



Communication Activity Report

Year 1 (2023)



A transdisciplinary research project funded by the EU and the UKRI



UK Research
and Innovation

Pandemic literacy and viral zoonotic spillover risk at the frontline of disease emergence in Southeast Asia to improve pandemic preparedness.

PANDASIA

Communication Activity Report

Year 1 (2023)

Deliverable: D6.3

Date: 13 March, 2024

Dissemination Level: PU-Public document

www.pandasia-project.com

Table of Contents

Table of Contents.....	3
List of Figures.....	4
Project Partners	6
Authors and Acknowledgements	7
List of Acronyms	8
1. Executive Summary.....	9
2. Background	10
3. Work Package 1: Society and spillover risk (WP1)	11
3.1 National stakeholder engagement activities	11
3.2 Provincial advocacy events	12
3.3 Co-production workshops	15
3.4 Public engagement events	16
4. Work Package 2: Spillover risks from wildlife, livestock & land cover change (WP2)	18
5. Work Package 3: Virology (WP3).....	18
6. Work Package 4: Modelling (WP4).....	19
7. Work Package 5: Pandemic Preparedness and Prevention literacy (WP5)	19
8. Work Package 6: Communication, dissemination and exploitation (WP6)	20
8.1 Impact.....	25
8.2 Update of the plan for exploitation and dissemination of results (if applicable)	25
9. Work Package 7: Coordination (WP7)	26
10. Annex	27
Annex 1: Chiang Rai Provincial Health Office's Institutional Review Board's Ethical Clearance to Obtain Approval for Working in Chiang Rai Province	28
Annex 2: The Approval Certificate from the Research Ethics Review Committee for Research Involving Human Subjects, Chulalongkorn University.....	29
Annex 3: The Approval Certificate from the IACUC from the Faculty of Veterinary Science, Chulalongkorn University.....	30
Annex 4: The Certificate of Biosafety-Biosecurity Training and the Official Certificate Required by the Center for Occupational Safety, Health and Environmental Management	31
Annex 4.1: The Certificate of Biosafety-Biosecurity Training, Mahidol University	31
Annex 4.2: The Official Certificate Required by the Center for Occupational Safety, Health and Environmental Management	32
Annex 5: PANDASIA Project's Press Release.....	33
Annex 6: PANDASIA Project Flyers	39
Annex 6.1: PANDASIA Project Flyer in English	39
Annex 6.2: PANDASIA Project Flyer in Thai	41

List of Figures

Figure 1. PANDASIA Work Packages	10
Figure 2. Meeting and Site Visit at Chiang Rai Provincial Health Office (PHO).....	12
Figure 3. Meeting and Site Visit at Mae Fah Luang Hospital, Mae Fah Luang District, Chiang Rai Province	13
Figure 4. Meeting and Site Visit at Wiang Kaen District Health Office (DHO), Wiang Kaen District, Chiang Rai Province.....	13
Figure 5. Meeting and Site Visit at Soi Dao District Health Office (DHO), Soi Dao District, Chanthaburi	14
Figure 6. Meeting with the Department of Epidemiology (DOE) of the Ministry of Public Health (MOPH) on epidemiological surveillance data and requesting an agreement for project collaboration	14
Figure 7. Meeting with the Department of Livestock Development (DLD) on Epidemiological Surveillance Data and Requesting an Agreement for Project Collaboration.....	15
Figure 8. Co-Production Workshop of WP1 and WP5 at the Heidelberg Institute of Global Health, Heidelberg University, August 21 – 25, 2023, Heidelberg	16
Figure 9. Policy Analysis and Stakeholders’ Mapping Data Collection in Chanthaburi, September 10 – 15, 2023	Error! Bookmark not defined.
Figure 10. Policy Analysis and Stakeholders’ Mapping Data Collection of Government Stakeholders During PANDASIA Stakeholder Mapping Workshop, October 17-18, 2023, Bangkok..	Error! Bookmark not defined.
Figure 11. Policy Analysis and Stakeholders’ Mapping Data Collection of Civil Society Organisations (CSOs) During PANDASIA Stakeholder Mapping Workshop, October 19, 2023, Bangkok	Error! Bookmark not defined.
Figure 12. Participants to the PANDASIA Stakeholder Mapping Workshop for Government Stakeholders on October 17-18, 2023	Error! Bookmark not defined.
Figure 13. Participants in the PANDASIA Stakeholder Mapping Workshop for Government Stakeholders on October 17-18, 2023, generously shared their organizations’ programs and activities on the One Health concept.....	12
Figure 14. Participants of the PANDASIA Stakeholder Mapping Workshop for Civil Society Organisations (CSOs) on October 19, 2023.....	Error! Bookmark not defined.
Figure 15. Participants in the PANDASIA Stakeholder Mapping Workshop for Civil Society Organisations (CSOs) on October 19, 2023, generously shared their organizations’ programs and activities on the One Health concept.....	Error! Bookmark not defined.
Figure 16. WP6 Team Engagement in PANDASIA Stakeholder Mapping Workshop....	Error! Bookmark not defined.
Figure 17. Closing Remarks of PANDASIA Stakeholder Mapping Workshop by Dr. Hans Overgaard, Principal Investigator of PANDASIA, Norwegian University of Life Sciences	Error! Bookmark not defined.

Figure 18. Qualitative Baseline Data Collection for In-depth Interviews (IDIs) and Focus Group Discussions (FGDs)	17
Figure 19. Qualitative Baseline Data Collection for Shared Walks	17
Figure 20. WP1 and University of Heidelberg (UKHD) Teams Conducting Baseline Quantitative Data Collection (Survey Questionnaire Pre-Test).....	18
Figure 21. Visitor Map of PANDASIA's Website EngagementS.....	21
Figure 22. Photos of the Sample Outbreak News.....	21
Figure 23. PANDASIA's Facebook Page.....	22
Figure 24. PANDASIA's LinkedIn	23
Figure 25. PANDASIA's X	23
Figure 26. Participants in the PANDASIA Stakeholder Mapping Workshop on October 17-18, 2023, in interactive sessions	25

Project Partners

No.	Abbreviations	Full names	Countries	Main roles
1	NMBU	Norwegian University of Life Sciences	Norway	Coordinator
2	NVI	Norwegian Veterinary Institute	Norway	WP4
3	UKHD	University of Heidelberg	Germany	WP5 lead
4	IZW	Leibniz Institute for Zoo and Wildlife Research	Germany	WP3-WP6
5	QMUL	Queen Mary University of London	UK	WP1
6	CU	Chulalongkorn University	Thailand	WP1 lead
7	UMU	Umeå University	Sweden	WP4 lead
8	KKU	Khon Kaen University	Thailand	WP3 lead
9	MU	Mahidol University	Thailand	WP2 lead
10	SUPA71	SUPA71 Co., Ltd.	Thailand	WP6 lead


Norwegian University
of Life Sciences

UNIVERSITÄTS
KLINIKUM
HEIDELBERG

Veterinærinstituttet
Norwegian Veterinary Institute

UMEÅ
UNIVERSITY

KKU
KHON KAEN UNIVERSITY

Leibniz-Institut für Zoo-
und Wildtierforschung
IM FORSCHUNGSVERBUND BERLIN E.V.

Queen Mary
University of London

Mahidol University
Wisdom of the Land

Disclaimer:

1. This project has received funding from the European Union's Horizon Europe research and innovation programme under [Grant Agreement No.101095444], and by UK Research and Innovation (UKRI) under the UK government's Horizon Europe funding guarantee [grant number 10055567].
2. The material presented and views expressed here are the responsibility of the author(s) only.
3. The EU Commission takes no responsibility for any use made of the information set out.

Authors and Acknowledgements

This report was prepared and written by the WP6 project team, led by SUPA71 Co., Ltd (SUPA71), which includes the following members: Dr. Kanokwan Suwannarong, Dr. Cecile Lantican, Ms. Kannika Thammasutti, and SUPA71's technical editor.

We would like to express our special thanks to the WP6 project team partner from the Leibniz Institute for Zoo and Wildlife Research (IZW), including Cora Knoblauch, for her valuable contributions and collaboration during this reporting process. Additionally, we would like to express our sincere gratitude to Prof. Dr. Alongkorn Amongsin, Dr. Hans Overgaard, and Mr. Mohamed Shelil for their insightful suggestions for the Communication Activity Report in the Year 2023.

List of Acronyms

ARD	Association of Public Broadcasting Corporations in the Federal Republic of Germany
CED	Communication, exploitation, and dissemination
CSO	Civil Society Organization
DDC	Department of Disease Control
DHO	District Health Office
DHSS	Department of Health Service and Support
DLD	Department of Livestock Development
DNP	Department of National Parks, Wildlife and Plant Conservation
DOE	Division of Epidemiology
EC	Ethical Committees
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FGD	Focus Group Discussion
GloPID-R	Global Research Collaboration for Infectious Disease Preparedness
HPH	Health Promoting Hospital
IACUC	Institutional Animal Care and Use Committee
ICF	Informed Consent Form
IHRI	Institute of HIV Research and Innovation
IRB	Institutional Review Boards
KII	Key Informant Interview
MNRE	Ministry of Natural Resources and Environment
MOAC	Ministry of Agriculture and Cooperatives
MOPH	Ministry of Public Health
OIC	Office of International Cooperation
PHO	Provincial Health Office
PLD	Provincial Livestock Office
THOHUN	Thailand One Health University Network
ZSL	Zoological Society of London-Thailand

1. Executive Summary

The consortium of PANDASIA aspires to deliver transdisciplinary implementation research to examine zoonotic spillover in Southeast Asia region. Thailand was selected because of its uniqueness of biodiversity, socioeconomic, cultural, and geographic contexts and the availability of a well-established transdisciplinary team.

We exercise transdisciplinary science in understanding the complexity of One Health nexus of human, animal, and environment interaction in actual Thai settings. Our implementation approach focuses on pioneering community-based pandemic preparedness and prevention interventions or 3PLs (Pandemic Preparedness Prevention Literacy). These approaches are country-owned, and community-based which mandate a comprehensive understanding of actual, local, national, and regional forces and regulations that shape public health preparedness in Thailand.

