

# Capacitating Southeast Asia through the use of Geospatial Technology and Earth Observation Data for Improved Decision-Making

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**Key words:** Capacity building; Keyword 1; Keyword 2; Keyword 3

## SUMMARY

SERVIR Southeast Asia (SEA) is a joint initiative of the United States Agency for International Development (USAID) and the National Aeronautics and Space Administration (NASA), aimed at empowering countries in the Southeast Asia region through advanced geospatial technology and Earth observation data. SERVIR SEA is implemented by the Asian Disaster Preparedness Center (ADPC) and focuses on enhancing the capacity of governments, institutions, and communities to make informed decisions on developmental challenges arising out of climate change and disasters. The cornerstone of SERVIR SEA's capacity-building efforts lies in the provision of training programs and technical assistance tailored to the unique needs of Southeast Asian countries. These programs cover a wide range of topics, including remote sensing, geographic information systems (GIS), data analysis, and the application of Earth observation data for various sectors such as agriculture & food security, water security, ecosystem & carbon management, weather & climate resilience and air quality & health. By equipping stakeholders with knowledge and skills, SERVIR SEA enhances capacity of professionals to leverage cutting-edge technology to address pressing regional challenges. One of the key achievements of SERVIR SEA has been the development and dissemination of user-friendly decision-support tools and platforms that enable real-time data access and analysis. For instance, the Regional Land Cover Monitoring System (RLCMS) provides high-resolution land cover maps and dynamic monitoring capabilities. Similarly, the Southeast Asia Drought Watch provides near real-time drought monitoring and forecasting information. Aside from these examples, SERVIR SEA has developed over 20 geospatial decision-support tools that aligns well with the regional and national needs of various stakeholders while also building the stakeholders capacity to use these tools. In addition to technical training and tool development, SERVIR SEA places a strong emphasis on fostering regional collaboration and knowledge exchange. Through workshops, conferences, and collaborative projects, the initiative creates a network of practitioners and policymakers who share best practices and lessons learned. This

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collaborative approach not only enhances the overall impact of the capacity-building efforts but also ensures the sustainability and scalability of the initiatives across the region. SERVIR SEA's efforts in capacitating the region through geospatial technology and Earth observation data are significantly contributing to more informed and effective decision-making. By building local capacities, developing innovative tools, and fostering regional collaboration, SERVIR SEA is playing a vital role in addressing environmental challenges and promoting sustainable development in Southeast Asia.

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