



Y2NEXT

Profile

Abstract

Y2NEXT is focusing on GIS related projects that include disaster risk assessment, business intelligence, GIS project management, data audit and capture and visualisation of information.

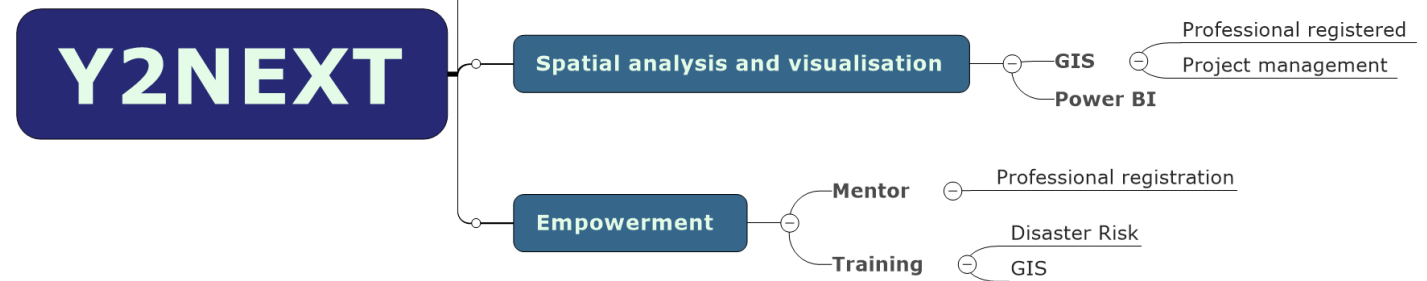
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Y2NEXT

Y2NEXT focus on using spatial science to provide solutions to decision makers, planners, government officials, etc.

Issues and/or problems starts with a why and the answer to this why provides the solution of the next level of management, planning and/or strategy.

Presently Y2NEXT focus on disaster risk assessment and spatial analysis and visualisation. Parallel to this, empowerment through mentorship and training is very important for Y2NEXT.

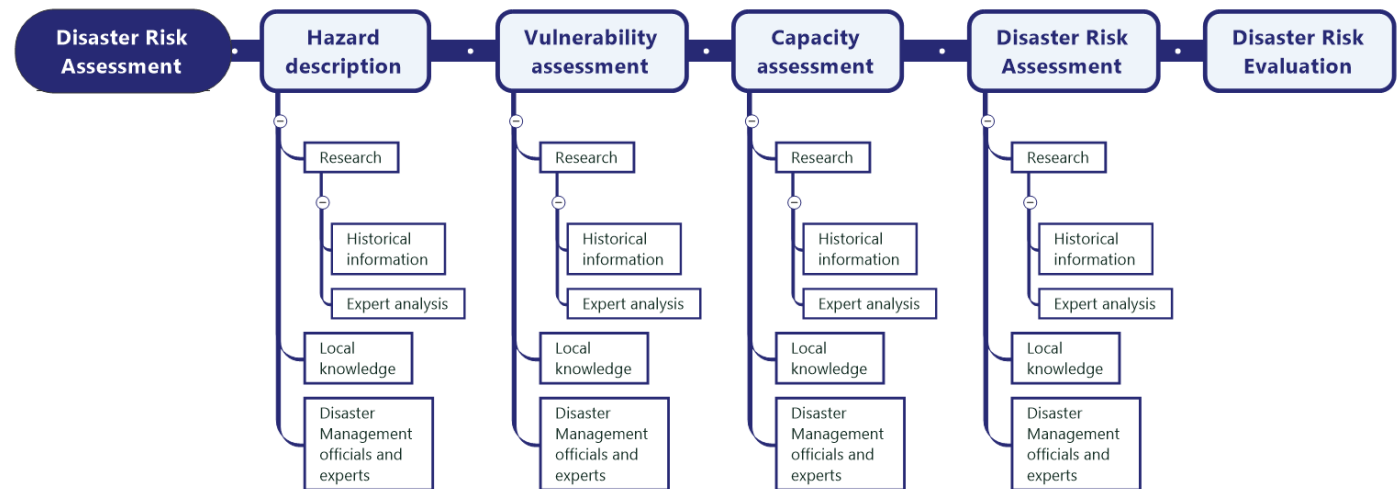


Disaster Risk Assessment

The methodology to be used for disaster risk assessment is based on international best practices, relevant sciences and the South African Disaster Management Amendment Act and National Disaster Management Framework.