Our first year of inception was filled with enthusiasm and aspirations to connect, communicate, and network with our important stakeholders needed for the life of the project. Our list of stakeholders varied from local, national, regional, and international counterparts and our activities included one-to-one meetings, brainstorming sessions, workshops and symposia.

Partners of PANDASIA worked in harmony internally and externally. We kept our internal communication mostly managed by WP7 the coordinator (NMBU) in delivering biweekly meetings to discuss important topics and enhancing peer to peer communication. NMBU in collaboration with QMUL exercised *transdisciplinarity in science* by delivering series of transdisciplinary workshops to discuss various aspects of pandemic prevention, viral spillover, individual and social behaviors that potentially lead to viral spillover. These workshops were conducted digitally and were instrumental in enhancing our internal communication.

Our external communication started by establishing a website and empowering our partners of WP6 (SUPA-71) to communicate locally and nationally in Thailand. They delivered several one-to-one meetings, focus group discussions and many piloting visits to local stakeholders, such as provincial health offices and sub-district hospitals, and to national stakeholders such as Ministries of Health, Wildlife and Natural Conservation, the National One Health Committee, which we believe will be instrumental in exploiting our work at some time.

This report consolidates the activities carried out in 2023 by each partner and explains the added value of each activity in delivering the overall objective of PANDASIA.

2. Background

PANDASIA is a transdisciplinary research project aiming to understand the complexity of zoonotic spillover, thereby enhancing global pandemic preparedness. This will be done through a comprehensive collection of social, biological, and molecular data with predictive modelling of zoonotic spillover rates and disease emergence in high-risk settings in Thailand. This interdisciplinary approach will enable an intensive understanding of potential pandemic drivers along nature-rural-urban gradients. PANDASIA consists of eight work packages (WPs), as shown in Figure 1.

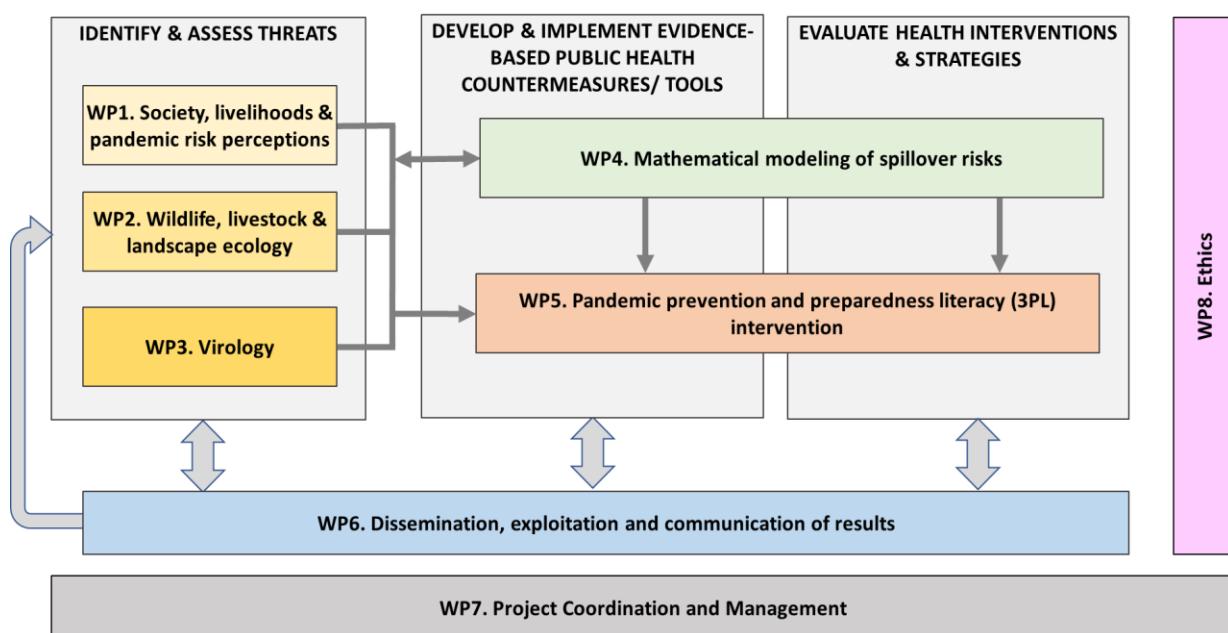


Figure 1. PANDASIA Work Packages

PANDASIA has the following Specific Objectives (SO):

- SO1.** Determine and monitor human and societal factors impacting zoonotic spillover risk by identifying populations, human behaviors, human-animal-environmental interactions, structural drivers and barriers, and relevant policies in study locations (WP1).
- SO2.** Determine the most important wild and domestic vertebrate animal hosts of importance for spillover in each study location, assessing their presence, abundance, and diversity (WP2).
- SO3.** Assess and model the potential effect of changes in land use, land cover, climate, and human demographic factors on spillover risk since 2000 (WP2).
- SO4.** Identify previously unrecognized pathogens with spillover potential, specifically targeting viral groups in vertebrate animal hosts for which there is strong precedence for viral occurrence and emergence in the region (WP3).
- SO5.** Develop ecological, epidemiological, and evolutionary conceptual models to enhance understanding of the significance of the general principles and pathways of spillover

processes and to guide the development and analyses of a structurally equivalent, yet more specific, data-driven model. (WP4).

SO6. Develop a point-of-care (POC) virus test kit prototype for healthcare providers and professionals to identify spillover at the earliest stages to prevent epidemic or pandemic spread (WP3).

SO7. Create and test a critical public health measure – a pandemic prevention and preparedness literacy (3PL) intervention to reduce zoonotic transmission and pandemic risk (WP5).

The first year of PANDASIA was rich of communication activities internally and externally. Our internal communication strategy aimed to achieve harmony, sense of urgency and common understanding of the project's objectives. While the external one focused on getting all our relevant stakeholders engaged and participated in several domestic and international events representing and sharing the vision of PANDASIA "**Preventing Future Pandemic**".

This report D6.3. Communication Activity Report presents an overview of all communication activities conducted in 2023 and presented in the order of our work packages.

3. Work Package 1: Society and spillover risk (WP1).

In collaboration with WP6 (Communication, Dissemination and Exploitation) team, WP1 conducted several activities including:

1. National stakeholder engagement activities
2. Provincial advocacy events
3. Co-production workshops
4. Public engagement events

3.1 National stakeholder engagement activities

Aim: Advocacy for PANDASIA and its communal activities.

Impact: Alignment of PANDASIA with national priorities and obtaining all ethical and legal approvals necessary to carry out the project. Conducting stakeholder mapping workshops for governmental stakeholders and Civil Society Organizations (CSOs).

Action: From March to October 2023, the team met and discussed with relevant government agencies and national authorities to obtain permission to carry out PANDASIA activities in identified communities.

Targeted audience: The Ministry of Public Health (MOPH), the Ministry of Agriculture and Cooperatives, Provincial Health Offices, District Health Offices, the MOPH's One Health National Committee, the Department of Livestock Development, and Provincial Livestock Offices (PLDs), and Civil Society Organizations (CSOs) working on the One Health approach.



Figure 2. Meeting and Site Visit at Chiang Rai Provincial Health Office (PHO)



Figure 3. Participants in the PANDASIA Stakeholder Mapping Workshop for Government Stakeholders on October 17-18, 2023, generously shared their organizations' programs and activities on the One Health concept.

3.2 Provincial advocacy events

Aim: Advocacy for PANDASIA on regional and local levels.

Impact: Alignment of provincial regional officers with PANDASIA and agreed to approve our selection of study sites.

Action: During March-April 2023, the Team visited the Mae Fah Luang and Wiang Kaen districts in **Chiang Rai** province and Pong Nam Ron and Soi Dao districts in **Chanthaburi**

province to introduce PANDASIA and secured the required local approvals to implement the project in these areas.

WP1 was requested to submit the project documents to Chiang Rai PHO's Institutional Review Board (IRB) for ethical clearance and obtain their approval for working in the province per the PHO's director's request. The agreement and clearance from the PHO were obtained on November 13, 2023. [Annex 1]

Targeted audience: Provincial regional offices in Chiang Rai and Chanthaburi regions



Figure 4. Meeting and Site Visit at Mae Fah Luang Hospital, Mae Fah Luang District, Chiang Rai Province



Figure 5. Meeting and Site Visit at Wiang Kaen District Health Office (DHO), Wiang Kaen District, Chiang Rai Province



Figure 6. Meeting and Site Visit at Soi Dao District Health Office (DHO), Soi Dao District, Chanthaburi



Figure 7. Meeting with the Department of Epidemiology (DOE) of the Ministry of Public Health (MOPH) on epidemiological surveillance data and requesting an agreement for project collaboration.



Figure 8. Meeting with the Department of Livestock Development (DLD) on Epidemiological Surveillance Data and Requesting an Agreement for Project Collaboration

3.3 Co-production workshops

Aim: Harmonise the peer-to-peer collaboration in PANDASIA.

Impact: Strengthening the transdisciplinary approach in PANDASIA.

Actions:

1. WP1 represented by Queen Mary University of London (QMUL) led a series of *transdisciplinary* workshops in collaboration with WP6 titled *How do we approach zoonotic spillover risk in Thailand from a transdisciplinary approach*. It consisted of three separate virtual meetings in the second week of June 2023, each meeting took two hours of discussions and participants were divided into breakout rooms (6 participant/room) to allow active listening and participation for all.
2. WP1 in collaboration with WP2 applied for wild animal research ethics approval by the Institutional Animal Care and Use Committee (IACUC) for domestic animals from the Faculty of Veterinary Science, Chulalongkorn University. It obtained approval on May 24, 2023. [Annex 3]
3. Integration between WP1 and WP5 to sharpen objectives and scientific methods for studies in WP1 (social science) and WP5 (intervention design and implementation), stakeholder analysis and mapping, policy document analysis, intervention design, and agreement on implementation plans. This co-production workshop took place in Heidelberg in the period of 21-25 Aug 2023.
4. Interview with the German Association of Public Broadcasting Corporations (ARD) TV channel: Prof. Dr. Till Bärnighausen, and Prof. Dr. Joacim Rocklöv and Dr. Kanokwan

Suwannarong represented PANDASIA in sharing their insights and scientific perspectives on current issues of pandemic preparedness and how PANDASIA intends to address that complexity. These interviews happened to be during the co-production workshop between WP1- WP5, and the ARD TV was granted an access to film the discussions between the participants.

