

Partnering with people with disabilities on participatory research into road infrastructure in Papua New Guinea



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Participatory research addressing access by people with disabilities to road infrastructure and road planning processes in PNG



Descriptor: A road intersection in rural PNG with pedestrians (Photo: Cardno)

- AusAID – funded through ADRA (Australian Development Research Awards)
- CBM-Nossal Institute Partnership for Disability Inclusive Development
- Cardno Emerging Markets
- Faculty of Architecture, Building and Planning, University of Melbourne
- PNG Assembly of Disabled Persons
- Divine Word University
- Other people with disabilities and organisations



Descriptor: Buluminsky Highway New Ireland - a section of the highway which is currently under maintenance. There are eight road workers and a truck. They are fixing potholes and widening the road itself. (Photo: Disability Inclusive Road Development project)



What do we already know about roads and people with disabilities in PNG and other developing countries?

Descriptor: Benedict Hipom, a data collector and wheelchair user, moving along a road with no footpaths and a muddy verge (Photo: Disability Inclusive Road Development project)



Road development can reduce poverty in developing countries by improving:

- Access to essential services (e.g. health, education)
- Social networks (e.g. family, friends, social supports)
- Economic opportunities (e.g. increased availability of supplies, provide new distribution networks, access to new means of livelihoods)

(Barrios 2008; Estache 2010)

Roads are part of the “travel chain”

(World Disability Report, 2011)



Road evaluations are limited by:

- Impact of roads are indirect
- Roads are not randomly placed
- Roads have geographically dispersed effects
- Impact of roads takes time
- Evaluations fail to differentiate between different groups

(Van de Walle 2009)

Transport networks in PNG are limited in distribution and quality

- Primary means of transportation in PNG is walking (World Bank 2008)
- Approx. 35% live over 10 km from a major road and 17% of the population have no road access at all
- There is a total of 25,000 km of roads (Mawuli & Sanida n.d.)
- Up to 85% of major roads are impassable during the wet seasons (World Bank 2010)

World Bank Socioeconomic Survey (2007)

- Increased income in 50% of provinces
- Reduced travel time to schools and health clinics

World Health Organization Global Status Report of Road Safety (2009):

- Over 1.3 million deaths, 20-50 million injuries each year
 - Majority in developing countries
 - Pedestrians, children, cyclists and motorbike users are among the most vulnerable groups
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- In PNG (2007)
 - 237 deaths of which 39% were pedestrians – second only to vehicle passengers
 - 1210 injuries

Road traffic is a source of disability and can exacerbate disabled people's marginalization

Nairobi road evaluation undertook pedestrian crossing observations found that elderly and disabled people looked stressed and nervous traversing major road with inadequate crossings, in contrast to other adults using the crossing
(Mitullah and Makajuma 2009)



Descriptor: Ismael Lenavie, a data collector and is a person with a movement impairment, is crossing a road in Madang during a break in the traffic. (Photo: Disability Inclusive Road Development project)

Road rehabilitation and construction is a priority for the Government of PNG

Coordinated by the Department of Works

Very little information about how communities in PNG are engaged in road planning processes...

And nothing on how people with disabilities participate!



Descriptor: Maintenance works on the Goroka City Ring Road. There are road workers holding a stop sign and children crossing the road at this point. (Photo: Disability Inclusive Road Development project)

- PNG National Policy on Disability reports 10-15% of the population have disabilities
- Most common impairments are movement, seeing and hearing impairments
- Common causes are disease, accidents and aging
- Some people also believe in supernatural causes
- Violence is a common cause of disability in the Highlands

(Byford & Veenstra 2004; Thornton & Pirpi 2008; Stubbs & Tawake 2009)



Descriptor: People with hearing impairments give information to the data collectors, Hekoi Igo, who is visually impaired, and Mary Ikupu who is a wheelchair user. (Photo: Disability Inclusive Road Development project)



Research questions

1. What are the barriers and facilitators for people with disabilities accessing roads in rural and urban PNG?
2. What are the outcomes of rural and urban road projects on the lives of people with disabilities and their families?
3. How have people with disabilities participated in rural and urban road planning?
4. What are the recommended approaches in disability inclusive consultation and participation in road planning and development in PNG?

1. Produce findings on prioritising infrastructure needs of PWD and appropriate responses in study areas
2. Contribute to the evidence base for disability inclusive infrastructure development in the Asia-Pacific region
3. Develop guidelines to support disability inclusive infrastructure consultation, planning and development for use by various stakeholders involved in road decision-making and construction
4. Develop a training package on disability inclusive infrastructure planning and development, to be conducted by disability organisations for infrastructure stakeholders
5. **People with disabilities have ownership of the research and the capacity to utilise the findings in their advocacy and rights-based work with the PNG government and development sector**

How we will answer these questions?

