieve objectives related to scientific research, history, statistics, or other purposes specified in Articles 24 and 26. Under Article 24, the collection of personal data without explicit consent from the data owner is permissible if it's for scientific research, historical, or statistical purposes and adequate protective measures are implemented to safeguard the rights and freedoms of the data subject, as determined by the committee. Similarly, under Article 26, the collection of personal data related to race, ethnicity, political opinions, beliefs, sexual behaviour, criminal history, health data, disabilities, labour union affiliation, genetics, biometrics, or other data impacting the data subject can be conducted without clear consent if necessary for legal compliance or public interest purposes related to scientific research, history, or statistics.

These actions must be carried out only to the extent necessary to achieve the objectives, with appropriate measures in place to protect the fundamental rights and benefits of the data subject, as determined by the committee. The announcements were published in the Royal Gazette on January 8, 2024, and became effective 90 days after publication. Furthermore, in the context of labour data, governmental agencies are responsible for labour affairs, such as the Department of Employment, Department of Skill Development, Department of Labour Welfare and Protection, or various social welfare agencies, collect and utilize data as part of their duties and may share such data in response to lawful requests.

> *"Article 24 prohibits data controllers from collecting personal data without the explicit consent of the data subject, except..."*
>
> *"Article 26 prohibits the collection of personal data related to race, ethnicity, political opinions, religious or philosophical beliefs, sexual behaviour, criminal records, health data, disabilities, labour union membership, genetic data, biological data, or any other data that impacts the data subject similarly, as specified by the committee, without clear and explicit consent from the data subject, except..."*

In summary,

Mr. Natthapol, from the Research Centre and the Ministry of Labour, welcomes feedback and collaboration from all sectors to improve data utilization.

Mr. Saratrai, from the National Statistical Office, encourages leaders from both public and private sectors to use data for policymaking and assures support and accessibility for inquiries.

Regarding the PDPA law, there is no need for excessive concern. For research or statistical purposes benefiting the public, data disclosure can be done within legal bounds or through consultation with the authorities for clarification.

Figure 7 Ambience in the second session

Source: Seminar on Labour-Related Databases: Their Existence, Utilization, and Future Directions A collaboration between the Collaborating Centre for Labour Research (CU-Collar), College of Population Studies, Chulalongkorn University, the National Labour Research Centre (NLRC), the Global Labour Organization, South-East Asia, and Thailand Chapter (GLO) May 3rd, 2024 (8.30 a.m.–12.00 p.m.) Online Zoom Meeting

Session 3: Exchanging Academic Work Experience through the Use of Existing Labour-related Database and Future Directions of Data Utilization.

The session highlights the use of labour data, selecting research topics and databases, the direction of data and analysing labour issues in the future such as using Big Data, the necessity of training researchers, and focuses on the changing landscape of labour research (Documents and presentation files in Appendix 2).

Moderated by Dr. Chadatan Osatis and Dr. Chonticha Asavanirandorn.

Figure 8 The speaker and moderator for the third session

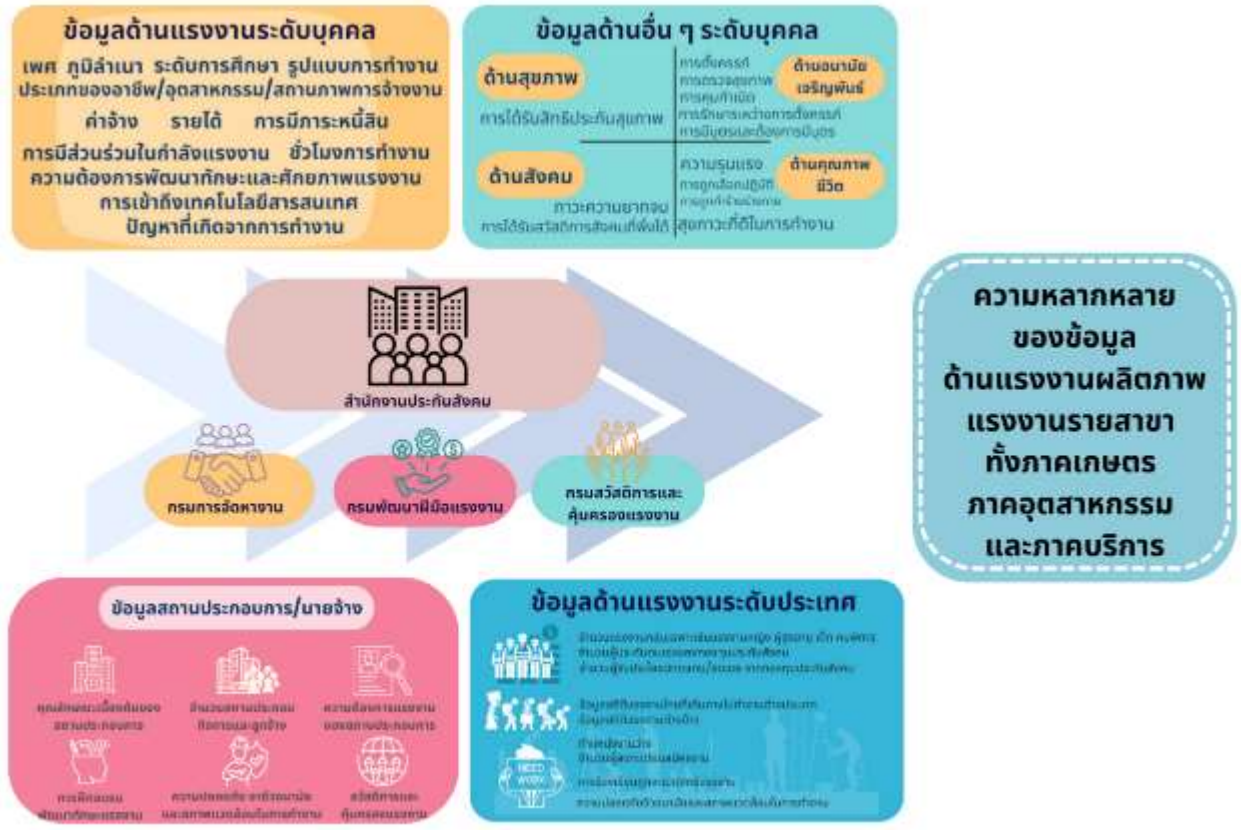
Source: Seminar on Labour-Related Databases: Their Existence, Utilization, and Future Directions A collaboration between the Collaborating Centre for Labour Research (CU-Collar), College of Population Studies, Chulalongkorn University, the National Labour Research Centre (NLRC), the Global Labour Organization, South-East Asia, and Thailand Chapter (GLO) May 3rd, 2024 (8.30 a.m.–12.00 p.m.) Online Zoom Meeting

3.1 Experiences and How the Database Benefitted Your Research.

Mrs. Napasorn Toongsooksai, Academic Labour Advisor, **Ministry of Labour** shared an example through the Ministry of Labour's research that utilizes labour data from MOL Big Data. Upon processing, it was found that the agency benefiting more from the data than the Ministry of Labour itself is the National Statistical Office. Both raw data and statistical analyses are used. Through an example of "Labour Productivity: How to Drive Changes under the Changing World", the research has been successfully conducted and is published on the website of the National Labour Research Centre. This study utilized data from MOL Big Data, the National Statistical Office, and the National Economic and Social Development Council. It was conducted by the Economic Policy Working Group of the Department of Labour Economics. The objective was to study labour productivity in the era of digital transformation, examining how Thailand's labour productivity responds to changes. What is the situation like? It is considered a starting point after COVID-19. What was the situation during the COVID-19 period? How do various accelerations in the digital age affect labour productivity? And after studying, how will the findings be used to formulate proposals for fairly enhancing productivity? This includes mechanisms for cooperation between public and private sector organizations to enhance productivity. It is widely known in academic

circles that Thai labour productivity is relatively low, with minimal increases each year. Looking at the national development plans for each five years, the target for increasing labour productivity is only 3% per year. This gives the impression that the term "labour productivity" and the situation of Thai labour are quite bitter pills for the country's economy. This highlights the importance of labour productivity particularly during the period of slowdown caused by COVID-19.