Targeted audience: Collaborative partners including CU, UKHD, QMUL, NMBU and SUPA-71.



Figure 9. Co-Production Workshop of WP1 and WP5 at the Heidelberg Institute of Global Health, Heidelberg University, August 21 – 25, 2023, Heidelberg

3.4 Public engagement events

Aim: Exploring the public acceptance of PANDASIA and pre-testing of the quantitative baseline questionnaire developed by WP5.

Impact: Determining the validity and precision of the data collection tools before submitting the questionnaire for protocol amendment to Chulalongkorn University in 2024.

Actions:

A group of the researchers including Dr. Suwannarong (CHULA), Dr. Hans Overgaard (NMBU), Dr. Doreen Montag (QMUL), Dr. Kate Baernighausen (UKHD), Ms. Vidhya Sasitharan (QMUL), and others conducted qualitative baseline stakeholder interviews in four study locations in Chanthaburi province. The qualitative baseline data collection in Chanthaburi province completed with thirty-two in-depth interviews (IDIs), ten focus group discussions (FGDs), and thirty shared walks.

Targeted audience: Public



Figure 9. Qualitative Baseline Data Collection – In-depth Interviews (IDIs) and Focus Group Discussions (FGDs)



Figure 10. Qualitative Baseline Data Collection – Shared Walks



Figure 11. WP1 and University of Heidelberg (UKHD) Teams Conducting Baseline Quantitative Data Collection (Survey Questionnaire Pre-Test)

4. Work Package 2: Spillover risks from wildlife, livestock & land cover change (WP2).

In 2023, WP2 focused to obtain the IACUC Approval from the Mahidol University system and has been pre-approved pending submitting the Biosafety-Biosecurity Approval that is jointly required. Dr. Poripat Siriaroonrat, the WP2 leader, received the 2-day refreshment training and an official certificate required by the Center for Occupational Safety, Health and Environmental Management. With the two requirements fulfilled, the IACUC official approval will be obtained by January 2024. [Annex 4]

5. Work Package 3: Virology (WP3).

As a partner of the consortium, Leibniz Institute for Zoo and Wildlife Research (IZW) represented by Prof. Dr. Alex Greenwood participated in a workshop at the Senate of Berlin, Germany, on 08.09.2023

Aim: Advocacy for PANDASIA and drivers of zoonoses.

Impact: Increase the political awareness of the wildlife and zoonoses as a topic plus the political awareness of PANDASIA.

Action: Prof. Dr. Alex Greenwood (IZW) participated in a workshop titled *The Drivers of Zoonoses and their Connection to Wildlife Diseases* at the Senate of Berlin, Germany.

Targeted audience: Berlin Senate Representative: Tamara Lüdke (SPD - Spokesperson for Club Culture, Animal Welfare, Development Policy, Consumer Protection and Drug Policy) and others.

6. Work Package 4: Modelling (WP4).

PANDASIA was presented two times to the academic audience in Sweden and Norway in two different occasions:

- A- In June (13), Prof. Dr Henrik Sjödin (Umeå University) presented PANDASIA at the Nordic Institute for Theoretical Physics (NORDITA) by on 13. June 2023.
- B- In Oct (27), Dr. Kyrre Kausrud (Norwegian Veterinary Institute) presented PANDASIA at Pandemic Centre's international conference at the University of Bergen, titled *Long term consequences of the COVID-19 pandemic for society*

Aim:

- A- Present modelling work and preliminary result on evolutionary host-shift adaptation accounting for within- and between-host processes.
- B- Presenting PANDASIA in a panel debate as an ongoing academic work focuses on prevention of pandemics at the source.

Impact: Increase the advocacy of the project and leverage the significance of the project to deeply understand the zoonotic spillover.

Actions:

- A- Prof. Dr. Henrik Sjödin (UMU) participated in a workshop titled *Unifying the Epidemiological and Evolutionary Dynamics of Pathogens* at the NORDITA.
- B- Dr. Kyrre Kausrud (Norwegian Veterinary Institute) presented PANDASIA at Pandemic Centre's international conference at the University of Bergen, titled *Long term consequences of the COVID-19 pandemic for society*

Targeted audience: Academics and fellow researchers

7. Work Package 5: Pandemic Preparedness and Prevention literacy (WP5)

Aside from leading the transdisciplinary efforts and the co-production workshop, UKHD conducted Nature Based Solution (NbS) summer school from 7 - 11, August 2023 in Heidelberg.

Aim: Explore the innovative potential of NbS to tackle two pressing global health challenges – climate change and pandemic prevention, which are highly interconnected and provide opportunities to design, apply, and evaluate a range of win-win NbSs to inform future policies based on scientific evidence.

Impact: Increase the advocacy of the project and leverage the significance of the project to deeply understand the zoonotic spillover and discuss potential collaboration with fellow researchers.

Action: UKHD organized and hosted a summer school for the young European researchers titled as Nature-based Solutions (NbS) to tackle pressing global health challenges: climate change and pandemics. In this week young scientists were introduced to various applications of NBS in pandemic prevention and climate change adaptation. As well as PANDASIA was introduced to them and future collaboration between the consortium and the participants was discussed.

Targeted audience: Academics, students and fellow researchers

8. Work Package 6: Communication, dissemination and exploitation (WP6).

Knowledge Exchange Strategy Report submitted: Communication, exploitation, and dissemination (CED) are important elements of the communication strategy. PANDASIA aims to **communicate** the project's activities and results as well as the societal challenges of dealing with future pandemics to audiences in Thailand, the EU countries, and worldwide. It paves the way (**exploitation**) for the use of project results to tackle societal issues of preventing pandemics. It seeks to **disseminate** the project results and translate these into usable formats to be accessed by the scientific community, policymakers, and industry at various levels in Thailand and EU countries. The knowledge exchange strategy provides and initiates the dialogue between science and society. It describes the overall communication goal of PANDASIA, which WP6 translates into actions for implementation from 2023 to 2027. Among the main tasks of WP6 is to promote the project's activities, outputs, and results to identified audiences and stakeholders in Thailand and the European countries. It also describes possible avenues and channels to reach stakeholders and audiences to enhance pandemic literacy. This communication strategy will enhance key audiences' recognition of the EU's global support for saving lives using evidence and sustainable approaches. As a result, the WP6 team, including teams from SUPA71 Co., Ltd (SUPA71), Thailand and Leibniz Institute for Zoo and Wildlife Research (IZW), drafted and submitted the knowledge exchange strategy report to the EU on June 30, 2023 (D6.1). The strategies include the following activities:

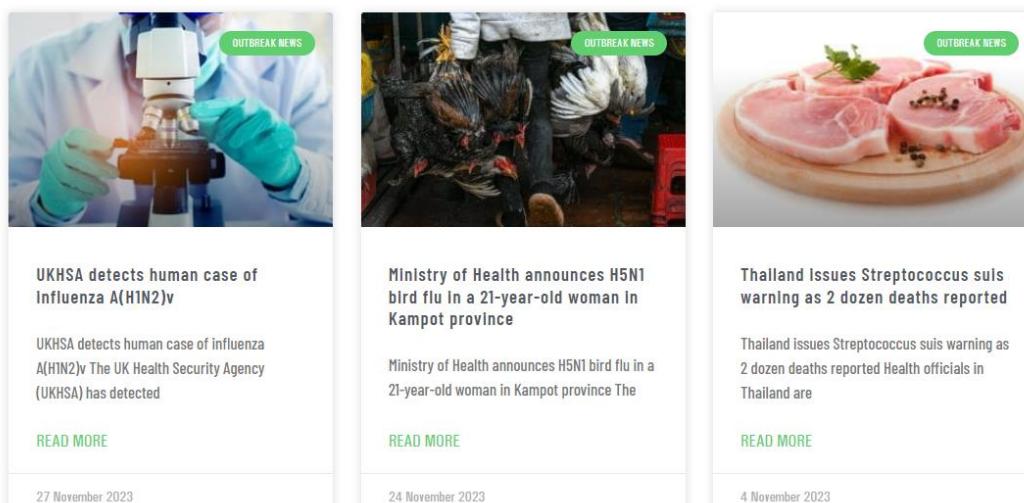
PANDASIA website and social media platforms launched and posted: On June 9, 2023, the PANDASIA website was launched (<https://pandasia-project.com/>). In addition, SUPA71 launched other social media platforms like Facebook, LinkedIn, Twitter, and YouTube, to communicate with target audiences from various locations and countries since it is essentially the platform for the project to connect with local and international stakeholders to share and make its activities visible to public and relevant stakeholders. Currently, the website and social media platforms have been updated per PANDASIA's communication guidelines. The engagement statistics from May to December 25, 2023, are as follows:

- **Website engagement:** As of December 23, 2023, multiple visits were from Austria (2), Bangladesh (1), Belgium (3), Brazil (1), Canada (7), France (7), Germany (42), Hong Kong (22), Indonesia (4), Iraq (1), Italy (5), Kazakhstan (1), Malaysia (1), Netherlands (1), New Zealand (23), Norway (1), Poland (1), Russian Federation (4), Saint Kitts and Nevis (1), Singapore (5), Spain (2), Sri Lanka (1), Sweden (24), Switzerland (2), Thailand (280), Turkey (2), United Kingdom (17), United States (16), Uruguay (1), Venezuela (1), and unknown countries (820). There were 183 downloaded documents from the website. In addition, 16 pieces of the outbreak news are posted on the website.



Figure 12. Visitor Map of PANDASIA's Website Engagements.

Outbreak News



[VIEW MORE](#)

Figure 13. Photos of the Sample Outbreak News

- **Facebook:** There are more than 1,700 followers, >1,600 clicked Likes, 6 shared activities posts, and around 40,000 reached of the online Facebook audiences.



Figure 14. PANDASIA's Facebook Page

- **LinkedIn:** There were 55 professional connections, 29 profile viewers, and 11 post impressions.