Stretches of roads in five sites:

- 2 urban sites (Port Moresby & Goroka)
- 3 rural sites (Lae, Madang & New Ireland)

Combination of roads which are completed and under redevelopment or maintenance

- To identify how people with disabilities were involved, and barriers/facilitators to their access and participation
- Promote inclusion in future planning process



Descriptor: Consultations with different stakeholders on site selection. There are a group of people looking at a map of PNG. These people represent PNG Assembly of Disabled Persons, the National Board of Disabled Persons, and the National Disability Advocacy and Resource Centre. (Photo: Disability Inclusive Road Development project)



Descriptor: A photo of a section of completed road leading to a settlement in urban Port Moresby. The road is tarred and has cars parked along the verge. Footpaths are present but in bad condition and there is water covering both the road and footpaths. (Photo: Disability Inclusive Road Development project)

New Ireland - Buluminsky Highway



Descriptor: Buluminsky Highway New Ireland - There are two photos. The first photo shows a section of the road which is tared. There grassy verges on each side and the trees are close to the road. In the distance there are two people walking on the road. The second photo shows another section of the highway which is currently under maintenance. There are eight road workers and a truck. They are fixing potholes and widening the road itself. (Photo: Disability Inclusive Road Development project)

How we will answer these questions?

- Interviews with local road decision-makers
- Group discussions with people with disabilities
- Photo elicitation
- “Moveabouts”
- Poster making



Descriptor: Data collectors and participants from the pilot of the group discussion and poster making tool. There are women and men with different types of impairments, children with disabilities and their parents. (Photo: Disability Inclusive Road Development Project)

Project principles:

- Participation of people with disabilities in every phase
- Accessibility
- Capacity development
- Inclusion of all groups
- Partnership building



Descriptor: People with disabilities congratulate each other at the close of a group discussion with clapping in sign language. (Photo: Disability Inclusive Road Development Project)

Five pairs of data collectors:



Descriptor: This is a photo of the data collection team! From left to right there is: Rachel Tararia who is sat in her wheelchair; Joseph Lapangot; Barabara Peter, Elisabeth Kasuem; Ismael Lenavie; Benedict Hipom who is also sitting in his wheelchair; Desmond Beng; Hekoi Igo; Mary Ikupu who is sat in her wheelchair and has her assistant Esther standing behind her; and finally Ipul Powaseu who is our PNG Research Officer. (Photo: Disability Inclusive Road Development project)

How will the findings be used?

- Provide guidelines for road planners on how to effectively include people with disabilities
- People with disabilities and DPOs can use findings for advocacy work

Descriptor: PNG Research Officer, Ipul Powaseu is interviewed by the local Madang radio station with a participant from the “Moveabout” pilot. (Photo: Disability Inclusive Road Development Project)



- Building a partnership with PNGADP
- Training of data collectors
- Piloting and adapting tools
- Great support from disability service providers
- Positive media interest



Descriptor: A young participant rests in the shade during the “Moveabout” pilot – He is giving a “thumbs up”. (Photo: Disability Inclusive Road Development Project)



- Reliable engagement from the Ministry of Works
- Logistics and transportation
- An early wet season



Descriptor: Data collectors and participants being transported to a “Moveabout” site in the back of a pick up truck. (Photo: Inclusive Road Infrastructure Project)



Descriptor: A group photo of data collectors and participants from the pilot conducted in June 2011.
(Photo: Disability Inclusive Road Development Project)

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What have we done so far?

1. Literature review
2. Partnership building
3. Drafted tools
4. Consulted with International and PNG advisory committees
5. Selected sites
6. Ethics approval
7. Met with stakeholders in each site
8. Piloted data collection tools
9. Trained data collectors



Descriptor: Data collectors ,Elisabeth Kasuem and Benedict Hipom, practicing using the “Moveabout tool”. Elisabeth is standing with her crutch and Benedict is sitting in his wheelchair. Elisabeth is taking notes. (Photo: Disability Inclusive Road Development Project)

What do we have ahead of us?

- Data collection
- Analysing the information or data
- Developing guidelines
- Training others in these guidelines
- Deciding what next??



Descriptor: Two children with disabilities holding their drawing of things they like about roads. There are figures of people, houses, cars and vans, a “thumbs up” and boats. (Photo: Disability Inclusive Road Development Project)