

Papua New Guinea Team

Case study in progress from the KIX-EAP learning cycle "Equitable Access to Education with Geospatial Data" held in collaboration with IIEP UNESCO

Last updated on September 2021

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About case studies in progress

This case study in progress was drafted by a national team that participated in the KIX EAP Learning Cycle: Equitable Access to Education with Geospatial Data. Case studies in progress are ongoing and incomplete studies. As such, the KIX EAP Hub/ NORRAG does not guarantee the quality of the work nor the accuracy of the data.

The KIX EAP Learning Cycles are supported by the Global Partnership for Education (GPE) Knowledge and Innovation Exchange (KIX), a joint endeavour with the International Development Research (IDRC), Canada. The findings, interpretations, and conclusions expressed in the Learning Cycle outputs do not necessarily reflect the views of the KIX EAP Hub, NORRAG, GPE, IDRC, its Board of Governors, or the governments they represent.

About the KIX-EAP Hub

The Global Partnership for Education (GPE) Knowledge and Innovation Exchange (KIX) is a joint endeavour with the International Development Research Centre (IDRC) to connect expertise, innovation, and knowledge to help GPE partner countries build stronger education systems and accelerate progress toward SDG 4. There are globally four KIX hubs or Regional Learning Partners, overseen by IDRC. The hub functions as a regional forum within KIX. NORRAG (Network for International Policies and Cooperation in Education and Training) is the Regional Learning Partner for the KIX Europe Asia Pacific (EAP) hub.

The KIX EAP hub facilitates cross-country knowledge and innovation exchange and mobilisation, learning, synthesis, and collaboration among national education stakeholders in 21 GPE partner countries in the EAP region. The hub also offers opportunities for peer learning and exchange by means of professional development and inter-country visits.

About the KIX EAP Learning Cycle Equitable access to education with geospatial data

This case study is a result of the KIX EAP Learning Cycle "Equitable access to education with geospatial data". Organised by NORRAG and the UNESCO International Institute for Educational Planning (IIEP), this professional development course ran from 15 June to 16 July 2021. Across 5 weeks, this Learning Cycle enabled participants to apply basic mapping techniques on a geographic information system (QGIS), understand the geospatial dimension of educational planning and management, and challenge the different aspects of equitable access to education by harnessing the power of geospatial data in their daily work. 10 national teams from Afghanistan, Bangladesh, Bhutan, Cambodia, Kyrgyz Republic, Maldives, Moldova, Pakistan, Papua New Guinea, and Sudan took part in this Learning Cycle.



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1. What is equity?

The constitution of PNG (Section 55) embodies the government's commitment to equality for both women and men within the family, community, and society. It supports the notion of Integral Human Development. PNG is a signatory to a range of International Conventions:

- United Nations Declaration of Human Rights (1982)
- UN Convention on the rights of a child (1982)
- Education for All (UN declaration 1990)
- Mainstream gender (Beijing declaration 1995)

Equity in education

The Key document to action is the National Education Plan and it contains a wide range of approaches or strategies to address issues of equitable access to education. The vision for the National Education Plan 2020-2029 is to provide an education system that is affordable for parents and the Government, that appreciates Christian and traditional values, and that prepares literate, skilled, and healthy citizens, each educated and trained for their fullest potential, to contribute to the economic and social development of the nation. The two keywords are fairness and inclusion.

Key variables

Pupil Text Beok Ratio Teacher Pupil Ratio	Material and Human Resource	EQUITABLE ACCESS
Gender Parity Index	Expectations, Classroom Participation and Assessment	EQUITABLE PARTICIPATION
Educational Outcome	Individual Outcomes Broader Outcomes	EQUITABLE OUTCOMES



Fig 1. Papua New Guinea Secondary Schools

The map above shows the secondary school age population by schools and level 3 administrative boundaries, the darker the green color in a particular area the higher the populaion density in that aree. Overall, Highlands and MOMSE region are more density populated and have more secondary schools established than Southern and New Guines Irelands region.



2. What may affect the demand for education?

Apart from the social factors, several important school factors determine the demand for education in PNG. These factors include:

- The distance from home to school
- Availability of schools (especially in rural areas)
- The infrastructure facilities available at schools
- Medium of instruction
- Subjects offered for the students
- School fees, direct and indirect costs.



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3. How equitable is the supply of education?

- On the supply side, the PNG government has worked steadily to subsidize the cost of schooling and make educational opportunities more accessible.
- The focus now is on the provision of a variety of post-primary education pathways (FODE, TVET, etc..).
- Students' basic school supplies are allocated to encourage student attendance at all levels of the educational system.



Fig 3. Papua New Guinea school distribution

Brief decription of the nmap

The map above shows how schools are distributed in the country, more schools are established in the Highlands and MOMASE region than the Souther and New Guines Irelands region. Southern region has a lot of rivers, deltas and remote atoli Islands which makes it difficult for schoolsto be established where population is mostly scatere Dverall where there is proper road network, more schools are established and are accessible to school age population Papua New Guinea Schools
Papua New Guinea Roads
Papua New Guinea Rivers

100 200 km

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4. Policy responses for more equitable access

- What types of policies or interventions could be investigated to improve equitable access to education? Policies targeting universal inclusive education could be investigated to improve equitable access to education.
- How geospatial data could support the Ministry in targeting, and prioritizing these interventions or policies? The GISs provide a variety of options to process geographical information. Most simply and fundamentally, Planners are able to retrieve or enquire about information in a particular area. That information may then be related to information about areas elsewhere, for example, to determine the area from which a school draws its pupils, or to find the nearest source of water for a school. Alternatively, you can use a GIS to quickly count all the houses in a catchment area around a school, apply a figure that describes the average number of infants living in each house, calculates the density of infants living in that area and provide projected enrolments for that school.