PANDASIA EU Project

Project Manager at PANDASIA

Bangkok, Bangkok City, Thailand · [Contact info](#)

59 connections

[Connect](#)

[Message](#)

[More](#)

PANDASIA

About

PANDASIA is an acronym for "Pandemic Literacy and Viral Zoonotic Spillover Risk at the Frontline of Disease Emergence in Southeast Asia to Improve Pandemic Preparedness." It is co-funded by the European Union (EU) and UK Research and Innovation (UKRI). The main objectives of the PANDASIA are to gather information on social and biological data and model zoonotic spillover rates and disease emergence in high-risk settings in Thailand to identify potential pandemic drivers along nature-rural-urban gradients. Evidence-based strategies for pandemic preparedness and public health measures can be developed and improved with a better understanding of the interactions between the underlying drivers of spillover at local levels. PANDASIA will utilize advances in prediction to determine, analyze, and model the potential for viral pathogen spillover from One Health (OH) and EcoHealth (EH) perspective points.

Figure 15. PANDASIA's design on LinkedIn.

- **X:** There were 12 posts and re-posts from June to December 2023. We followed 150 professionals and projects and received 36 active followers from various professional fields, especially in public health, environment, and communication.

PANDASIA Project

← 18 posts



... Following

PANDASIA Project

@PANDASIA_EU

PANDASIA is a project under funding support from European Union (EU) and UK Research and Innovation

Education Thailand Joined May 2023

150 Following 36 Followers

Figure 16. PANDASIA design on X.

Communication materials: The communication materials prepared and produced by the WP6 Team in English and Thai include:

- **Press release:** One press release was produced, published, and distributed to relevant stakeholders. [Annex 5]
- **Flyers:** There are flyers in English and Thai that introduce the project descriptions that are posted on the website. [Annex 6]
- **Newsletters:** Two newsletters that were produced will obtain approval from PANDASIA's PI and then be distributed to the public and relevant stakeholders. Apart from serving the Consortium members' information needs, the periodic newsletter narrates the progress of project activities to our external audience when uploaded on the website.

Communication support to Stakeholder Mapping Workshops provided: The WP6 team observed the activities and provided communication support to enhance the project's visibility among Thai stakeholders. Additionally, the Team prepared and distributed information packages to the workshop participants, consisting of tote bags, T-shirts, caps, and pens that bear the PANDASIA logo. The Team also supported documenting the activities and produced videos to capture the knowledge sharing among local partners. The video materials were carefully edited to protect the personal privacy of some participants. This was produced after the participants signed the Informed Consent Forms (ICFs) from all of the workshops' participants. All of them expressed their willingness to participate in the dialogue and be recorded as part of the event.

In addition to the above activities, a newsletter highlighting the activity was also produced in November 2023 and was released in January 2024. The newsletter provided information on the current activities of relevant government agencies and CSOs and how agencies and organizations translated the concept of "One Health" into action.

The provision of support to WP1 was a window of opportunity for WP6 to identify and meet potential stakeholders because profiling stakeholders and identifying the gatekeepers will enable WP6 to enhance its knowledge-sharing strategy.



Figure 17. Participants in the PANDASIA Stakeholder Mapping Workshop on October 17-18, 2023, in interactive sessions

Communication with press and media contacts in Europe and Thailand initiated: The WP6 Team started to connect with the press offices of consortium members. For any results or activities that interest the members and the external audience, the WP6 Team will gather and share such information via email, any other channel, or an online platform.

8.1 Impact

It is too early to gauge the impact of communication initiatives during the period under review. While the website was launched in June 2023, WP6 only provided general information to introduce the purpose of PANDASIA and its implementing partners. However, during the period, WP6 was able to quantify the indicators of successful engagement via social media platforms. However, activities conducted by the WPs were only in their preparatory stages, like WP1 stakeholders' mapping workshops that were of interest and relevant to the WP6 communication strategy. The results of the stakeholders mapping would lead WP6 to identify a select group of possible local gatekeepers and policymakers to support PANDASIA community activities.

8.2 Update of the plan for exploitation and dissemination of results (if applicable)

PANDASIA's plans for exploitation and dissemination are integral to the Knowledge Sharing Strategy. To achieve the aim of **exploitation**, the project ensures the use of project results to tackle societal challenges of preventing pandemics. To serve the purpose of **dissemination**, WP6 will translate project results into formats usable by stakeholders at various levels in Thailand and the EU countries, after obtaining the results of the stakeholder mapping, policy

analysis, and baseline (qualitative and quantitative) studies, which WP6 aims to be produced a draft of the dissemination by around September 2024 and onwards.

9. Work Package 7: Coordination (WP7)

NMBU as the coordinator is keen to enhance peer-to-peer communication and to exercise transdisciplinary science at every opportunity. We conducted three consecutive virtual workshops titled as “Transdisciplinarity in PANDASIA”, having biweekly meetings for the first year, represented PANDASIA in several national and international scientific events.

Aim:

1. Enhancing the transdisciplinary approach and application in PANDASIA.
2. Scouting for potential national and international contributors
3. Networking with relevant policy makers and scientists.

Impact:

- 1- Increase the awareness of the PANDASIA.
- 2- Leverage the importance of the project.
- 3- Network with global decision makers as: The Lancet-PPATS Commission on Prevention of Viral Spillover, Preventing Pandemics at the source, International Alliance against Health Risks in Wildlife Trade and others.
- 4- Engage with the scientific community of One Health and Pandemic Prevention in the UIO.

Actions:

- 1- Hans Overgaard (PI) presented PANDASIA to a Networking event organized by HADEA to improve collaboration between various EU projects like ESCAPE, PCR-4-ALL and BE-READY, 23 March 2023.
- 2- Hans Overgaard presented PANDASIA in a webinar titled *EU-ASEAN Collaboration in Science, Research and Innovation: Horizon Europe Health & Biotech Calls*, 13 June 2023.
- 3- NMBU and PANDASIA represented by the Principal Investigator Dr. Hans Overgaard presented the PANDASIA project to the Centre for Pandemics and One Health Research (P1H) at the University of Oslo (UiO), Holmen Fjordhotell, 15 June 2023
- 4- The Project Manager, Mohamed Shelil (NMBU) participated in the World Health Summit in Berlin, Germany, 14-18 October 2023.
- 5- NMBU in collaboration with QMUL organized virtual transdisciplinary workshops to:
 - a. share views and expertise on pandemic prevention in Thailand,
 - b. exchange local and scientific expertise between colleagues of PANDASIA.

Targeted audience: Several stakeholders including DGs RTD, SANTE, HERA, ECDC and WHO and several academics at UiO.

10. Annex

- **Annex 1:** Chiang Rai Provincial Health Office's Institutional Review Board's Ethical Clearance to Obtain Approval for Working in Chiang Rai Province.
- **Annex 2:** The Approval Certificate from the Research Ethics Review Committee for Research Involving Human Subjects, Chulalongkorn University.
- **Annex 3:** The Approval Certificate from the IACUC from the Faculty of Veterinary Science, Chulalongkorn University.
- **Annex 4:** The Certificate of Training and IACUC Submission to the Biosafety-Biosecurity Approval through the Mahidol University System.
 - **Annex 4.1:** The Certificate of Biosafety-Biosecurity Training, Mahidol University.
 - **Annex 4.2:** The Official Certificate Required by the Center for Occupational Safety, Health and Environmental Management.
- **Annex 5:** PANDASIA Project's Press Release .
- **Annex 6:** PANDASIA Project's Flyers.
 - Annex 6.1 PANDASIA Project Flyer in English.
 - Annex 6.2 PANDASIA Project Flyer in Thai.

Annex 1: Chiang Rai Provincial Health Office's Institutional Review Board's Ethical Clearance to Obtain Approval for Working in Chiang Rai Province

ที่ ชร ๐๐๓๓.๐๑๙/ 



สำนักงานสาธารณสุขจังหวัดเชียงราย
ต.เชียงราย-เทิง จ.เชียงราย ๕๗๐๐๐

๑๗ พฤศจิกายน ๒๕๖๖

เรื่อง ตอบรับการขออนุญาตลงพื้นที่เก็บข้อมูลวิจัย

เรียน ศาสตราจารย์ น.สพ.ดร.อลงกรณ์ อมรศิลป์

อ้างถึง หนังสือศูนย์เขียวชาญเฉพาะทางโรคอุบัติใหม่และอุบัติซ้ำในสัตว์ คณะแพทยศาสตร์ จุฬาฯ

ที่ อบ. ๘๓/๒๕๖๖ ลงวันที่ ๓ ตุลาคม ๒๕๖๖

ตามหนังสือที่อ้างถึง ได้ขอความอนุเคราะห์ให้ศาสตราจารย์ น.สพ.ดร.อลงกรณ์ อมรศิลป์ หัวหน้าศูนย์เขียวชาญเฉพาะทางโรคอุบัติใหม่และอุบัติซ้ำ คณะแพทยศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย ขออนุญาตเก็บข้อมูลวิจัยเรื่อง “Pandemic literacy and viral zoonotic spillover risk at the frontline of disease emergence in Southeast Asia to improve pandemic preparedness” หรือ PANDASIA ซึ่งงานวิจัยดังกล่าวได้รับการอนุมัติในการดำเนินโครงการฯ จากคณะกรรมการจิริธรรมการวิจัยในคน กลุ่มสหสถาบัน ชุดที่ ๑ จุฬาลงกรณ์มหาวิทยาลัย และคณะกรรมการจิริธรรมการวิจัยในมนุษย์ มหาวิทยาลัยขอนแก่น นั้น

สำนักงานสาธารณสุขจังหวัดเชียงราย ได้พิจารณาโควงร่างการวิจัยเห็นว่า งานวิจัยดังกล่าว จะเป็นประโยชน์ และสามารถนำผลการวิจัยมาใช้ประโยชน์ อีกทั้งงานวิจัยดังกล่าวได้รับการรับรอง โครงการวิจัยโดยคณะกรรมการจิริธรรมการวิจัยในมนุษย์จากกลุ่มสหสถาบัน ชุดที่ ๑ จุฬาลงกรณ์มหาวิทยาลัย และมหาวิทยาลัยขอนแก่นมาแล้ว จึงเห็นควรอนุญาตให้ผู้วิจัย เข้าเก็บข้อมูลในพื้นที่ สังกัดสำนักงานสาธารณสุขจังหวัดเชียงราย โดยให้ดำเนินการวิจัยตามขอบเขตของโครงการวิจัยที่ได้รับการรับรอง