Figure 9 Utilization of MOL Big Data for labour productivity



Source: Exchanges and Sharing on Utilization of Research Data by Mrs. Napasorn Toongsooksai, an Academic Labour Advisor at the Ministry of Labour

In response to how the MOL Big Data benefits our research, it can be seen through the “Having Employment” (การมีงานทำ) project and 17 datasets in MOL Big Data, which utilizes datasets from the Department of Skill Development, including records of trainees, registered businesses certified for courses, and training expenses. This is crucial for analyzing labour productivity because it correlates with the skills of the workforce. Therefore, it examines how many people have received development. Even though businesses with at least one hundred employees must develop their employees' skills by at least 50%, analyzing which courses employers provide to enhance their employees' skills can indicate whether our productivity will increase according to the set goals for all 10 target industries. This ultimately allows us to identify what courses are available, how many hours are spent training, and the pass rates for skill standard tests are all analysed comprehensively in this study.

We also used the Data from the National Statistical Office that covered the topics of agricultural labour numbers and hiring in various sectors. Another example is through the data from the Social Security Office that specifically highlights the registry of hiring from two certified establishments, to observe hiring in different sectors, such as agriculture, industry, commerce, and services, as well as sub-sectors within them.

In terms of job positions, we utilized the data from the Department of Employment which covered vacancies, while we also used the dataset of the registered job applicants from the Department of Labour Welfare and Protection that contains information about workplace safety, welfare beyond legal requirements, and environmental condition, thus allowing a comprehensive approach to examining the quality of life and productivity of labour.

In summary, many of our research utilizes various datasets from all four departments. However, each data set contains a lot of information, so it's chosen based on the research objectives. Once selected, it serves as the basis for analysing labour productivity across sectors: agriculture, industry, and services. For instance, in agriculture, crop cultivation shows low productivity, while animal husbandry exhibits relatively high productivity. Fishing has a high average income but relatively low employment. Agricultural support activities show high productivity. We also adopted quality analysis to reveal low productivity in crop cultivation and textile manufacturing due to intensive labour. Food production sees high employment but low productivity, while automotive industry productivity correlates with high employment. In construction, especially foundational construction and hotel accommodation, productivity is low due to intensive labour. Trade sees high employment but low productivity, while transportation shows relatively low labour productivity. Service sectors show consistently low labour productivity across various sub-sectors. Thus, this study combines MOL Big Data with labour data from other sources, particularly from the National Statistical Office, for detailed analysis.

Within the Department of Labour's jurisdiction, at least one such research piece is conducted annually by various workgroups. More importantly, there are labour hazard alert reports, a longstanding academic endeavour within the Department of Labour Economics, developed over several phases and updated quarterly using data from the Social Security Office, covering hiring, vacancies, and terminations. These reports are supplemented with data from the National Statistical Office, the National Economic and Social Development Board, the Ministry of Industry, the Ministry of Commerce, etc.

Through a "Labour Situation Report," our primary source is from the Department of Employment's foreign data in MOL Big Data and Social Security data on hiring, vacancies, and terminations. Mrs. Napasorn noted that The Department of Labour, as the primary data producer, combines its data with key data from other agencies to produce consistent research and academic work published regularly.

Ms. Narumon Pulpakdee, Deputy Director of the Macroeconomic Department, Bank of Thailand (BOT), oversees the analysis of labour market of the country. The Bank of Thailand utilizes labour data for various purposes. The main data source for the analysis and tracking of the labour market includes surveys on the employment situation conducted by the National Statistical Office and self-insured individuals from the Social Security Office. Additionally, data from various sources such as temporary business closures reported under Section 75 of the Department of Welfare and Labour Protection, foreign labour data from the Department of Employment, and other data sources like mobile phone usage data from True

Corporation, are also used. The Business Sentiment Index (BSI) from the BOT itself is another crucial source.

More specifically, the labour data used begins with the analysis and tracking of the labour market. BOT routinely monitors and analyses the labour market in various dimensions such as employment status, unemployment rates, and income growth. Moreover, labour data is further utilized to analyse various issues and develop new indicators to better understand the labour market situation.

For example, during the COVID-19 pandemic, additional monitoring and assessment were conducted, such as evaluating the number of vulnerable workers affected by COVID-19 and estimating nonfarm income both overall and by sector including low-skilled workers in the service and manufacturing sectors, highly skilled workers, and self-employed individuals. This was crucial for assessing future private-sector consumption trends. Furthermore, additional indicators and data analysis were developed to better evaluate the impact of COVID-19 and track the developments in the labour market more effectively. For example, definitions were refined, and the number of underemployed individuals was tracked, as the pandemic led to many workers partially losing their income due to employers adjusting to reduced revenue. This might involve reducing work hours or rotating workers, resulting in inadequate income for some workers to sustain their livelihoods.

Therefore, the BOT has defined the concept of "underemployed" individuals, referring to those who have jobs but work fewer hours, less than 4 hours per day or not exceeding 20 hours per week for the agricultural sector, or not exceeding 24 hours per week for non-agricultural sectors. This definition differs from the standard international definition of "underemployed" individuals, who work fewer than 35 hours per week and desire to work more. This adjustment aims to better reflect the impact of COVID-19 on the Thai labour market.

Additionally, there has been an increase in the analysis and tracking of labour mobility. During the COVID-19 pandemic, some Thai and foreign workers have returned to their hometowns. Mobile phone usage data has been used to track the movement of Thai workers, including those returning home during the outbreak and returning to the labour market after the COVID-19 situation eased.

For tracking the movement of foreign workers, the data from the Department of Employment and the Social Security Office are utilized. Moreover, there has been an increase in tracking structural changes in the labour market, such as individuals exiting and re-entering the labour force, as well as changes in employment status, such as transitioning from wage employment to farm or non-farm self-employment.

Regarding the utilization of data for in-depth studies, it has been applied in various areas. For example, studying wage determination in the Thai labour market is a crucial indicator supporting private consumption and economic expansion. This study aims to understand the factors influencing Thai wage determination, including structural and cyclical factors, as well as understand the differences in factors affecting wages in different income groups or economic sectors. This study utilizes diverse labour data sources, including surveys on the employment situation of the population, data from the Social Security Office the Department of Employment, and the International Labour Organization (ILO).