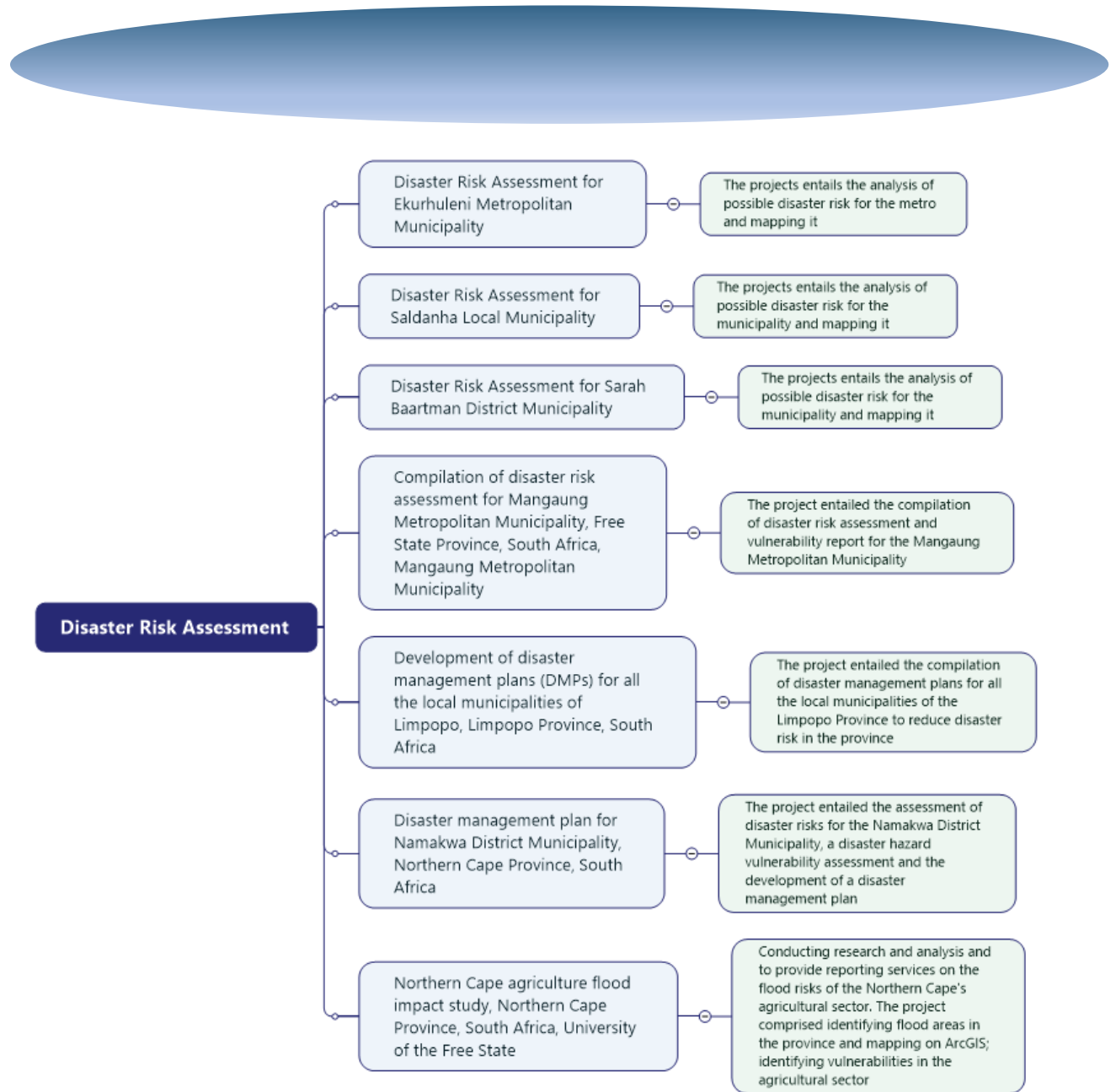
Y2NEXT developed disaster risk assessment methodology that is based on specific scientific research, for example, floods, drought, fire and water pollution. Indicators developed for these hazards are used to analyse and map these hazards.

