Rural University

an exploration of what adult education can become, and the possibilities it might afford, in a rural setting

for my family

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Carrie-Anne Richardson

Declaration

I, Carrie-Anne Richardson [0512868V] am a student registered for the course Master of Architecture [Professional] in the year of 2010. I hereby declare the following.

I am aware that plagiarism (the use of someone else's work without permission and/ or without acknowledging the original source) is wrong. I confirm that the work submitted for assessment for the above course is my own unaided work except where I have stated explicitly otherwise. I have followed the required conventions in referencing thoughts, ideas, and visual materials of others. For this purpose, I have referred to the Graduate School of Engineering and the Built Environment style guide. I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my unaided work or that I have failed to acknowledge the source of my ideas or words in my own work.

Carrie- Anne Richardson
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a personal note

On a warm long weekend in December 2009, three friends and I embarked on a spontaneous trip to Mozambique. We Ended up in Xai Xai, a beautiful, under-developed coastal town, and spent the night in the local 'hotel' - four huts, with questionable ablutions, about ten meters from the beach.

Our arrival at Xai Xai was memorable: we pulled up to the lonely shore, and were immediately surrounded by local children, flaunting their wares, from beaded jewellery to painted cloth. One stood out, however - Pedro, a 17 year old Mozambican boy offered to be our tour guide, promising to show us all the best local spots. We took him up on the offer, and spent the weekend in his company.

On Sunday afternoon, walking back from swimming in an unspoilt lagoon teaming with turtles and colourful fish, I spoke to Pedro. He told me about how the people where he lived (a nearby rural settlement) earn less than R150 a month, which is barely enough to cover food. He told me that the average government office worker in Mozambique earns less than a mine worker in South Africa. He told me about his dream to become a doctor, initiating his studies at the local college. We drove past the college later, which turned out to consist of about 4 classrooms in a crumbling old building.

After an amazing weekend of swimming and sun and eating oysters caught by local children, straight out of the sea, we said goodbye to our new friend, thinking it unlikely that we'd see him again. As we drove off from his village, he called after us, waving his cell phone, "oh, and you can find me on facebook if you like..."

That a young person in such difficult (although beautiful) circumstances could hold such high aspirations inspired me, and I couldn't help but wonder whether the very technology with which Pedro was already so familiar (cellphone access to the internet), if implemented in the right way, could facilitate his access to a higher quality education, and help him to realise his dream.

For my thesis, I decided to work closer to home. A series of decisions based on investigations described in 'Section 2: Site' lead me to the rural town of Lusikisiki, situated in the region of the former Transkei in the Eastern Cape. Would the young people there be as ambitious as Pedro? How might their access to high quality education be facilitated through technology? What kind of architecture would manifest from this exploration?





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Note

All images, unless otherwise stated, are photographs taken by the author in the Eastern Cape between April and July, 2010.

All diagrams and renders, unless otherwise stated, are author's own

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Abstract

Rural Development is an urgent agenda in South Africa, dealing with the rectification of the inequities of the past, and encouraging the economic development of rural areas and, consequently, the country. Education forms a vital aspect of rural development, empowering rural people to uplift themselves and their communities. Higher education is particularly important as a tool for mobilizing talent and developing the skills that will develop South Africa.

It is the intention of this project to explore the notion of a Rural University: a centre of academic excellence in adult education located in a rural area that will open up the world for rural people, giving them access to the great body of human knowledge, and an opportunity to contribute to it: giving rural people an academic voice. The project investigates the economic and social viability of such a centre, as well as an appropriate approach to the development of curriculum, program, business model and design, that is sensitive to both the people and the land, questioning traditional notions of what a university should be in the process, by appropriating the typology to suit a rural context.



1. Introduction

The landscape of the former homeland of the Transkei, now known as OR Tambo District Municipality, is one of rolling hills, dotted with rural settlements watching over their farmlands. The interior is made up of endless grasslands – the town 'Lusikisiki' is named after the sound the wind makes as it blows through the long grass. The vegetation thickens, however, into dark green forest as one nears the rugged coastline, known by sailors as the 'wild coast' for its dangerous waters. It is the home of the Xhosa, and the birthplace of notable political figures Thabo Mbeki, Walter Sisulu and Nelson Mandela, the latter fondly recalling his barefooted childhood in the rural Eastern Cape in his autobiography, 'The Long Walk to Freedom' (1994).