Examples of labour data used include wages, labour productivity, unemployment rate, underemployment rate, and proportions of employees by various characteristics such as elderly workers, highly educated workers, and service sector workers. Additionally, composite indicators of job finding rate under the Social Security system are calculated using data from insured persons under Section 33, the number of foreign workers, proportions of unionized employees, and minimum wage rates. Other data used for analysis include inflation rates, density of automated machinery compared to labour, and participation in the global value chain by Thailand. From our study, we found that there are significant factors affecting wages in Thailand which include unemployment rate, inflation, minimum wage rates, and educational levels of workers. In terms of the structural and supply-side factors such as labour productivity, trends in automation, and participation in the global value chain, as well as the proportions of unionized workers and international labour, did not significantly impact Thai wages. Furthermore, the study found variations in wage drivers among different groups of workers, income levels, and economic sectors. In particular, inflation affected the wages of lower-income workers more than other groups, while minimum wage rates had the greatest impact on the lowest-income group of workers. Inflation also influenced wages more in the manufacturing sector than in service branches excluding trade and construction, and the availability of foreign labour significantly influenced construction sector wages.

Associate Professor Dr. Kiriya Kulkolkarn, Faculty of Economics, Thammasat University utilized data from the National Statistical Office's labour force survey, which is crucial for labour-related issues. In the initial phase of the research, the focus was on international labour. Specifically, data on foreign workers registered with the Ministry of Labour at the provincial level and data on Thai labourers in various provinces were used to examine the impact of the influx of foreign workers on Thai wages and the extent of Thai unemployment by province. Therefore, at that time, data on registered foreign workers obtained from the Ministry of Labour at the provincial level and data on Thai labourers by province were utilized. Individual-level data on Thai labourers by province were available and could be analysed accordingly.

The second research project also focused on studying international labour in a similar vein. When researching labour issues, it is essential to define the research questions first. Some topics require extensive collaboration with various ministries. In the second project mentioned, the researchers examined the concentration of foreign labour in different types of enterprises. They analysed the characteristics of these enterprises, such as the level of foreign labour utilization, R&D investment, and export activities. They also investigated whether these were purely Thai companies or if they had foreign investment involvement. This part of the research utilized data from the Ministry of Industry's National Productivity Institute, which conducted surveys over two years. Although the surveys were not conducted continuously, the data provided detailed information on individual business establishments, including the extent of their use of foreign labour. This allowed for an analysis of which types of businesses and industries heavily relied on foreign labour.

The third project is more macro-oriented and focuses on examining to what extent international labour can help alleviate Thailand's ageing society issues. As Thailand transitions into an ageing society and experiences a decline in its younger workforce, this trend could potentially lead to a decrease in production and GDP. Therefore, the question arises of how much international labour could mitigate this decline. Would it significantly increase Thailand's GDP per capita, merely compensate for the decrease, or fail to increase it at all? Using simulation modelling techniques, researchers can explore various scenarios. Given that

international labour may have limited skills and might primarily contribute to the workforce quantity rather than quality, it is possible that even with an increase in the labour force, GDP may not significantly increase. It could compensate to some extent, but not enough to offset the decline caused by the reduction in the number of elderly Thai workers.

Another aspect involves examining the macro picture in connection with the fiscal burden, specifically looking at how much international labour contributes to Thailand's tax revenues compared to the benefits derived from social security. For instance, if a certain amount, let us say 30 Baht, is contributed to social security, it would require data from the public health sector to estimate. This analysis would take on a more macroeconomic approach to assess potential disagreements regarding whether international labour constitutes a fiscal burden on the country or not.

In the most recent project, the study delves into informal labour by utilizing data from the Ministry of Labour, including internal labour migration within Thailand. Similar to the previous projects, it seeks to determine how international labour affects internal labour migration in Thailand and to what extent Thai labour migration impacts the influx of international labour into the country.67

In the past, accessing data from the government sector was quite difficult, especially with social security, which is a massive source of data. Sometimes, researchers did not even know what data was available in those databases. Most research projects relied on self-conducted surveys, which often yielded less data compared to what the government sector stored or registered. This led to resource wastage and limited the scope of research. For instance, when studying the impact of COVID-19 on international labour, we had to investigate ourselves to determine the extent of the impact on labour from Myanmar, Cambodia, and Laos. We needed to know which nationality was more affected and whether it affected men or women more. We conducted surveys on-site, and sometimes translators assisted in the process. In the future, when data is more accessible, it will be more beneficial and easier to access.

Dr. Nuttanan Wichitaksorn, Senior Lecturer in Analytics/Statistics at the Department of Mathematical Sciences, Auckland University of Technology and Visiting Research Advisor at Thailand Development Research Institute provides a user perspective but utilizes tools for data analysis and economic dimensions. The Labour Market Analytics team utilizes various tools, not just statistical ones, and explores new tools as well. Additionally, TDRI has a Big Data team that examines non-traditional data from JobsDB regarding job applications. In the past, the main data source was the Labour Force Survey (LFS) from the National Statistical Office, which was considered one of the best survey data sources globally by senior professors.

Another set of data used from the National Statistical Office is the Socio-Economic Survey (SES), which examines the economic and social conditions of households. The frequency of data release varies, similar to the Labour Force Survey (LFS), which releases data on a quarterly or monthly basis. SES data provides information on both labour and household expenditure, although it has a less frequent release schedule.

One aspect of the definition of big data is velocity, referring to the speed at which data is generated. However, there are still challenges in this regard. Data from the Ministry of Labour used for analysing the Labour Market Condition Index has increased in frequency to monthly releases. Monthly frequency is deemed appropriate for labour-related matters

because labour market adjustments typically respond to economic changes. Looking at GDP, there might be a lag of about 1-2 quarters. Therefore, the frequency does not need to be daily or weekly; reliable monthly data is sufficient.

Accessing data from the Social Security Office is challenging, despite the abundance of data. For example, personal-level data in countries like New Zealand prioritizes privacy protection, making access complex for researchers. However, there are methods for researchers to utilize this data, albeit through complex procedures. Researchers can extract personal data and use important and interesting information for research purposes.

At the outset, using social data for research was seen as beneficial. I view labour from two dimensions: economic and social. Therefore, both aspects must be considered together. Whether it is examining income or the social dimension of returning home from work with income, both dimensions must be considered simultaneously. The economic dimension affects the social dimension, and vice versa.

The key is to enhance close collaboration, which involves two aspects:

1. Improved Communication: There should be increased communication efforts. For instance, in the past, the Ministry of Labour has made efforts to involve experts in reviewing various research projects, which is beneficial. There should be more efforts to communicate about policy considerations and forward them to the Ministry of Labour. Communication needs to be extensive.

2. Collaboration: Collaboration between academia and the Ministry of Labour should be increased. There should be data sharing where non-confidential information can be shared for mutual benefit.

It is proposed to organize a national-level academic conference on labour annually. This conference would gather researchers, professors, academics, and students, at least at the master's level, to present their work. The conference would span approximately two days and cover various topics such as ageing society, informal labour, and international labour migration. Many issues can be exchanged and discussed during such conferences.

