



Workshop

Poverty Impact and Vulnerability Estimator System Solutions

Sept 5-6, 2024

Workshop Venue: Asian Development Bank Institute, Kasumigaseki Building, Chiyoda-ku, Tokyo

OVERVIEW:

Dynamic societal changes have varied impacts over the strata of society. Moreover, such impacts are often drastic and have prolonged influence over migrants, economically weaker sections, and vulnerable populations dwelling within a city. The proposed project - Poverty Impact and Vulnerability Evaluation (PIVE) tool helps policymakers, planners, and other urban planning and disaster management stakeholders grasp information quickly and efficiently in response to dynamic changes in society and the environment.

PIVE equips decision-makers with the capability to swiftly and efficiently access information in response to the dynamic shifts occurring in society and the environment. Importantly, PIVE ensures its data remains continuously updated to reflect the latest developments, particularly concerning how these changes affect vulnerable populations. It supports multi-scale data and information collection, facilitating timely and dynamic monitoring. This involves the systematic collection, quantification, and analysis of data from diverse sources, including mobile data and satellite imagery at the metropolitan scale, as well as the use of field survey applications, social networking service (SNS) applications (such as chatbots), and other community-level means. This enables the rapid implementation of support measures contingent on data availability, such as food and other aid forms. More information on each component of the PIVE tool can be found at <https://pive.locationmind.net/>

Communities often initiate mitigation efforts in response to dynamic societal and environmental changes. PIVE facilitates quick geospatial interpretation of these community-driven measures,

including activities and movements during lockdowns, as well as the effectiveness of public policies. Stakeholders benefit from these insights as they strategize support activities and enhance aid effectiveness. Furthermore, PIVE enables quantitative monitoring of intervention impacts by various stakeholders, spanning from policy assessments to the evaluation of community support activities. Informed by these results, policies by public authorities and support activities by coordinated non-profit organizations (NPOs), non-governmental organizations (NGOs), and others can be adjusted to better align with evolving circumstances. Incorporating visualizations in the form of maps and dashboards ensures effective communication to a wide audience, promoting outreach, raising awareness, and facilitating consensus-building. Moreover, PIVE's ability to compile and organize multifaceted digital data on local conditions, communities, and people forms a valuable digital asset for regions and communities. This comprehensive data collection encompasses areas such as active locations, daily activities and movements, community identification, and a comprehensive understanding of the living environment of disadvantaged and vulnerable populations. These outputs, drawn from analyses of census statistics, satellite remote sensing, mobile data, field surveys, and social networking service data, are compiled into digital assets, ensuring their accessibility and utility for future endeavors. The objective of PIVE project in the technology innovation challenge is that we will make a proactive proposal about use cases of PIVE to the local stakeholders. Through discussion, we would like to explore potential solutions and empower NGOs/NPOs, government organizations and organizations working on ground to make better data informed decisions.

WORKSHOP'S OBJECTIVE:

Session 1 endeavors to introduce the PIVE tool to pertinent stakeholders from diverse ADB member countries, showcasing its role in bolstering vulnerability resilience within the region. Emphasis lies on the exchange of experiences and the collective identification of challenges. In Session 2, the focus shifts towards exploring the practical usability of tools such as chatbots, survey apps, and dashboards, highlighting their potential to drive informed decision-making through data. Session 3 provides a unique opportunity through a site visit to delve into Japan's current disaster resilience system, offering firsthand insights and lessons in disaster preparedness. Overall, the workshop aims to foster collaboration while optimizing tool utilization for a more substantial collective impact on regional vulnerability resilience.