This makes the assessment cost effective but still scientifically sound.



Disaster Risk Assessment

Disaster risk assessment experience.



Disaster Risk Assessment

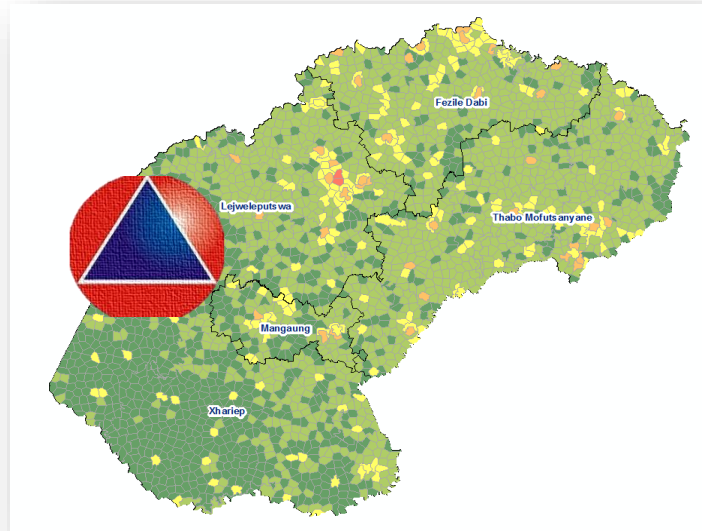
Disaster Risk is a function of hazards (impact and probability) and vulnerability and the capacity to mitigate.

Spatial Analysis and Statistics are used to combine hazard, risk and vulnerability indicators to identify disaster risk for a study area.

The results of the analysis are used to identify communities, wards and/or settlements that are at risk.

With information from relevant IDP's and SDF's specific risk reduction measures and projects can be identified.

These projects must be implemented through IDP processes.



Ward	Hazard	Vulnerability	Coping	Vulnerability Index	Disaster Risk
1	15	18,64	11,08	1,68	25,25
9	15	15,52	10,17	1,53	22,90
18	12	16,06	10,27	1,56	18,77
12	9	18,64	11,08	1,68	15,15
13	9	15,68	9,62	1,63	14,68
5	9	16,06	10,17	1,58	14,22
2	6	15,68	9,62	1,63	9,78
10	6	16,06	10,17	1,58	9,48
11	9	20,84	19,83	1,05	9,46
14	6	15,08	9,62	1,57	9,41
3	0	15,08	9,62	1,57	0,00
4	0	16,06	10,27	1,56	0,00
6	0	16,06	10,27	1,56	0,00
7	0	16,06	10,27	1,56	0,00
8	0	15,46	9,62	1,61	0,00
15	0	16,06	10,27	1,56	0,00
16	0	16,06	10,17	1,58	0,00
17	0	16,06	10,27	1,56	0,00
19	0	15,46	9,62	1,61	0,00
20	0	15,52	10,17	1,53	0,00

Spatial Analysis and data visualisation

Through spatial analysis, many problems can be analysed, and solutions are produced. By combining location of schools and roads spatial analysis can be used to establish a travelling time to these schools. Transport to the schools can be planned but the possible location of new schools (incorporating population distribution) can be identified.

Problem areas regarding sanitation can be identified using spatial analysis and visualisation of school information.

Visualisation of data can show the contribution of budget needs to specific schools and the size thereof.