จึงเรียนมาเพื่อโปรดทราบ



ขอแสดงความนับถือ

(นายสยาธรรมราชย์ พูเจริญกัลยา)
รักษาการในตำแหน่งนักวิชาการสาธารณสุขเขียวชาญ (ด้านส่งเสริม康健)
ปฏิบัติราชการแทนนายแพทย์สาธารณสุขจังหวัดเชียงราย

กลุ่มงานพัฒนาทรัพยากรบุคคล

โทรศัพท์ ๐ ๕๓๙๑ ๐๓๗๐

โทรสาร. ๐ ๕๓๙๑ ๐๓๒๘

Annex 2: The Approval Certificate from the Research Ethics Review Committee for Research Involving Human Subjects, Chulalongkorn University



The Research Ethics Review Committee for Research Involving Human Research Participants,
 Group I, Chulalongkorn University
 Chamchuri 1 Building, 2nd Floor, 254 Phayathai Road, Pathumwan, Bangkok 10330 Thailand
 Telephone: 02-218-3202, 02-218-3049 Email: eccu@chula.ac.th

COA No. 128/66

Certificate of Approval

Study Title No. 660079 : PANDEMIC LITERACY AND VIRAL ZOONOTIC SPILLOVER RISK AT THE FRONTLINE OF DISEASE EMERGENCE IN SOUTHEAST ASIA TO IMPROVE PANDEMIC PREPAREDNESS: PHASE I

Principal Investigator : Prof. Dr. Alongkorn Amosin

Place of Proposed Study/institution : Faculty of Veterinary Science, Chulalongkorn University

The Research Ethics Review Committee for Research Involving Human Research Participants, Group I, Chulalongkorn University, Thailand, has approved constituted in accordance with Belmont Report 1979, Declaration of Helsinki 2013, Council for International Organizations of Medical Sciences (CIOM) 2016, Standards of Research Ethics Committee (SREC) 2017, and National Policy and guidelines for Human Research 2015.

Signature

(Associate Prof. Prida Tasanapradit)

Chairman

Date of Approval : 20 June 2023

Signature

(Assistant Prof. Dr. Raveenan Mingpakaneer)

Secretary

Approval Expire date : 19 June 2024

The approval documents including:

1. Participant Information Sheet and Consent Form
2. Research proposal
3. Researcher
4. Research instruments/tools

Conditions

The approved investigator must comply with the following conditions:

1. It's unethical to collect data of research participants before the project has been approved by the committee.
2. The research/project activities must end on the approval expired date. To renew the approval, it can be applied one month prior to the expired date with submission of progress report.
3. Strictly conduct the research/project activities as written in the proposal.
4. Using only the documents that bearing the RECCU's seal of approval: research tools, information sheet, consent form, invitation letter for research participation (if applicable).
5. Report to the RECCU for any serious adverse events within 5 working days.
6. Report to the RECCU for any amendment of the research project prior to conduct the research activities.
7. Report to the RECCU for termination of the research project within 2 weeks with reasons.
8. Final report (AF 01-15) and abstract is required for a one year (or less) research/project and report within 30 days after the completion of the research/project.
9. Research project with several phases; approval will be approved phase by phase, progress report and relevant documents for the next phase must be submitted for review.
10. The committee reserves the right to site visit to follow up how the research project being conducted.
11. For external research proposal the dean or head of department oversees how the research being conducted



Study Title No. 660079
 Date of Approval 20 Jun 2023
 Approval Expire date 19 Jun 2024

**Annex 3: The Approval Certificate from the IACUC from the Faculty of Veterinary Science,
 Chulalongkorn University**



Chulalongkorn University Animal Care and Use Committee

Certificate of Project Approval		<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Renew
Animal Use Protocol			
2331018			
Protocol Title			
Pandemic literacy and viral zoonotic spillover risk at the frontline of disease emergence in Southeast Asia to improve pandemic preparedness (PANDASIA)			
Principal Investigator			
Prof.Dr.Alongkorn Amonsin			
Certification of Institutional Animal Care and Use Committee (IACUC)			
This project has been reviewed and approved by the IACUC in accordance with university regulations and policies governing the care and use of laboratory animals. The review has followed guidelines documented in Ethical Principles and Guidelines for the Use of Animals for Scientific Purposes edited by the National Research Council of Thailand.			
Date of Approval	Date of Expiration		
May 24, 2023	May 23, 2024		
Applicant Faculty/Institution			
Faculty of Veterinary Science			
Signature of Chairperson	Signature of Authorized Official		
Name and Title	Name and Title		
Asst.Prof.Dr.Chutamas Benjanirut Chairman	Assoc.Prof.Dr.Nuvee Prapasarakul Associate Dean for Research Innovation and Corporate Communication		
<i>The official signing above certifies that the information provided on this form is correct. The institution assumes that investigators will take responsibility, and follow university regulations and policies for the care and use of animals.</i>			
<i>This approval is subjected to assurance given in the animal use protocol and may be required for future investigations and reviews.</i>			

Annex 4: The Certificate of Biosafety-Biosecurity Training and the Official Certificate Required by the Center for Occupational Safety, Health and Environmental Management

Annex 4.1: The Certificate of Biosafety-Biosecurity Training, Mahidol University



Annex 4.2: The Official Certificate Required by the Center for Occupational Safety, Health and Environmental Management



ศูนย์ส่งเสริมจริยธรรมการวิจัย
 สำนักงานอธิการบดี มหาวิทยาลัยมหิดล
 โทรศัพท์ ๐๒-๘๔๗๖๑๑๕ โทรสาร ๐๒-๘๔๗๖๒๗๔

ที่ อว ๗๙.๐๑๓๐/๐๙๔๕๔๔

วันที่ ๒๙ ตุลาคม ๒๕๖๖

เรื่อง แจ้งผลการพิจารณาโครงการที่ดำเนินการต่อสัตว์เพื่องานทางวิทยาศาสตร์

เรียน คณบดีคณะสิ่งแวดล้อมและทรัพยากรศาสตร์

ตามที่ น.สพ.ดร.บริพัตร ศิริอรุณรัตน์ คณบดีคณะสิ่งแวดล้อมและทรัพยากรศาสตร์ ได้จัดส่งข้อเสนอโครงการเรื่อง “การสำรวจความสัมพันธ์ระหว่างโไฮสต์และเชื้อก่อโรคในสัตว์พื้นเมืองจำพวกหนูและค้างคาวกินแมลง เพื่อทำความเข้าใจความเสี่ยงจากการแพร่ระบาดของไวรัสจากสัตว์สู่คนในจังหวัดเชียงรายและจันทบุรี ประเทศไทย” ฉบับแก้ไข [F01-66-023] มา�ังศูนย์ส่งเสริมจริยธรรมการวิจัย เสนอต่อคณะกรรมการกำกับดูแลการดำเนินการต่อสัตว์เพื่องานทางวิทยาศาสตร์ เพื่อพิจารณาตามความทราบแล้วนั้น

ในการนี้คณะกรรมการกำกับดูแลการดำเนินการต่อสัตว์เพื่องานทางวิทยาศาสตร์ มหาวิทยาลัยมหิดล ได้พิจารณารับทราบ และรับรองโครงการที่ดำเนินการต่อสัตว์เพื่องานทางวิทยาศาสตร์ แล้ว แต่ทั้งนี้เมื่อทางโครงการได้รับการรับรองด้าน Biosafety จากคณะกรรมการจริยธรรมต้านความปลอดภัย ทางชีวภาพเรียบร้อยแล้ว โปรดดักสังสำเนาเอกสารการรับรองด้าน Biosafety มายังศูนย์ส่งเสริมจริยธรรมการวิจัย เพื่อดำเนินการออกใบรับรองโครงการฯ ตั้งแต่วันที่ได้รับการรับรองโครงการด้าน Biosafety เป็นต้นไป

จึงเรียนมาเพื่อโปรดทราบ และดำเนินการต่อไปด้วยจักเป็นพระคุณยิ่ง

บุษรี รุจานวิสัฒนาภรณ์

(ดร.บุษรี รุจานวิสัฒนาภรณ์)

ผู้อำนวยการศูนย์ส่งเสริมจริยธรรมการวิจัย
 (เลขานุการคณะกรรมการกำกับดูแลการดำเนินการต่อสัตว์
 เพื่องานทางวิทยาศาสตร์ มหาวิทยาลัยมหิดล)

สำเนาเรียน น.สพ.ดร.บริพัตร ศิริอรุณรัตน์

ผู้ประสานงาน : วิสุดา พัฒนาฤทธิ์ (ศูนย์ส่งเสริมจริยธรรมการวิจัย)
 เบอร์โทรศัพท์ : ๐๒-๘๔๗๖๒๗๔๔
 อีเมล : wisuda.pat@mahidol.edu

Annex 5: PANDASIA Project's Press Release



PRESS RELEASE

20.02.2023

EU-funded PANDASIA project reduces risk of pandemics and enhances health literacy in Thailand and Europe

Thailand, Khon Kaen - The PANDASIA project investigates how infectious diseases are transmitted between animals, humans and environment and how potential pandemics emerge. The findings will be used to enhance health literacy in different target groups in Thailand and Europe

Emerging infectious diseases, which are caused by zoonotic pathogens such as viruses and bacteria are transmitted between animals and humans, pose an increasing threat to global health. Zoonoses occur primarily where wild animals and humans come into regular contact. Due to its species diversity, human population density, and movement, Southeast Asia is considered as hotspot for the emergence of new zoonoses and subsequent pandemics. Climate change and loss of biodiversity accelerate the risk of new pandemics. The EU-funded, transdisciplinary scientific project PANDASIA investigates potential risks of new pandemics in Thailand and develops preventive measures. Findings will be used to enhance health literacy of different target groups and communities.