3.2 Suggestions and Strategies for Developing the Utilization of Labour-related Databases for Future

Mrs. Napasorn Toongsooksai highlights The MOL Big Data initiative of the Ministry of Labour, in collaboration with Chulalongkorn University, which aims to drive the utilization of data through cooperation. The National Labour Research Centre has already established the first memorandum of understanding (MOU) and is in the process of drafting the second. The agreement outlines a five-year plan to promote and develop the use of labour data for research and academic purposes. In the short term, the following actions will be undertaken:

Short-term goals:

(1) Exchange academic knowledge on utilizing MOL Big Data Analytics (Data Lab).

(2) Develop methods to enhance access to labour data.

(3) Organize network meetings of researchers to utilize labour data for advancing labour research.

Long-term goals:

(1) Streamline access to labour data in the MOL Big Data platform by reducing approval processes.

(2) Manage the database to facilitate longitudinal studies for long-term research.

The main approach is to develop research capabilities and data utilization. Once this MOU is finalized, it will be broadly disseminated. One aspect is to develop research capabilities, acknowledging that many government agencies, including the Ministry of Labour, predominantly employ civil servants in academic or research roles. We currently have limited capabilities in this area and often rely on professors from various educational institutions for assistance. Dependence without self-development is incorrect because any research that can be conducted independently should be carried out, followed by continuous improvement.

The second aspect is to develop policy-oriented knowledge through collaborative research and dissemination. The third is to enhance academic collaboration both domestically and internationally. Lastly, it involves developing labour data and its utilization. We aim to execute this plan outlined in the MOU to the best of our ability over the five years (Years 2024, 2025, 2026, 2027), which will officially commence in fiscal year 68. Therefore, during these three fiscal years, the Ministry of Labour will drive this initiative forward.

During the implementation phase, there may be exchanges, and reviews of methods, plans, and activities that need to be added or adjusted because they are no longer responsive. The key issue to be presented, based on consultations with the faculty in the economics department, is that we are just beginning in the Data Lab. However, due to PDPA regulations and other factors, we have to follow strict procedures for accessing databases. The current procedures have been minimized as much as possible, but in the future, we aim to further streamline them to ensure quick and convenient access to databases for academic and research purposes. This will enable faster responses to academic critiques. These adjustments should be addressed in the second version of the MOU.

In the long run, there has been a proposal from myself regarding the database aspect in the Ministry of Labour for some time. It suggests incorporating registration-based data using the 13-digit identification number and then concatenating the data to its fullest extent. For instance, starting with the insured person under Section 33, Data 1: Job applicants registry. This would provide information on whether the person has a job in a company under the social security system through the job procurement process of the Department of Employment. It would detail whether they have applied for a job, obtained their current job, and are working under the social security system. It would also track how many times they have entered and exited various workplaces, and any changes in their wage rates each time they enter or exit. Have they applied for jobs abroad? How many countries have they worked in? This is the aspiration of having a comprehensive database. Although we already possess more complete registration-based data than in the past, it has not yet been concatenated into a longitudinal format. By focusing on individual identities, we do not have to concern ourselves with what services each person has received from the Ministry of Labour. Instead, by concatenating the data into a longitudinal format, we can observe labour market behaviours. The key point is that we should be able to discern changes in the Thai labour market well from this type of database, which is something we want to see.

Furthermore, she would like to inform you that during the meetings, it was discussed that the MOL Big Data is updated on a T-1 basis. For example, if an insured person under Section 33 pays their contributions today, the data will be completed in the Social Security system today. The updated data will then be sent to the MOL Big Data the next day. However, not all data may be updated daily, such as data from labour union registries, which may not be updated daily but mostly within a month. Therefore, the database will contain the most up-to-date information possible.

Ms. Narumon Pulpakdee expresses that for the future use of labour databases, there are additional aspects that can be explored. Firstly, utilizing labour data for studying and analysing the self-employed workforce should be enhanced, especially in terms of income and livelihood dimensions. self-employed workers represent the majority of the Thai workforce, accounting for over 50%. Focusing on non-farm self-employed workers alone, there are approximately nine million people, constituting nearly one-fourth of the total workforce. It is anticipated that this workforce will continue to grow, driven by digital trends and the gig economy especially platform workers, and online sellers. However, it is widely acknowledged that the self-employed workforce is highly vulnerable due to its predominantly low and uncertain income, necessitating social welfare support.

Analysing and researching self-employed labour is deemed necessary because it helps provide a more comprehensive assessment of the economy. It enables the design of policies to strengthen support for self-employed workers, thereby improving their livelihoods. Additionally, it can drive economic growth in the long term. However, it is acknowledged that previous analyses and research on self-employed workers may have been limited by data constraints. For example, the frequency of available data, such as monthly or quarterly data, may only capture certain aspects of employment, like the number of employed individuals or hours worked, and may lack income data. Income data from the Survey of Economic and Social Conditions (SES), conducted every two years, may not be timely enough, especially for economic evaluations. Nevertheless, the inclusion of additional questions about self-employed income in Labour Force Survey (LFS) by the National Statistical Office could improve the availability of data for analysing and studying this workforce.

Another area where improvement is possible is in leveraging micro-level data for research purposes. Utilizing microdata in research studies has great potential as it allows for a deeper understanding of the labour market. Each individual or group in the labour force differs across various dimensions. For example, currently, we can observe how labour in the manufacturing sector has been impacted by shrinking exports, while the tourism sector is recovering from COVID-19. Analysing microdata would reveal the distribution of labour across different dimensions, providing insights into the situations of various labour groups. It would enable the assessment of which labour groups are most vulnerable and in need of assistance. This not only enhances our understanding of the labour market but also allows for the design of targeted and effective policies to support workers.

For leveraging microdata, there's indeed some utilization currently, but it's not extensive. Part of the reason might be limitations in accessing the data. If in the future, access to microdata becomes easier and more convenient, it would greatly enhance its utilization potential. Apart from using it for specific labour-related research, linking micro-level labour data with other micro-level databases, such as educational data or financial statement data, and import-export database from Customs Department, could enable analysis and research on a wide range of diverse topics from various perspectives. This would significantly benefit

economic assessments and the design of labour and other related policies, helping address the challenges facing the country.

Associate Professor Dr. Kiriya Kulkolkarn looks ahead, as an academic, she would like to emphasize considering students as well. In recent times, she provided students with informal labour data she has accessed to, allowing them to experiment with it. This allows students to practice data analysis and management. Additionally, she likes them to think about incorporating this into classroom learning. Besides working with online data, in terms of quantity, she encourages them to conduct interviews. After seeing numerical data, they often have many questions. Why is informal labour structured this way? Why don't workers seek stability? Interviewing various occupational groups will help them understand different perspectives. Another group that could benefit is those who need to produce reports upon completion of their studies. This year, for example, she is overseeing 20 students. Each will engage in analysis, meaning we'll quickly require data. Typically, obtaining data from the National Statistical Office takes about 3-4 months. To expedite this process, students decided early and promptly requested data from the National Statistical Office, for which she is grateful for their assistance and cooperation.