In his book, Mandela recalls learning from his elders in a traditional sense, acquiring knowledge through observation and emulation. However, education in a formal, western sense was first offered to the Xhosa with the arrival of the first European missionaries in the late 18th century. It came at a cost: as Peter Magubane (1998) notes, 'conversion to Christianity resulted in the development of a major cleavage in Cape Nguni society, which was to last up until the 1950s, between the so-called 'School' people and the 'Red' traditionalists.' 'School' people were those who embraced Christianity and a Western education, and were the products of mission stations and schools. Highly influenced by Western, English speaking culture (as was imparted on them by their European teachers), the 'School' people began to take on a European style of dressing, and adopting cultural traditions centred on school and church. 'Red' people were described as such for the red clay they smeared on their faces and bodies. As traditionalists, they rejected both the church and Western education as 'foreign introductions', and continued to practice time honoured rituals centred on the spirits and the ancients. To accept an education was to abandon your culture.

Such an imposition of Western culture on Africa is not unusual: the history of development theory is plagued with Eurocentric, and at times patronizing, colonialist and exploitative policy devised by the west for Africa, and one of the major problems faced in education for rural Africans today is that of establishing a curriculum of relevance to context that is not devised from an urban, western perspective. As Rural Development becomes an increasingly urgent agenda, with education forming one of its key components, the task of providing rural people with access to education of quality and relevance becomes an important one.

It is the intention of this essay to explore the notion of a Rural University: a centre of academic excellence in adult education located in rural South Africa that would fulfill the constitutional rights of rural South Africans to a quality education, rectifying injustices of the past, empowering rural people to uplift themselves and their communities, and giving rural people an academic voice. The 'University' is not made of bricks and mortar, as Pirsig(2000) would suggest, but of a body of human knowledge, kept alive and expanded upon by an academic community of people. Its is the intention of this project to include rural people within that academic community, and to give them an opportunity to access the body of knowledge, and contribute to it, through technology, so that they might share their indigenous knowledge with the world.

The essay is to investigate the viability of such a project, and an appropriate approach to the development of curriculum, programme, business model and design, challenging preconceived notions of what a university should be in the process. It is divided into the following sections:

Section 2. Rural Development in South Africa describes the South African rural situation, and covers contemporary government policy on rural development.

Section 3. Education for Rural People covers international and local policy on the subject, proposes innovative ways in which Information and Communications Technologies (ICTs) may be employed in in education for rural people, and provides an overview of relevant government policy on education.

Section 4. Rural University: Tertiary Education for Rural People explores and questions traditional ideas about education, and introduces innovative programmatic precedents that place the university type in a rural context.

Section 5. Conclusion summarises findings, and suggests the 'beginnings of a brief', informed by key points.

The essay is structured so that it moves from the general to the specific, building up a set of criteria (noted in the conclusion of each section, and reiterated in the final conclusion) that the Rural University must fulfill in order for the project to prove viable, and appropriate in terms of program, design and implementation.



2. Rural Development in South Africa

2.1 Introduction

In order to establish the viability of an academic centre of excellence in higher education located in rural South Africa, and to investigate an appropriate approach to the definition of a programme and business model for such a centre, as well as an appropriate approach to the design and implementation thereof, it is important to understand the context in which the project is placed.

The following section provides insight into the South African rural situation, highlighting the complexities involved in defining the rural, exploring the problems and potentials of South Africa's rural areas, and tracing the evolution of South African policy on rural development, arriving at contemporary government policy in the form of the Comprehensive Rural Development Programme of 2009. The section concludes with a summary of points of relevance to this project.

