The 6th International Forum on Big Data for Sustainable Development Goals (FBAS 2026)

Session Proposal Template

Session Title		
Session Chair(s)	*Name*	
	Affiliation	
	Profile (200-word limit)	
	e-mail	
Contact Person	*Name*	Lawrence Duguman
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Preferred Topics	**Scientific Monitoring and Evaluation with Big Data**	
Session Description (200-word limit)	The presentation explores how digital intelligence — Big Data and AI — strengthened evidence-based reporting for Papua New Guinea's second Voluntary National Review (VNR) on the Sustainable Development Goals (SDGs), due in 2025. The report leverages a **Digital Data Ecosystem** integrating national surveys (DHS, MICS), administrative data, and UN digital platforms like the ESCAP SDG Tracker and UNDP SDG Diagnostics. Central to the analysis is a dual-pillar machine learning methodology. **CART (Classification and Regression Tree)** analysis identifies which population groups are furthest behind across 16 SDG proxy indicators, while the **Dissimilarity Index (D-Index)** measures inequality of opportunity. Together, they reveal intersectional disadvantages — for instance, that poorer, rural women with lower education face compounding barriers that traditional single-variable analysis would miss. AI tools dramatically accelerated workflows. Deep analysis of all 17 SDGs with 169 targets, which previously took weeks, was	

	completed in hours using tools like Claude, ChatGPT, and Gemini. QuillBot improved readability, and human experts validated all outputs for accuracy and policy alignment. Key findings show poverty is the single strongest predictor of being left behind.
Expected outcomes ***(50-word limit)***	Institutionalization of digital intelligence within PNG's SDG reporting framework, enabling faster, evidence-based VNR production. Enhanced targeting of vulnerable populations through machine learning segmentation (CART/D-Index). Strengthened cross-sector partnerships and data ecosystems for ongoing policy monitoring. Improved ability to identify SDG synergies and trade-offs, leading to more balanced and inclusive national development decisions.

Please submit filled session proposal to fbas@cbas.ac.cn before **April 20, 2026**