She thinks the Ministry of Labour should bring this data into classrooms more often, to show students what information is available and how to access it. Students need to understand what data Thailand has and how they can use it to formulate questions. Collaboration should involve not only teachers and academics but also extend to the classroom level. How can we enhance collaboration and help students become more familiar with the symbols, tools, and data provided by the government?

Dr. Nuttanan Wichitaksorn Thailand has many initiatives and is often creative in creating good things. However, there is often a maintenance issue. But there are good examples of initiatives that can be maintained well, such as the Ministry of Labour's disaster alert system. Therefore, I would like to support both short-term and long-term initiatives of the Ministry of Labour. These matters are important, and I want to emphasize that data must be used extensively. We have data, but if it's not used, we won't know. This means that allowing outsiders, including students, to use it would be very beneficial. They could be the next generation of academics, civil servants, or officials who will oversee labour issues. This would give them knowledge and understanding. I believe that if we provide more opportunities for its use, there must be conditions and agreements that users must adhere to, with proper referencing of sources.

Another point to note is the commendable efforts of the Ministry of Labour's Economic Division in attempting various research projects. There have been several proposals, although implementing them practically might be challenging. However, it might be worth exploring new approaches. For instance, staff or civil servants involved in research work from the Economic Division or elsewhere could collaborate with academics interested in conducting research. Some individuals might be interested in working with Professor Ruttiya, for example. They could consult with their department heads to explore opportunities for collaboration. In the past, some projects may have lacked certain elements, such as proper data utilization, foundational principles, techniques, or methods. Collaborative efforts could provide valuable on-the-job training and be highly beneficial. Additionally, utilizing data has numerous benefits. As Professor Kiriya once mentioned, sometimes we must conduct investigations ourselves. Therefore, learning how to conduct surveys effectively, ensuring continuity, and providing opportunities for staff or recent graduates who have completed their studies with scholarships and are eager to contribute could be valuable.

Finally, Dr. Nuttanan supports the development of longitudinal data because it allows all stakeholders to observe the changes in pattern, especially when the data are being collected regularly and with follow-up surveys.

3.3 Session Summary

Dr. Nuttanan Wichitaksorn emphasized the importance of Communication and Collaboration, which he referred to as "2C." He stressed the necessity of interaction, regular exchange, and dialogue, noting that it doesn't have to be in large groups but can be in small circles where individuals can meet, converse, and exchange ideas, learning new techniques and information. He highlighted the significance of Collaboration, stating that frequent communication is key, and emphasized the importance of trust and mutual support between the Ministry of Labour, CU-Collar, and others involved.

Associate Professor Dr Kiriya Kulkolkarn agreed that there needs to be increased collaboration, suggesting that teachers should engage more with the Ministry or even within their departments. She pointed out the difficulty of exchanging information within the Ministry and the need to gather new data, which is unfortunate because existing data is often underutilized. She stressed the importance of collaboration for mutual learning and benefit, where teachers don't just provide guidance but also gain insights themselves.

Ms. Narumon Pulpakdee summarized by emphasizing the importance of labour data. Acknowledging the significant role of labour in driving the economy and national development, she stressed the importance of deep understanding paralleled with the evolving labour landscape. She highlighted the need for comprehensive labour data that accurately reflects reality, including detailed microdata that can be linked multi-dimensionally. She regarded this as crucial, especially considering the diverse challenges Thailand may face in the future, such as environmental sustainability, geopolitical risks, and deterioration in the competitiveness of exports and manufacturing sectors.

Mrs. Napasorn Toongsooksai added that good data is worthless if no one uses it. She emphasized the need for accessibility and simplicity in data usage, underlining that it's not just external individuals but also researchers and academics within various departments who desire to utilize the data. She emphasized the importance of the Ministry of Labour's rich data and encouraged its maximum utilization. She suggested that if the Ministry's Big Data can be made accessible, it would greatly enhance its usefulness. Additionally, she supported the idea of teachers collaborating with Ministry researchers, believing it would increase confidence and ultimately maximize the benefits of labour data utilization. She concluded by expressing hope that the Ministry of Labour, as the primary agency for labour registration data, would fully harness its potential for maximum benefit.

Session 4: Closing Remarks

Associate Professor Ruttiya Bhula-or expressed gratitude to everyone who participated in today's seminar. She emphasized the importance of seminars covering labour databases and facilitating exchange between producers and users. She remarked, "This is not the last time we'll meet, but rather a milestone where we'll meet again."

She further extended sincere appreciation to the Ministry of Labour for their close collaboration for over five years since the signing of the MOU in 2019. Despite facing challenges such as COVID-19 and changes in working teams, CU-Collar has made progress. However, she stressed the need for further collaboration with key stakeholders to ensure a strong link between databases and the formulation of labour policy.

Assoc. Prof. Ruttiya Bhula-or also thanked CU-Collar consultants and their team for their invaluable advice and contribution to today’s seminar. She emphasized the importance of continuity and announced plans to hold labour-related database seminars annually, coinciding with National Labour Week. She stated, "We anticipate ongoing discussions in this data-driven format because ultimately, this data will provide evidence and lead to more valuable and effective policies."

In her closing remarks, she discussed the formation of a research group focusing on labour and socio-economic issues. This group will discuss the utility of data from the Data Lab and necessary improvements. She emphasized that the top-down approach is no longer sufficient and urged for continuous reflections and feedback from all stakeholders to work towards development and benefiting everyone in society. She hopes to see more associated stakeholders in the coming years.

Figure 10 Ambience in the last session

Source: Seminar on Labour-Related Databases: Their Existence, Utilization, and Future Directions A collaboration betweenThe Collaborating Center for Labour Research (CU-Collar), College of Population Studies, Chulalongkorn University The National Labour Research Center (NLRC) The Global Labour Organization, South-East Asia, and Thailand Chapter (GLO)May 3rd, 2024 (8.30 a.m.–12.00 p.m.) Online Zoom Meeting

Section 5: Recommendations

Based on the post-conference analysis, the following recommendations are made:

1. Integrating Big Data Sources with Labour Market Analysis and Promoting Data Access

Labor market analysis can provide deep insights and help improve decision-making processes. Advanced data analysis tools and infrastructure are essential for efficiently managing large datasets. Currently, the primary sources for policy analysis and research using microdata consist of three main sources: (1) survey and census data from the National Statistical Office, (2) data from research projects or data obtained through various social media, and (3) key data sources managed by government agencies for labour-related policies. Each database has its unique strengths and weaknesses, but the critical labour management and policy databases are crucially linked to policy development. Therefore, supporting the use of Data Labs for research and policy development, a collaboration between the Ministry of Labour and Chulalongkorn University, and utilizing survey and census data to maximize labour database and policy benefits is essential. Continuous improvement in labour data utilization requires regular evaluation and feedback mechanisms.

Promoting comprehensive and user-friendly labour databases is necessary to maximize data utility, integrating data from various sources, including government agencies, academic institutions, and the private sector, to provide a holistic view of the labour market. Customizable data queries and downloadable datasets will make the platform more accessible to researchers and policymakers. Regular updates and maintenance will ensure data accuracy and relevance, and establishing networks of experts from different fields to provide strategic guidance will enhance data collection, analysis, and dissemination practices periodically, aiding in the effective use of data and adaptation to dynamics. Compliance with PDPA requires establishing clear guidelines for anonymizing data to protect individuals' privacy while allowing researchers to access necessary information and being part of a transparent process. Regular training on PDPA compliance should be provided to data managers and researchers to ensure that data collection, processing, and sharing adhere to strict legal requirements. These processes should include data encryption, strict access controls, and systematic monitoring of data use.