2.2 The Task of Defining the 'Rural'

In order to understand the task of rural development in South Africa, and the policies associated with it, it is important first to understand exactly what defines 'rurality', and who rural people are[1]. The task of defining the rural is a difficult one. Although, it could be said that 49.4% of the world's population resides in rural areas, as is evident in Table 1 (United Nations, 2008), distributed across the world according to Figure 1, few agree on exactly what constitutes a 'rural area' or 'rural population'. Often, 'rural' is simply defined as that which is not 'urban' (DoE, 2005), a generalization that has, in the past, resulted in ambiguities and misleading statistics with detrimental effects on policy[2]. In a more successful attempt to define the 'rural', Wiggins and Proctor (2001) expand on the idea, dividing the rural into three categories according to an area's proximity to the city: peri-urban zones (located just outside the city), the (middle) countryside and remote rural areas. Each area may be rich or lacking in natural resources, adding to the complexity of an area, with implications on its potential for development. Most countries, however, consider rural areas to be those of a low density; areas where 'human settlements and infrastructure occupy only small patches of the landscape, most of which is dominated by fields and pastures, woods and forest, water, mountain and desert' (Wiggins & Proctor, 2001) and where economic activity is dominated by primary production, such as farming or forestry, and any manufacturing/commerce directly associated with it. UNESCO-IIEP (2006, p22) accepts that, by common definition,

"Typically rural people have agriculture as their main occupation; they are farmers, nomads, pastoralists, or fishermen. They deal with animal production, transformation and marketing of land and forest products and services."

However, the flaws in this definition reveal themselves when one considers the situation in South Africa, where the legacy of apartheid driven racial segregation and land resettlement policies is apparent in the densely populated former homelands, and where many rural households are currently supported by incomes generated in the cities, or through some kind of relationship with the urban. The ISRDS (2008, p8) notes the importance of Rural-Urban linkages when investigating South Africa's rural situation: rural people often move between their home and the city for reasons relating to employment, either seasonally (temporary migration) or weekly (labour migration)[3] . Movements relating to shopping trips, school trips and short term visits, as well as the movement of commodities and services between rural and urban areas are also important to consider. A person may reside in what is considered a rural area, but the activities they carry out are not restricted to their official place of residence, and failure to recognise this point, amongst others, often results in the establishment of rigid rural-urban dichotomies that can add to the ambiguity and inaccuracy of statistics.

In addition to the ambiguities that arise with regards to the difference between 'rural' and 'urban' are those related to the heterogeneity of the rural areas themselves: the rural sector is dynamic, and the areas we've come to term 'rural' range from commercial farmlands; subsistence farming areas; small towns and villages through to nature reserves. All these spaces differ markedly in geography, economic activity and population structure, and subsequently have very different needs and potentials with regards to development. Adding further to the complexity of the rural situation are variations such as ecological and natural resources available, human settlement patterns, language and cultural differences, lifestyle differences and the proximity of the rural area to urban/industrial conglomerates (ISRDS, 2000, p7). Even individual rural settlements are complex - Odora Hoppers (2004) notes that, 'rural cannot be seen as one single space, but rather as a multiplicity of social spaces that overlap the same geographical area, with each social space

1 Agreeing on a definition of the 'rural' is crucial to the formation of development policies: in the Integrated Sustainable Rural Development Strategy or 'ISRDS' (2000, p7) it is noted that, 'Rational and effective planning and implementation of rural development will to a large extent depend upon an agreed definition of the rural areas of South Africa'

2 The Comprehensive Rural Development Strategy (DRDLR, 2009, p8) points out that, in the past, Statistics South Africa defined municipalities (white cities/towns and their associated townships) as urban, and everything else as rural. However, with what have become wall to wall municipalities, this definition no longer holds. The RDF (1996) also mentions that this town-scale classification meant that all households that were not placed within formally declared towns were considered rural, such that many peri-urban households fell under this definition, leading to an overestimation of the incomes of genuinely rural people and an underestimation of their dependence on agriculture. Simply defining that which does not exist within the limits of acknowledged urban areas as 'rural' leads to incorrect classifications and misleading statistics.