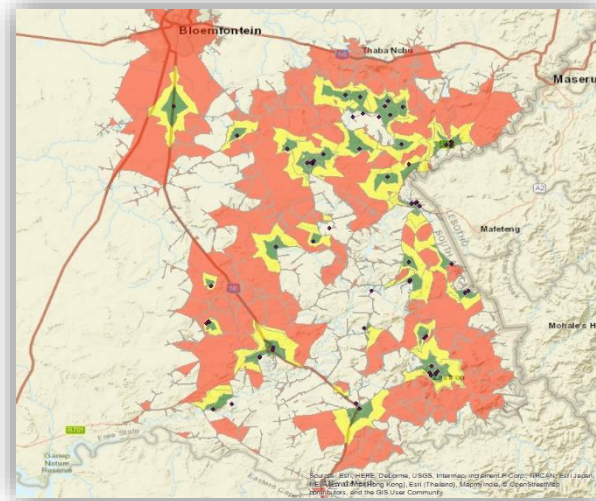


Figure 1: Travel time to schools

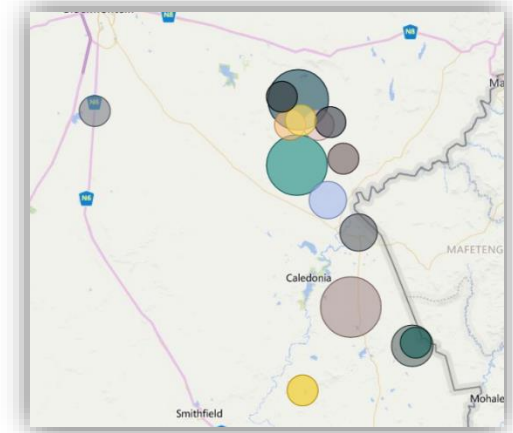


Figure 2: No sanitation (schools)

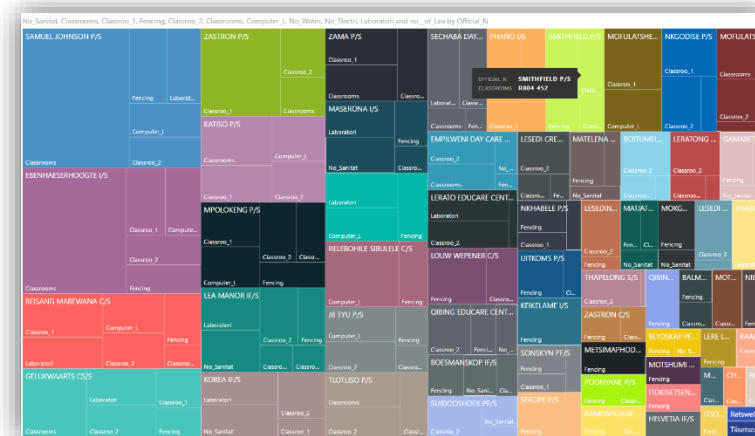


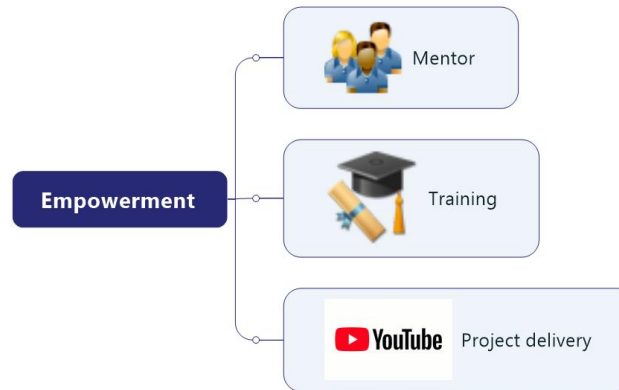
Figure 3: Contribution to school budget

Empowerment

Y2NEXT is passionate about empowering people. This is being done through various avenues.

Through mentorship and training (in association with the University of the Free State) Y2NEXT attempts to empower other professionals and practitioners.

Reports and other project deliverables will be delivered in such a way that it contributes to capacity building.



Contact us

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