AGENDA:

DAY 1 (September 5, 2024)	
Session 1: Introducing PIVE: Exploring Its Key Components September 5, 2024 (09:30 - 15:20(TBC)) <i>The timings are in JST (UTC/GMT +9 hours)</i>	
Session Chair: by Hong Soo Lee, Senior Urban Development Specialist, Asian Development Bank (TBC)	
09:30 - 09:35	Opening Remarks By Tetsushi Sonobe, Dean, Asian Development Bank Institute(TBC)
09:35 - 10:00	Introduction of Workshop Participants By Name, Research Associate, ADBI
10:00 - 10:20	Big Data Utility for solving socio-economic problems - A brief about LocationMind Inc Embarking on a 5-Year Reflective Journey with LocationMind By Naoki Kiritani, CEO, LocationMind Inc(TBC)
10:20 - 11:00	Introduction of the PIVE tool • Why PIVE is relevant for practitioners and how it will address the issues • Brief on the components of PIVE such as Mobile GPS Data, Satellite Analysis Data, Survey App, and Chatbot By Prof. Ryosuke Shibasaki, CTO, LocationMind Inc.
11:00 - 11:20	Introduction to Mobile GPS Analysis for PIVE tool • Process of analyzing GPS data • Life patterns such as transportation patterns of daily activity • How macro and micro Origin Destination Maps be useful By Saurav Ranjit, Engineer, LocationMind Inc.
11:20 - 11:40	Introduction to Satellite data analysis for PIVE tool • Benefits of using Satellite data • Applications of Satellite data usage such as identifying emerging settlements By Hiroyuki Miyazaki, CEO, GLODAL
11:40 - 12:00	Question and Answer Session
12:00 - 13:00	Lunch Break
13:00 - 15:00	Panel Discussion Round table discussion from the representatives of each organization By Dr. K.E. Seetharam, Senior Capacity Building and Training Specialist, ADBI(TBC) <i>(Questions to be prepared, grouping by country)</i>

15:00 - 15:20	Coffee Break
Session 2: PIVE System Explanation and Hands on Training Session September 5, 2024(15:20 - 18:10)(TBC) <i>The timings are in JST(UTC/GMT +9 hours)</i>	
Session Chair: by Name, Asian Development Bank(TBC)	
15:20 - 15:30	Introduction of PIVE System and Hands on Training brief A brief about the activity for hands-on training for the PIVE tools By Prof. Ryosuke Shibasaki, CTO, LocationMind Inc.
15:30 - 16:30	Demonstration of Chatbot for PIVE tool • Facebook messenger-based community-based information system • Disaster situations include announcements, asking questions, and announcements with response By Apichon Witayangkurn, Thammasat University
16:30 - 17:30	Demonstration of SurveyApp for PIVE tool • A field survey app to collect questionnaire from residents • Features of the app for transportation planning and better transport user experience By Noriel Tiglao, Co-founder, SafeTravelPH Mobility Innovations Organization
17:30 - 17:45	Question and Answer Session
17:45 - 18:00	Survey and Feedback Collection
18:00 - 18:10	Wrap-up and Announcement for Day 2

DAY 2(September 6, 2024)	
Session 2: PIVE System Explanation and Hands on Training Session(continued) September 6, 2024(09:30 - 14:00)(TBC) <i>The timings are in JST(UTC/GMT +9 hours)</i>	
Session Chair: by Name, Asian Development Bank(TBC)	
09:30 - 11:00	Demonstration of PIVE Dashboard using ArcGIS Online • Use Case of disaster preparedness, socio-economic mapping, amidst and post-disaster, transport infrastructure, and education and safety for women and children demonstration(as Traffic Volume, Population Distribution, Emerging Settlement Area, KPI) on the ArcGIS Online dashboard • Applications of these outputs from the dashboards for the practitioners By Mitsuha Miyake, Engineer, LocationMind Inc.
11:00 - 11:15	Coffee Break
11:15 - 12:15	Panel Discussion Round table technical discussion among the participants for the usability of survey app, Chatbot and PIVE dashboard <i>Moderated by Session Chair</i>
12:15 - 12:30	Closing and Survey
12:30 - 14:00	Lunch Break
Session 3: Field Visit September 6, 2023(14:00 - 18:00)(TBC) <i>The timings are in JST(UTC/GMT +9 hours)</i>	
14:00 - 15:00	Move from ADBI
15:00 - 18:00	Visit the Metropolitan outlying flood control channel https://gaikaku.jp/ (TBC) This field visit showcases advanced flood management techniques and engineering solutions, providing the participants with valuable knowledge and practical insights that can be applied to improve their own flood control and disaster mitigation strategies
18:00 - 19:00	Move from field visit site to Hotel