3 In an article for Discovery magazine, Alec Hogg (2010) describes his decision to move from Parkview to rural Kwa-Zulu Natal and, 'live where the frictional cost of life is lowest', taking advantage of modern technology in order to work from this remote location: there is a growing trend for urban people to relocate to rural areas in pursuit of a higher quality of life, and maintain a modern lifestyle through technology; a point also noted by Wiggins and Proctor (2001)

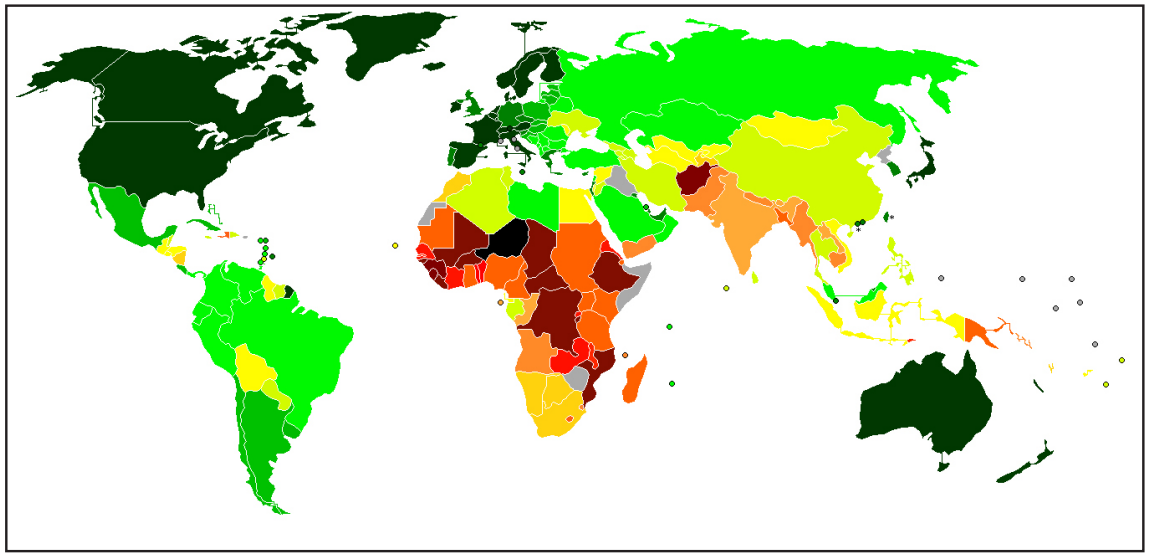


Figure 1: Map of the world indicating the Human Development Index showing developed, developing and underdeveloped (generally rural) countries. HDI
source: Thinkquest, 2010

Table 1: World Rural Population
source: United Nations, 2008

year	total population world	rural population world	rural population as % total population	Total population Africa	rural population Africa	rural population as % total population
2000	6124123	3270214	53.40%	820959	525828	64.05%
2005	6514751	3350116	51.42%	922011	572618	62.11%
2010	6906558	3411951	49.40%	1032013	619823	60.06%
2015	7295135	3450471	47.30%	1149117	664683	57.84%

having it own logic, its own institutions, as well as its network of actors.' The rural sector is heterogeneous and richly diverse in terms of geography; topography and natural resources; economic activity; social structures; culture; heritage and political history, and such diversity must be recognised and acknowledged in any study.

Thus, the task of clearly defining Rural South Africa, and the needs of rural South Africans, becomes a complex one. In the Ministerial Committee on Rural Education's 2005 report, it is noted that the committee adopted the quantitative definition for 'rural' used by Statistics South Africa in the 2001 census, which was a spatial definition identifying Traditional Authority areas (primarily 'community owned' land in the former homelands), and formal rural areas (primarily commercial farms in former 'white' rural areas of South Africa). However, the committee suggested that in order to capture the diversity of rural locations, refinements to the definition may be made with regards to factors such as proximity to towns, topography, settlement patterns, access to information and communications technology, road infrastructure, access to services and facilities, social condition within the relevant community and political activities. For now, the following demographics relating to rural South Africa are based on the former, simpler definition.

2.3 South Africa's Rural People

In 2000, 45% of South Africa's population lived in non-urban areas. 85% of rural people lived in the former homelands, while the remaining 15% lived on commercial farms and in small towns (ISRDS, 2000, p8).