2. Promoting Interagency and International Collaboration

Collaboration between government agencies, academic institutions, and international organizations is crucial for advancing labour market research. Establishing networks for sharing labour market data, research findings, and best practices can foster innovation and improve policy-making. Regular workshops and joint meetings will facilitate knowledge exchange and collaborative projects. International collaboration can bring diverse perspectives and methodologies, enhancing research quality. Additionally, creating a centralized database accessible to all stakeholders can streamline data sharing and improve collaborative research efforts. Promoting networks for sharing labour market data, research findings, and best practices can foster innovation and improve policy-making. Regular workshops and joint meetings will facilitate knowledge exchange and collaborative projects. International collaboration can bring diverse perspectives and methodologies, enhancing research quality.

Additionally, creating a centralized database accessible to all stakeholders can streamline data sharing and improve collaborative research efforts.

3. Utilizing Data for Policy Development and Facilitating Academic Research and Publication

Leveraging data-driven insights for labour policy development, policymakers should use labour databases to identify emerging trends such as job demand shifts, wage patterns, and employment rates. Data analysis can help evaluate the impact of existing policies and identify areas needing intervention. Establishing a feedback loop between researchers and policymakers will ensure research findings translate into actionable policies. Regular policy reviews based on the latest data will help adapt to changing labour market conditions. To enhance policy connections, the Ministry of Labour has research databases under the National Labour Research Centre and CU-COLLAR. Additionally, to reach more people, seminar reports and research findings should be disseminated through various multimedia channels. Publishing online video summaries and infographics can make complex data and insights more accessible to the general public, facilitating the practical use of research findings.

Appendix 1: Concept Document and

Agenda

Seminar on Labour-Related Databases: Their Existence, Utilization, and Future Directions
By
Labour Research and Coordination Research Unit (CU-COLLAR)
(Collaboration between the College of Population Studies and the Social Research Institute, Chulalongkorn University)
National Labour Research Centre
Global Labour Organization
Date: May 3, 2024
Time: 08:30 – 12:00
Platform: Online Zoom Meeting

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1. Background and Rationale

Labour data and research are crucial for understanding population and labour market dynamics, identifying issues, and designing effective policies. However, challenges remain in accessing and integrating data from various sources, as well as addressing the limitations of different data types. Concurrently, the development of labour data and research is becoming more dynamic and interdisciplinary. Innovations in data services, such as the Ministry of Labour's Data Lab, which provides data from various departments, and new data sources like Big Data and social networks, are increasingly important for labour market research and academic output. For example, Big Data has been used to analyse unemployment insurance statistics in the United States, although concerns about data privacy and research integrity persist, especially with the growing use of Big Data and Artificial Intelligence (AI). The European Union's new data protection regulations reflect significant advancements in this area.

Therefore, this seminar aims to facilitate discussions on existing labour-related databases, their limitations, and future development directions. Such discussions are essential for effective policy-making and research that can keep pace with the rapidly changing labour market. Sharing academic experiences using current labour databases will promote practical research and policy design, enhancing the development of relevant research questions for maximum benefit.

The "Seminar on Labour-Related Databases: Their Existence, Utilization, and Future Directions" aims to foster an ecosystem of knowledge exchange and collaboration, addressing labour data and research issues, data access, development strategies, and promoting data usage in research, policy-making, and policy monitoring. This will reduce redundancy and enhance the quality of research and policies impacting people's lives.

This seminar is part of the ongoing collaboration between the Ministry of Labour and Chulalongkorn University to enhance research capacity, data utilization, and labour policy development, promoting academic collaboration domestically and internationally, and advancing labour data and its applications.

2. Objectives

1. To discuss labour-related databases with the responsible agencies, explore data utilization methods to develop efficient and up-to-date data infrastructure, and maximize the benefits of existing labour databases.
2. To share academic experiences using current labour databases, address their limitations, and provide recommendations for future development.

3. Seminar Format

The seminar will be conducted online via Zoom on Friday, May 3, 2024, from 08:30 – 12:00. Participants will receive a link and password via the registered email before the seminar.

4. Discussion Framework

"Labour refers to human effort or exertion in producing and distributing goods and services for economic benefit, with compensation for the effort. This includes both physical and intellectual labour." (Professor Nikom Chandravithun, Royal Institute Newsletter, 1993) [1]

The databases discussed will include both active and inactive labour force groups, such as employed individuals, unemployed individuals, seasonal workers, and those not currently in the labour force but potentially entering it in the future. This encompasses working-age individuals aged 15 and above. The databases cover various dimensions, such as labour force statistics by gender, employment statistics by sector, rural and urban labour market statistics, work permits for migrant workers, youth labour market statistics, labour market statistics for people with disabilities, skill requirements, labour disputes, labour unions, employer associations, skill standard tests, and employment statistics for people with disabilities.

The discussions will follow the concept of the labour-related life course, considering life stages and transitions within a multi-stage life framework. This includes transitions before entering, during, and after exiting the labour market, with a unit of analysis at the individual (microdata) level, using the labour-life concept to develop and analyse data.

5. Target Audience and Number of Participants

The seminar targets key agencies responsible for labour-related databases in Thailand, such as the Ministry of Labour, the National Statistical Office, and the Bank of Thailand. It also includes representatives from government, private sector, academic institutions, researchers, and experts using labour-related databases, for example, the Thailand Development Research Institute (TDRI), the National Economic and Social Development Council (NESDC). Approximately 40 participants are expected.

[1] Professor Nikom Chandravithun, Royal Institute Newsletter, 1993, Year 3, Issue 25, June 1993

6. Expected Outputs

1. **Summary Report:** A report summarizing the discussions, insights, and recommendations for policymakers, researchers, and practitioners interested in labour databases and their applications. The report will provide an overview of the current status of labour databases in Thailand and internationally, identify challenges and opportunities discussed during the seminar, and suggest directions for future research and policy development.
2. **Recommendations:** A compilation of suggestions from the discussions and research findings, focusing on improving access, reliability, and utilization of labour databases for policy-making and research. The recommendations will address specific issues such as data privacy (PDPA concerns), integrating Big Data with labour market analysis, and strategies for enhancing collaboration between governmental, academic, and international organizations. Mechanisms for collaboration, such as establishing dedicated platforms or networks for sharing labour market data, research findings, and best practices, will be proposed to promote innovation and excellence in labour market research and policy-making. Additionally, the seminar's online video and infographic summaries will be published for wider dissemination.