From 13-17 February 2023, the Kick-Off-Meeting of the EU PANDASIA project took place in Khon Kaen in northeastern Thailand. Hans J Overgaard, the project coordinator from the Norwegian University of Life Sciences, says: "How does a local pandemic develop into a global threat and how can this process be avoided or stopped in time? PANDASIA is a new, transdisciplinary EU project by universities and research institutions in Europe and Thailand with the aim of investigating the origin of pandemics guided by the 'One Health' approach. This transdisciplinary approach applies human, animal and environmental health and social science". Biologists, veterinarians, mathematicians, sociologists and human medical doctors from Norway, Sweden, United Kingdom, Germany, and Thailand are working closely together to understand the dynamics of so-called zoonotic "spillover infections" and to develop a predictive




 Co-funded by
 the European Union

 UK Research
 and Innovation

framework with effective preventive measures. PANDASIA will collect data from local communities in Thailand to determine their exposure to wildlife and livestock. Biodiversity specialists will sample the relevant biodiversity which virologists will then examine for viruses that have the potential to spill over to humans. Based on these data, models will be developed which aim to predict the future risk of the spread of new infectious diseases. A pandemic preparedness and prevention literacy (3PL) intervention will be developed, implemented and tested to improve the knowledge and practices of local communities and to reduce and prevent possible zoonotic transmission from animals to humans, thus reducing the risk of local outbreaks becoming global pandemics. Since pandemics first occur at the local level, it is extremely important for the scientists of this project to work closely with local government units and communities, non-governmental organisations and environmental and agricultural authorities in Thailand to improve their pandemic health literacy. The consortium partners of the PANDASIA project aim to expand their current understanding of the drivers of emerging infectious diseases and the interaction of viruses between humans, animals and the environment.

The PANDASIA project is funded by the EU HORIZON.2.1 - Health programme "European Union Research and Innovations Actions" (<https://cordis.europa.eu/project/id/101095444>). This programme explores new technologies and new methods or improve existing ones. PANDASIA is coordinated by the Faculty of Science and Technology of the Norwegian University of Life Sciences (NMBU) and includes the following consortium members:

Norwegian University of Life Sciences (NMBU); Norwegian Veterinary Institute (NVI); Khon Kaen University (KKU); Leibniz Institute for Zoo and Wildlife Research in Berlin (Leibniz-IZW); Universitätsklinikum Heidelberg (UKHD); Queen Mary University of London; Center of Excellence for Emerging and Re-emerging Diseases in Animals (CU-EIDAs) at the Faculty of Veterinary Science; Chulalongkorn University (CU); Umeå University; Faculty of Environment & Resource Studies, Mahidol University (MU); and SUPA71 Co., Ltd.



Co-funded by
the European UnionUK Research
and Innovation

Boiler plates - consortium members

Norwegian University of Life Sciences (NMBU)

NMBU's mission is to contribute to the well-being of the planet. Our interdisciplinary research and study programmes generate innovations in food, health, environmental protection, climate and sustainable use of natural resources. NMBU's research and study programmes are enabling people all over the world to tackle the big, global challenges regarding the environment, sustainable development, how to improve human and animal health, renewable energy sources, food production, and land- and resource management.

<https://www.nmbu.no/en>

Norwegian Veterinary Institute (NVI)

The Norwegian Veterinary Institute is a national biomedical institute delivering research-based knowledge and contingency support in the fields of animal health, fish health and food safety. The NVI is the national leading centre of expertise in biosecurity in fish and land animals. The aim of the Institute is to become Norway's centre of preparedness for One Health.

<https://www.vetinst.no/en>

Khon Kaen University (KKU)

The Khon Kaen University is the first medical school in the northeast region of Thailand and the leading academic centre. Interdisciplinary and integrative teaching and research are the focus of training medical practitioners as well as a range of complementary support scientists and lecturers to serve Thailand. KKU focuses on family medicine, community health, wellbeing, endemic health problems, tropical disease research.

<https://m.kku.ac.th>

Leibniz Institute for Zoo and Wildlife Research in Berlin (Leibniz-IZW)

The Leibniz Institute for Zoo and Wildlife Research (Leibniz-IZW) is an internationally renowned German research institute of the Leibniz Association. Its mission is to examine evolutionary adaptations of wildlife to global change and develop new concepts and measures for conservation. To achieve this, the Leibniz-IZW uses its broad interdisciplinary expertise in conducting research for conservation in close dialogue with the public and stakeholders.



<https://www.izw-berlin.de/en/home.html>

Heidelberg University Hospital and Faculty of Medicine (UKHD)

Internationally renowned patient care, research and teaching. Heidelberg University Hospital (Universitätsklinikum Heidelberg, UKHD) is one of the largest and most prestigious medical centers in Germany. The Medical Faculty of Heidelberg University (Medizinische Fakultät Heidelberg, MFHD) belongs to the internationally renowned biomedical research institutions in Europe. Both institutions have the common goal of developing new therapies and implementing them rapidly for patients. Heidelberg University Hospital and the Medical Faculty of Heidelberg University employ around 14,500 employees and are committed to provide trainings and qualifications. Every year around 86,000 patients and more than 1,100,000 outpatient cases are treated in more than 50 clinical departments with almost 2,500 beds.

<https://www.klinikum.uni-heidelberg.de/>

Queen Mary University of London

As a leading research-intensive University, we believe that when views collide, disciplines interact, and perspectives intersect, truly original thought takes form. Throughout our history, we've fostered social justice and improved lives through academic excellence. Our reformer heritage informs our conviction that great ideas can and should come from anywhere. It's an approach that has brought results across the globe, from the communities of east London to the favelas of Rio de Janeiro. We continue to embrace diversity of thought and opinion in everything we do, in the belief that when views collide, disciplines interact, and perspectives intersect, truly original thought takes form.

<https://www.qmul.ac.uk/>

Center of Excellence for Emerging and Re-emerging Diseases in Animals (CU-EIDAs) at the Faculty of Veterinary Science, Chulalongkorn University (CU)

The mission of the Faculty of Veterinary Science at CU is to enhance veterinary medicine by academic excellence in education, research, and service to the profession. As the premier educator of veterinary medicine in the country, the faculty conducts cutting-edge research for the benefit of society and the region and educates graduates with the knowledge, skills, and ethics necessary to deliver quality service to society. The Center of Emerging and Re-emerging Infectious Diseases in Animals (CU-EIDAs) is a research excellence centre located at the Faculty of Veterinary Science's Department. The centre is organised by competent and well-trained research scientists and students and focuses on emerging and re-emerging




 Co-funded by
 the European Union

 UK Research
 and Innovation

illnesses in animals and humans. CU-EIDAs research generates fundamental and new knowledge, as well as preventative and control strategies for emerging and re-emerging illnesses in humans and animals. Additionally, the centre works on capacity building and laboratory networking in order to prepare for future pandemics caused by emerging and reemerging illnesses.

<http://www.eidas.vet.chula.ac.th>

Umeå University, Sweden

Formally established in 1965, Umeå University is a comprehensive university covering research and education in medicine, science and technology, social sciences, arts and humanities, and educational sciences. As a knowledge-driven organisation, Umeå University is striving to provide students and staff with unique opportunities for learning and development – whilst simultaneously serving society with new knowledge and creative citizens.

<https://www.umu.se/en/department-of-public-health-and-clinical-medicine/>

Mahidol University, Thailand

The Mahidol University builds excellence in education, research and academic services in the field of environment, natural resources, medical and health science. The University wants to be the number one institution for environmental study in Thailand in 2025, and in the top three in the ASEAN region in 2031.

<https://en.mahidol.ac.th/index.php/about-eng>

SUPA71 Co., Ltd, Thailand

SUPA71 helps organisations across the Greater Mekong Subregion (GMS) countries to meet their research and capacity building needs. SUPA71 is a private research firm based in Bangkok, Thailand with highly qualified professionals providing research technical expertise in the GMS offering research-related services in education, risk communication, children, migration, social behaviour change communication, technology, innovation, marketing, population health, epidemiology, and infectious emerging and re-emerging infections. SUPA71 is currently working on several malaria-related projects and on COVID-19 prevention and control measures at Thai and migrant Points of Entry.



Co-funded by
the European UnionUK Research
and Innovation<http://www.supa71.com>

Contact

Norwegian University of Life Sciences (NMBU)

Faculty of Science and Technology

P.O. Box 5003, 1432 Ås, Norway

Hans J Overgaard

Phone: +47 91640252 or +66 81 1234879

Email: hans.overgaard@nmbu.no

Visiting address: Drøbakveien 31

Phone office: +47 6723 1628

Leibniz Institute for Zoo and Wildlife Research (Leibniz-IZW)

in the Forschungsverbund Berlin e.V.