7. Programme

Time	Detail
08:30 – 08:45	Open Zoom Meeting and Registration
08:45 – 09:15	**Session 1:** Welcome Address by Associate Professor Dr. Pannee Cheewinsiriwat, Assistant Vice President for Research Affairs Opening Remarks by Mrs. Napasorn Toongsooksai, Academic Labour Advisor, Ministry of Labour • Introduction and Scope of the Seminar by Associate Professor Dr. Ruttiya Bhula-or, Deputy Dean, and Director of Labour Research and Coordination Research Unit (CU-COLLAR), (the College of Population Studies, Chulalongkorn University & the Social Research Institute, Chulalongkorn University) • Group Photo with Speakers, Advisors, and Distinguished Guests
09:15 – 10:20	**Session 2: Overview of Key Labour Databases in Thailand and Internationally** • An overview of existing labour databases, relevant agencies, scope, and access, maximizing the use of labour databases for research and policy-making, and PDPA issues. o Mr. Natthapol Hachanda, Director of the Research and Innovation Center for Labour, Labour Economics Division, Ministry of Labour (MOL Big Data Analytics) o Mr. Saratrai Watcharaporn, Director of Statistical Data Utilization Promotion, National Statistical Office (Survey Data and Database Development)

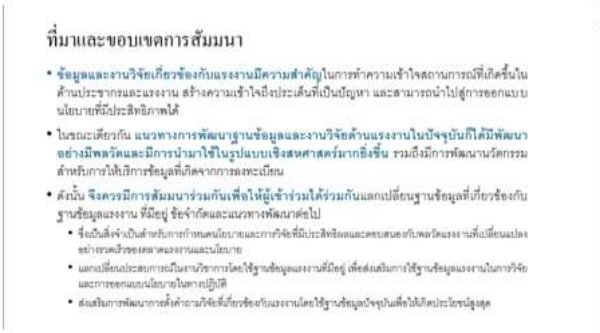
	○ Pol. Lt. Col. Thienrat Wichiansan, Expert Committee Member, Personal Data Protection Committee (Data Protection and Privacy Issues) • Moderated by Dr. Montakarn Chimmamee, Social Research Institute and CU-COLLAR, Data Lab Coordinating Center, Chulalongkorn University • Q&A and Discussion with Participants
10:20 – 10:25	Break
10:25 – 11:55	**Session 3: Exchanging Academic Work Experiences and Future Directions of Labour Data Utilization** • Examples of using labour databases, case studies on research topic selection and database use, future directions for labour data, the necessity of researcher training, and the changing landscape of labour research. ○ Mrs. Napasorn Toongsooksai, Academic Labour Advisor, Ministry of Labour ○ Ms. Narumon Pulpakdee, Deputy Director, Macroeconomic Department, Bank of Thailand ○ Associate Professor Dr. Kiriya Kulkolkarn, Faculty of Economics, Thammasat University ○ Dr. Nuttanan Wichitaksorn, Visiting Research Advisor, Labour Market Analytics Team, Thailand Development Research Institute (TDRI) • Moderated by Dr. Chadatan Osatis and Dr. Chonticha Asavanirandorn, College of Population Studies, Chulalongkorn University • Q&A and Discussion with Participants
11:55 – 12:00	**Session 4:** Seminar Summary by Associate Professor Dr. Ruttiya Bhula-or
12:00 – 12:15	Media Briefing: Summary of CU-COLLAR Research and Labour Data/Research in Thailand

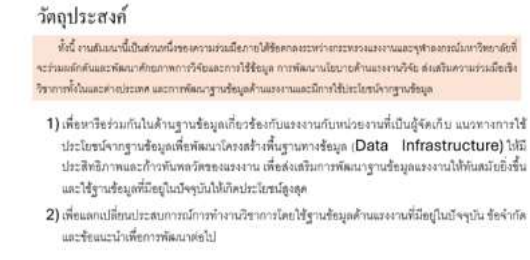
Appendix 2: Document & Presentation (In Thai)

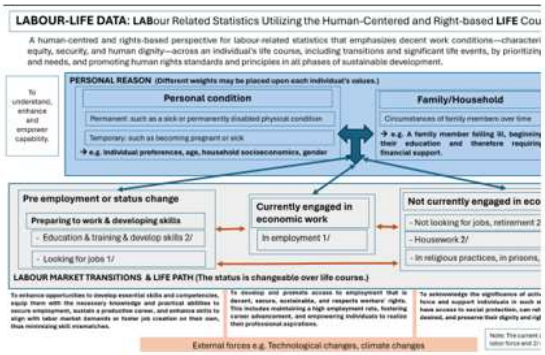
The document & presentation can be drawn from:

https://drive.google.com/drive/folders/1Or1JDQLjNSGqcndH3L64t0bW-oYC5LeZ	

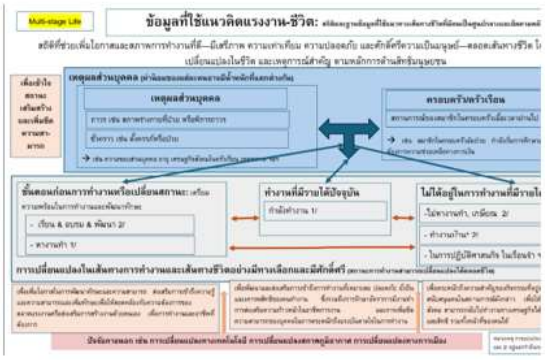
Session 1: Opening Remarks






LABOUR-LIFE DATA: LABour Related Statistics Utilizing the Human-Centered and Right-based LIFE Cou
PERSONAL REASON (Different weights may be placed upon each individual's values.)
Personal condition
Family/Household
Pre employment or status change
Currently engaged in economic work
Not currently engaged in eco
LABOUR MARKET TRANSITIONS & LIFE PATH (The status is changeable over life course.)
External forces e.g. Technological changes, climate changes


สรุปงานวิจัยของ CU-COLLAR
ฐานข้อมูล/งานวิจัยด้านแรงงาน
Datalab Coodinating Center
https://www.cu-collar.org/labourdata
CU-COLLAR


Multi-stage Life
ข้อมูลที่ใช้แนวคิดแรงงาน-ชีวิต:
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ครอบครัวหรือเรือน
ทำงานที่มีรายได้ปัจจุบัน
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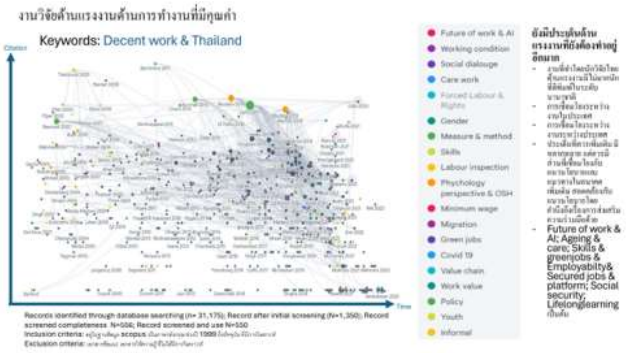
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Future of work & AI
Working condition
Social dialogue
Care work
Forced Labour & Rights
Gender
Measure & method
Skills
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Green jobs
Covid 19
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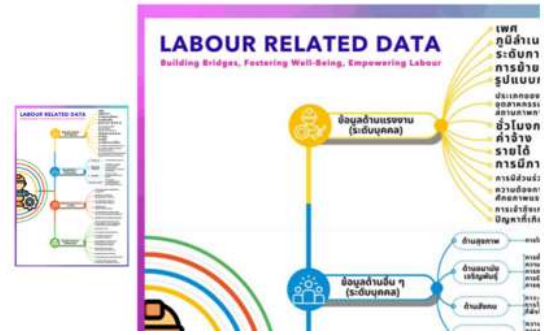
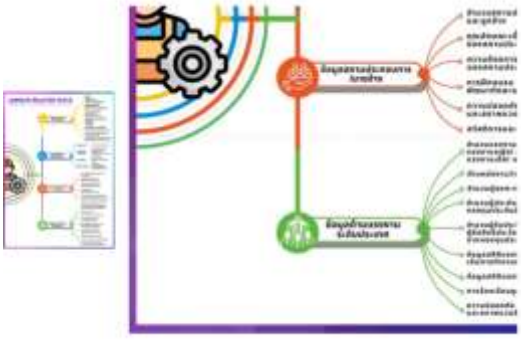
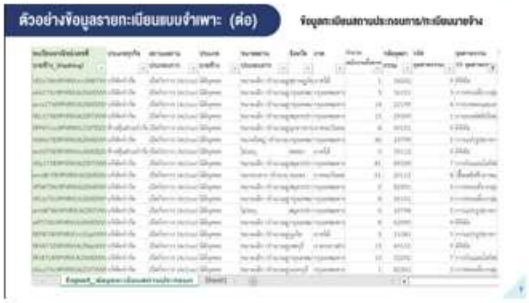
Work value
Policy
Youth
Informal