Alfred-Kowalke-Str. 17, 10315 Berlin, GERMANY

Prof Alex D Greenwood

Head of Department of Wildlife Diseases

Phone: +49 30 5168 255

E-Mail: greenwood@izw-berlin.de

Steven Seet

Head of Unit Science Communication & Public Affairs

Phone: +49 30 5168125

E-Mail: seet@izw-berlin.de

SUPA71 Co., Ltd

6/10 Sukhonthasawat Road

Ladprao, Bangkok, 10230; THAILAND

Dr Kanokwan (Pook) Suwannarong

Director

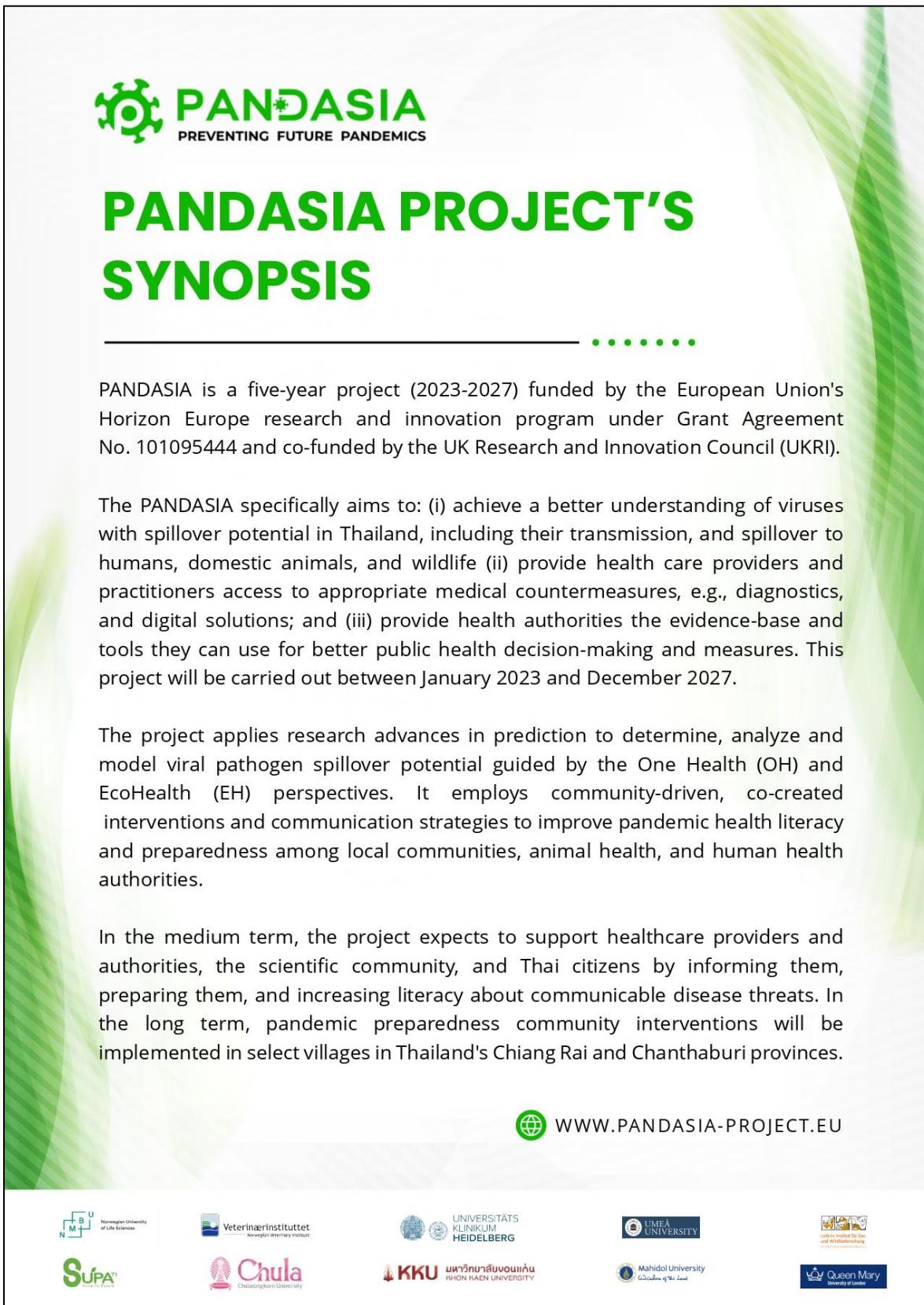
Phone: +66 85 915 5425 (mobile); +66 2 932 9822 (tel)

E-Mail: ksuwannarong@supa71.com



Annex 6: PANDASIA Project Flyers

Annex 6.1: PANDASIA Project Flyer in English



PANDASIA PROJECT'S SYNOPSIS

.....

PANDASIA is a five-year project (2023-2027) funded by the European Union's Horizon Europe research and innovation program under Grant Agreement No. 101095444 and co-funded by the UK Research and Innovation Council (UKRI).

The PANDASIA specifically aims to: (i) achieve a better understanding of viruses with spillover potential in Thailand, including their transmission, and spillover to humans, domestic animals, and wildlife (ii) provide health care providers and practitioners access to appropriate medical countermeasures, e.g., diagnostics, and digital solutions; and (iii) provide health authorities the evidence-base and tools they can use for better public health decision-making and measures. This project will be carried out between January 2023 and December 2027.

The project applies research advances in prediction to determine, analyze and model viral pathogen spillover potential guided by the One Health (OH) and EcoHealth (EH) perspectives. It employs community-driven, co-created interventions and communication strategies to improve pandemic health literacy and preparedness among local communities, animal health, and human health authorities.

In the medium term, the project expects to support healthcare providers and authorities, the scientific community, and Thai citizens by informing them, preparing them, and increasing literacy about communicable disease threats. In the long term, pandemic preparedness community interventions will be implemented in select villages in Thailand's Chiang Rai and Chanthaburi provinces.

 WWW.PANDASIA-PROJECT.EU

 Norwegian University of Life Sciences

 Veterinærinstituttet
Norwegian Veterinary Institute

 UNIVERSITÄTS KLINIKUM HEIDELBERG

 UMEÅ UNIVERSITY

 Laholm Institute for Sea and Water Management

 SUPATM
Science Park

 Chula
Chulalongkorn University

 KKU
มหาวิทยาลัยขอนแก่น
KHON KAEN UNIVERSITY

 Mahidol University
University of the South East Asia

 Queen Mary
University of London



Co-funded by
 the European Union

UKRI
 UK Research
 and Innovation

THE PROJECT BRINGS TOGETHER A TRANSDISCIPLINARY TEAM THAT OFFERS SPECIFIC EXPERTISE TO OPERATIONALIZE PANDASIA'S WORK PACKAGES (WP), NAMELY:



WP1: Society and Spillover Risk is tasked with identifying and tracking human and social characteristics important for spillover events, zoonotic disease emergence, and potential pandemics. Researchers in this WP will review human, wildlife, and livestock surveillance data from relevant ministries and stakeholders in Thailand.



WP2: Spillover Risks from Wildlife, Livestock & Land Cover Change is tasked with selecting, observing, and collecting biological samples from wild and domestic animals for virological and population dynamics assessments. The team will also assess historical land use/land cover (LULC), climate, and population data to determine their potential importance for spillover risk.



WP3: Viruses and Spillover Risk will identify known and previously uncharacterized viruses with spillover potential. They will specifically target viral groups in vertebrate animal hosts (including circulating viruses in samples from biotic (wildlife, domestic animals, mosquitoes, flies, and leeches) and abiotic sources (air, water, and sediment), to determine viral occurrence, diversity and spillover in Thailand.



WP4: Modelling of Spillover Risk will apply process-based mathematical modeling to develop a new innovative risk assessment for spillover management building on local data from potential EID hotspot areas in Thailand. The WP aims to uncover the ecological, epidemiological, and socioeconomic factors contributing to zoonotic viral spillover by utilizing mathematical modeling approaches and developing strategies to prevent and control their spread, benefiting humans and animals.



WP5: Pandemic Prevention and Preparedness Literacy Intervention is tasked with generating evidence for critical public health measures to reduce the transmission of viruses among wildlife, domestic animals, and humans. It fosters the co-creation of community-based pandemic prevention literacy interventions to improve pandemic prevention and preparedness in Thailand.



WP6: Communication, Exploitation, and Dissemination (CED) is tasked with promoting the project's activities, outputs, and results to audiences in Thailand, European stakeholders, and citizens of both regions in order to enhance pandemic literacy. It facilitates effective internal communication among all partners and supports the other work packages.



WP7: Coordination and management ensure efficient and transparent project management and coordination according to the PANDASIA project plan and European Commission guidelines and regulations. It provides oversight of PANDASIA's work plan implementation according to the planned timeline and budgetary resources.



WP8: Ethics ensures compliance with ethical principles and relevant legislation in EU countries and Thailand.

The participating consortium members taking advantage of the many synergies among the institutes to follow "One Health" principles are as follows: Norwegian University of Life Sciences (NMBU); Norwegian Veterinary Institute (NVI); Heidelberg University Hospital (HUU); Leibniz Institute for Zoo and Wildlife Research in the Forschungsverbund Berlin e.V. (Leibniz-IZW); The Wolfson Institute of Population Health (WIHP) of the Queen Mary University of London (QMUL); Chulalongkorn University (CU); Umeå University (UM); Khon Kaen University (KKU); Mahidol University (MU); and SUPA71 Co., Ltd (SUPA71).



Annex 6.2: PANDASIA Project Flyer in Thai


ข้อมูลฉบับย่อโครงการวิจัย PANDASIA



โครงการ PANDASIA เป็นโครงการวิจัยที่ได้รับการสนับสนุนร่วม จากสหภาพยุโรป (European Union) และสภากาชาดนานาชาติกรรมาแห่งศธาราของอังกฤษ (UK Research and Innovation Council, UKRI) โดยมีระยะเวลาดำเนินโครงการรวม 5 ปี (พ.ศ. 2566 ถึง พ.ศ. 2570) ภายใต้แผนงานการวิจัยและนวัตกรรม Horizon Europe สายัญญาเลขที่ 101095444

โครงการวิจัย PANDASIA นี้มีเป้าประสงค์จำเพาะในการ 1) ส่งเสริมให้คลาสในสหสาขาวิทยาศาสตร์ ได้พัฒนาต่อยอดองค์ความรู้และความเข้าใจที่ลึกซึ้งทางด้านเชื้อไวรัสที่มีโอกาสสูงในการติดเชื้อจากสัตว์สู่คน ในพื้นที่ของประเทศไทยครอบคลุมประเด็นที่สำคัญได้แก่ การระบาดของเชื้อและการแพร่กระจายของเชื้อมายังมนุษย์สัตว์เลี้ยง และสัตว์ป่า 2) ผลักดันให้บุคลากรทางด้านการแพทย์และสาธารณสุขมีการเข้าถึง และสามารถใช้เครื่องมือหรือมาตรการ เช่น การวินิจฉัย รวมทั้งการประยุกต์ใช้เทคโนโลยีในการตอบโต้ทางการแพทย์ได้อย่างเหมาะสม และ 3) จัดเตรียมฐานข้อมูลและเครื่องมือให้กับหน่วยงานด้านสาธารณสุข ซึ่งสามารถใช้เพื่อการตัดสินใจรวมทั้งสร้างมาตรฐานการในการพัฒนาระบบทางด้านสาธารณสุขให้ดียิ่งขึ้นภายในกรอบระยะเวลาดำเนินการระหว่างเดือน มกราคม พ.ศ. 2566 ถึง ธันวาคม พ.ศ. 2570

PANDASIA เป็นโครงการวิจัยที่นำความก้าวหน้าของศาสตร์วิจัยทางด้านการทำนายเพื่อประกอบการตัดสินใจการวิเคราะห์และการสร้างแบบจำลองของการแพร่ระบาดของเชื้อไวรัสเป้าหมายจากสัตว์สู่คนตามหลักคิดและทฤษฎี “สุขภาพหนึ่งเดียว” (One Health, OH) และแนวทางของ “นิเวศสุขภาพ” (EcoHealth, EH) โดยเป็นการประยุกต์ใช้มาตรการทางด้านการสื่อสารสังคมอย่างสร้างสรรค์เพื่อการขับเคลื่อนชุมชนให้เกิดการพัฒนาความรู้ด้านสุขภาพในวงกว้างและการเตรียมพร้อมในการรับมือกับปัญหาสุขภาพจากชุมชน ห้องถูน ร่วมกับหน่วยงานทางด้านสาธารณสุขในสัตว์และมนุษย์

จากผลลัพธ์ระยะกลางของการดำเนินโครงการคาดว่าบุคลากรทางด้านสาธารณสุขนักวิทยาศาสตร์จากสหสาขาวิชา รวมทั้งประชากรไทย จะได้รับการสนับสนุนเชิงข้อมูล การเตรียมพร้อม และองค์ความรู้ที่เพิ่มพูนมากขึ้นเกี่ยวกับภัยคุกคามที่มาจากโรคติดต่อนอกจากนี้ในระยะยาว ทางโครงการจะสนับสนุนให้ชุมชนมีความสามารถในการป้องกันและรับมือกับระบบของโรคได้อย่างมีประสิทธิภาพโดยใช้เครื่องมือ และมาตรการตอบโต้ทางสาธารณสุขที่เหมาะสมอีกด้วย ซึ่งพื้นที่เป้าหมายในชุมชนจะหัวดเชิงรายและจังหวัดเชิงรายของประเทศไทยจะถูกเลือกให้เป็นต้นแบบในการศึกษา


WWW.PANDASIA-PROJECT.EU


การดำเนินการขับเคลื่อนโครงการ จะเป็นการอาศัยความร่วมมือเชิงบูรณาการจากคณะผู้เชี่ยวชาญสหวิทยาการชั้นสามารถแบ่งออกเป็นก่อรุ่มงาน (WORK PACKAGES, WPS) ก็มีความเชี่ยวชาญเฉพาะด้าน ดังนี้

• • • • •



ก่อรุ่มงานที่ 1: บริบททางสังคมและความเสี่ยงของการแพร่ระบาดของโรคติดเชื้อจากสัตว์สู่คน เป็นการศึกษาในบริบทของการวินิจฉัยและติดตามเอกสารภัยและการป้องกันภัยและสังคมที่มีความสำคัญต่อการนักวิเคราะห์ของโรคติดเชื้อ โรคติดเชื้อจากสัตว์สู่คน อุบัติใหม่และโรคที่อาจเกิดการระบาดขึ้น เช่นโคโรนาไวรัสในกลุ่มงานนี้จะได้มีการทบทวนข้อมูลของการเฝ้าระวังโรคในมนุษย์สัตว์ป่าและปศุสัตว์จากหน่วยงานภาครัฐและตัวกระทรวงและจากผู้มีส่วนได้ส่วนเสียที่เกี่ยวข้องในประเทศไทย



ก่อรุ่มงานที่ 2: ความเสี่ยงของการแพร่ระบาดของโรคติดเชื้อที่มาจากการสัตว์ป่า ปศุสัตว์ และการเปลี่ยนแปลงเชิงพื้นที่ คือการศึกษาที่มีขอบข่ายและเกี่ยวกับการคัดเลือกการสังเกตการรวมและเก็บตัวอย่างเชิงวิภาคจากสัตว์ป่าและสัตว์เลี้ยง เพื่อการประเมินทางไวรัสวิทยาและการเปลี่ยนแปลงพื้นที่ของประชากร รวมทั้งการเปลี่ยนแปลงเชิงภysisของภาระให้ประยุกต์ของที่ดินจากอดีต การเปลี่ยนของสภาพภูมิอากาศและข้อมูลประชากร เพื่อกำหนดความสำคัญที่อาจเกิดขึ้นในการเกิดความเสี่ยงของการแพร่ระบาดของโรคติดเชื้อ



ก่อรุ่มงานที่ 3: ไวรัสและความเสี่ยงของการแพร่ระบาดของโรคติดเชื้อจากสัตว์สู่คน เป็นการศึกษาที่มีเป้าหมายในการวินิจฉัยเชื้อจากโรคบุตใหม่/หรืออุบัติขึ้นที่มีความเสี่ยงในการระบาด โดยเฉพาะเชื้อไวรัสที่สามารถในติดเชื้อได้ในสัตว์ที่มีกระดูกสันหลังโดยมี สัตว์ป่า สัตว์เลี้ยง เป็นแหล่งกำเนิดโรคหรือไวรัส และสัตว์ที่ไม่มีกระดูกสันหลัง ได้แก่ ยุง แมลง และปลิง ที่อาจจะเป็นพาหะของโรค รวมทั้งไวรัสที่มีการแพร่กระจายทั่วไปตามลักษณะด้วย (อากาศ น้ำ และตะกอนดิน) ในประเทศไทย



ก่อรุ่มงานที่ 4: แบบจำลองของความเสี่ยงของการแพร่ระบาดของโรคติดเชื้อจากสัตว์สู่คน เป็นการประยุกต์กระบวนการวิเคราะห์ต้นแบบเชิงคณิตศาสตร์เพื่อพัฒนาแบบจำลองของการบริหารจัดการความเสี่ยงของการแพร่ระบาดของโรคติดเชื้อจากสัตว์สู่คนในรูปแบบใหม่และทันสมัยโดยมีข้อมูลจากการศึกษาในพื้นที่ที่มีการระบาดของโรคติดเชื้ออุบัติใหม่สูงในชุมชนของประเทศไทย เป็นการต้นแบบการศึกษาโดยมีวัตถุประสงค์ในการสืบทราบถึงปัจจัยทางนิเวศวิทยา ระบบวิทยา และเศรษฐกิจที่มีผลต่อการแพร่ระบาดของโรคติดเชื้อจากสัตว์สู่คนด้วยการอธิบายผ่านแบบจำลองเชิงคณิตศาสตร์รวมทั้งการพัฒนากลยุทธ์ในการป้องกันและควบคุมการแพร่กระจายของโรคติดเชื้อ ซึ่งจะเป็นประโยชน์ต่อมนุษย์และสัตว์



ก่อรุ่มงานที่ 5: การป้องกันการแพร่ระบาดและการสนับสนุนในการเตรียมความพร้อมในการรับมือกับการระบาดของโรคติดเชื้อ เป็นก่อรุ่มงานที่มีบทบาทในการกำหนดข้อบัญญัติและการห้ามการทางด้านสาธารณสุขที่สำคัญเพื่อประสิทธิภาพในการลดการระบาดของเชื้อไวรัสระบาดทั่วโลก ที่มีความเสี่ยงและตระหนักรู้ถึงมาตรการทางด้านสาธารณสุขที่สำคัญเพื่อประสิทธิภาพในการลดการระบาดของโรคติดเชื้ออย่างสร้างสรรค์ เพื่อยกระดับการป้องกันการแพร่ระบาดและการเตรียมความพร้อมในการรับมือกับการระบาดของโรคติดเชื้อในประเทศไทย



ก่อรุ่มงานที่ 6: การสื่อสาร การสร้างประชชน์และการเผยแพร่ (CED) เป็นก่อรุ่มงานที่ตอบสนองต่อภารกิจในการประชาสัมพันธ์ส่งเสริมกิจกรรมผลการดำเนินงานและผลลัพธ์ของการต่อสู้ที่สนใจในประเทศไทย ตลอดจนผู้มีส่วนได้ส่วนเสียและประชาชนจากต่างประเทศ เพื่อเพิ่มพูนความรู้ความเข้าใจเกี่ยวกับโรคระบาด รวมทั้งสนับสนุนประสานงานและสื่อสารระหว่างก่อรุ่มงานต่าง ๆ ภายในโครงการ ให้เกิดประสิทธิภาพสูงสุด



ก่อรุ่มงานที่ 7: การสื่อสาร (C) การสร้างประชชน์ (E) และการเผยแพร่ (D), CED เป็นก่อรุ่มงานที่ตอบสนองต่อภารกิจในการประชาสัมพันธ์ส่งเสริมกิจกรรมผลการดำเนินงานและผลลัพธ์ของการต่อสู้ที่สนใจในประเทศไทย ตลอดจนผู้มีส่วนได้ส่วนเสียและประชาชนจากต่างประเทศ เพื่อเพิ่มพูนความรู้ความเข้าใจเกี่ยวกับโรคระบาด รวมทั้งสนับสนุนประสานงานและสื่อสารระหว่างก่อรุ่มงานต่าง ๆ ภายในโครงการ ให้เกิดประสิทธิภาพสูงสุด



ก่อรุ่มงานที่ 8: จริยธรรมเป็นก่อรุ่มงานที่จัดตั้งเพื่อกำกับและควบคุมการดำเนินวิจัยของโครงการให้เป็นไปตามหลักจริยธรรมและกฎหมายที่เกี่ยวข้องในประเทศไทย คุณภาพด้านสุขภาพจิตและสุขภาพกาย รวมทั้งความปลอดภัยของผู้เข้าร่วมโครงการ ที่มีผลกระทบต่อสุขภาพจิตและสุขภาพกายในประเทศไทย

ภายใต้ความร่วมมือจากคณะผู้ร่วมวิจัยทุกภาคผู้ชาย จะเป็นแรงผลักดันในการทำงานตามกรอบแนวคิดและทฤษฎีของ “สุขภาพเชิงเดียว” ให้ประสบความสำเร็จ ซึ่งมีนักวิจัยที่มีความเชี่ยวชาญจากสถาบันชั้นนำ ดังต่อไปนี้ มหาวิทยาลัยวิทยาศาสตร์เพื่อชีวิตแห่งนอร์เวย์ (NMBU), สถาบันสัตวแพทย์แห่งนอร์เวย์ (NVI), โรงพยาบาลรามคำแหง (HUH), สถาบันไลบనิช เพื่อการวิจัยสัตว์ และ สัตว์ป่าภายใน Förschungsverbund Berlin e.V. (Leibniz-IZW), สถาบันสุขภาพประชชน์ฟลัตตัน (WIHP) แห่งมหาวิทยาลัยคิวชูและมูลนิธิ QMUL, จุฬาลงกรณ์มหาวิทยาลัย; มหาวิทยาลัยอุบลราชธานี (UM), มหาวิทยาลัยขอนแก่น (วข), มหาวิทยาลัยมหิดล (มห) และ บริษัท สุขา เขเว่น ตีวัน จำกัด (SUPA71)