LABOUR RELATED DATA
Building Bridges, Fostering Well-Being, Empowering Labour
ข้อมูลด้านแรงงาน (ระดับบุคคล)
ข้อมูลด้านอื่น ๆ (ระดับบุคคล)


สรุปงานวิจัยของ CU-COLLAR
ฐานข้อมูล/งานวิจัยด้านแรงงาน
Media Kit
2024
CU-COLLAR
GET TO KNOW US

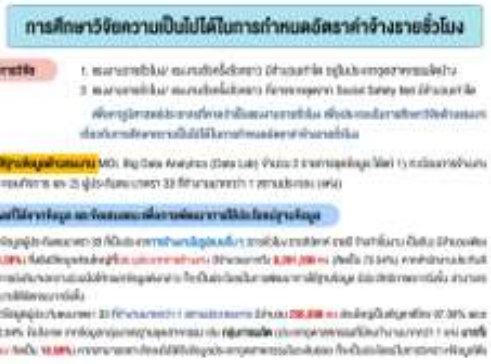


Session 2: Overview of Labour Databases: Scope, Accessibility, Policy Utilization, and PDPA Compliance




การวิเคราะห์การจ้างงานในอุตสาหกรรมเป้าหมาย (S-Curve) (ต่อ)


แนวทางการใช้ Data lab


การศึกษาวิจัยความเป็นไปได้ในการกำหนดอัตราค่าจ้างรายชั่วโมง


คู่มือและแนวปฏิบัติเกี่ยวกับการยกเลิกเงื่อนไขทางวิชาการ
การใช้ประโยชน์จากฐานข้อมูล MOL Big Data Analytics


4. DATA LAB คือ....


แจ้งความประสงค์ขอใช้ข้อมูล
ผ่าน "หนังสือแสดงความประสงค์ขอใช้
ข้อมูล MOL Big Data Analytics"

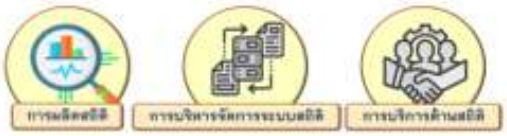

Background


ส่งรายละเอียด มาที่
rlic@mol.mail.go.th,
rimol.th@gmail.com
ศูนย์วิจัยแรงงานแห่งชาติ
เว็บไซต์ศูนย์วิจัยแรงงานแห่งชาติ
http://nlrc.mol.go.th/
หัวข้อ "การขอใช้ข้อมูลใน MOL Big Data Analytics"

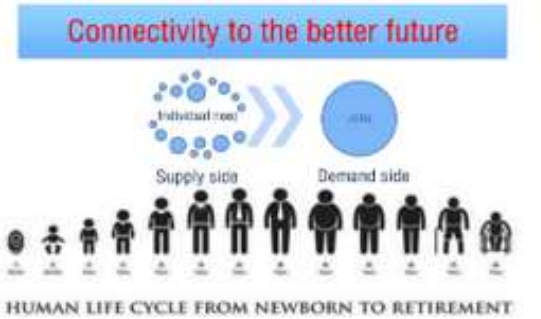
5. Challenge

ฐานข้อมูลแรงงาน
สำนักงานสถิติแห่งชาติ

ภารกิจหลักของสำนักงานสถิติแห่งชาติ



การสำรวจภาวะการทำงานของประชากร



การเก็บรวบรวมข้อมูล


นิยามที่สำคัญ
ผู้มีงานทำ
ผู้ว่างงาน
ผู้รอฤดูกาล


บริการข้อมูลของ สสช ที่เกี่ยวกับแรงงาน
บริการข้อมูลสถิติและตัวชี้วัดที่สำคัญ สาขาแรงงาน


สถิติ และ ตัวชี้วัดของการสำรวจ


Interactive Dashboard


ตัวอย่าง การนำข้อมูล สรง. ไปใช้ประโยชน์


บริการ NSO Data Catalog
Data Catalog


ฐานข้อมูลต่าง ๆ ของ สสช. ที่เกี่ยวกับแรงงาน
Interactive Dashboard
บริการ NSO Data Catalog
ระบบบัญชีข้อมูลภาครัฐ
(Government Data Catalog)


ระบบบัญชีข้อมูลภาครัฐ (Government Data Catalog: GD Catalog)
http:// gdcatalog.go.th


ศูนย์กลางการแบ่งปันสถิติ (Stathub)
https://stathub.nso.go.th/


การให้บริการข้อมูลระดับย่อย (Micro Data)
ข้อมูลระดับย่อย
ตัวอย่าง : พจนานุกรมข้อมูล (Data Dictionary)
Datadic SES 2563
Microdata SES 2563
Questionnaire SES 2563
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ตัวอย่าง การนำข้อมูลจาก
GD catalog ไปใช้ในประโยชน์


การให้บริการข้อมูลระดับย่อย (Micro Data)
ข้อมูลระดับย่อย
ตัวอย่าง : ข้อมูลระดับย่อย (Microdata)
Datadic SES 2563
Microdata SES 2563
Questionnaire SES 2563
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สารสนเทศเพื่อการพัฒนาประเทศ
ข้อมูลพื้นฐาน


การให้บริการข้อมูลระดับย่อย (Micro Data)
http://ddi.nso.go.th/


การให้บริการข้อมูลระดับย่อย (Micro Data)
ข้อมูลระดับย่อย
ตัวอย่าง : แบบสอบถาม (Questionnaire)
Datadic SES 2563
Microdata SES 2563
Questionnaire SES 2563
19


วิธีการขอใช้ข้อมูลระดับย่อยของ สสช.
20

Session 3: Exchanging Academic Work Experience through the Use of Existing Labour-related Database and Future Directions of Data Utilization.

https://drive.google.com/file/d/157lKjGeFRr4Oh1NYTKDM_ZwrwERkXutJ/view?usp=drive_link	