The majority of this rural population is made up of women, and female-headed households are often particularly disadvantaged. The poorest rural households often display low levels of literacy and education, and access to water, fuel and other services is often difficult and time consuming, with an impact on the productivity of households that already come across few opportunities to take up gainful employment. The impact of HIV/AIDS in rural areas is significant, where HIV/AIDS affects not only the individual, but the whole household, due to

the loss of human capital in both health and skills.
In South Africa's former homelands, major areas of employment (or rather livelihood strategies) are subsistence farming and remittances from urban areas, with 30% of the population unemployed and 50% underemployed (ISRDS, 2000, p11).

Such descriptions do tend to paint a negative picture of rural areas, and the Ministerial Committee on Rural Education (DoE, 2005) suggests that, 'it is important to see beyond the number and the negative 'deficit' views to recognise the positive capabilities and assets of rural people and the inherent worth of indigenous knowledge in fields such as medicine, conservation, arts and culture'. In the 2006 Baseline Survey of the 21 ISRDP and URP nodes (Everatt, Smith & Solanki, 2006), rural development nodes were found to perform better than urban renewal nodes in terms of social capital, which reflects trust and care within a community.

2.4 Rural Development Policy in South Africa

2.4.1 Theoretical Context

South Africa does not operate in isolation: no country can afford to ignore its standing in a global situation (Leys, 1997), and South Africa is affected by international relations just as it has effect through them. Thus, rural development in South Africa should be viewed within the broader context of rural development on an international level, and within the even broader context of development theory, of which rural development is a central component (Ashley & Maxwell, 2008). The history of development theory is a troubled one. Although development, today, would seem to be largely concerned with the improvement of the quality of life of people in underdeveloped regions, development has always had a darker, competitive side fuelled by the economic interests of those with power, often tainted with exploitative intentions or, at the very least, a lack of concern for the people and the land in an underdeveloped region. As Colin Leys (1996) points out, the notion of development has begun to increasingly come under fire in the last two decades, as most theories have been devised for the Third World from a Eurocentric (and, at times, patronizing and colonial[4]) perspective, and have failed to acknowledge the complexities of the contexts in which they have been applied, leading to their failure overall. Others have succeeded in acknowledging context, criticizing ahistorical and non-contextual strategies, but have failed to present any immediately achievable, short term path towards development[5].

Theory on rural development, specifically, would also appear to be in a 'troubled state' – as Ashley and Maxwell (2001) assert, "the evidence (of this) lies in the persistence of rural poverty, but also in the declining flows to the sector, and the concerted effort to rethink policy by both international funding agencies and developing country governments." Contemporary rural development theory has long identified agriculture as its driving engine, and while some maintain that the eradication of rural poverty lies in agricultural growth, others question this, noting a long term decline in agricultural commodity prices (Rosengrant, 2001) and increased pressure being placed on natural resources; and suggesting that emphasis be placed on the rural non-farm economy rather than agriculture and related activities as long as the project is driven by a local competitive advantage. The viability of agriculture-led poverty reduction that relies on small farm productivity and contribution to the local economy comes into question as technological complexity, increased connectedness to markets and the globalisation of commodity chains threaten the small farm model (Ashley & Maxwell 2001). The matter is contentious and exacerbated by the problem of defining the rural (as explained earlier), and, according to Ashley & Maxwell, 'the crisis in rural development reflects a loss of confidence in the rural development 'project', which has for long been central to the development effort. In policy terms, rural development has lacked a convincing narrative, offering manageable and internationally agreed solutions to clear and well-understood problems.' In any event, it is projected that, 'Urban populations will soon be larger than the rural, most rural people will be functionally landless and, in most areas, agriculture will be a relatively small productive sector, commercial in its orientation and incorporated into national and international commodity chains. Most rural households will have a diverse and geographically dispersed portfolio of income sources: they will pursue multi-locational and multi-occupational livelihood strategies' (Ashley & Maxwell, 2001).

It is within this context that South African rural development policy is placed: as a former colony and rich source of natural resources for the European powers in the past, South Africa has fallen on the receiving end of Eurocentric policies, despite its strong position as one of the more developed countries in Africa (FAO and UNESCO-IIEP, 2006). Rural Development policy in South Africa as devised by the government has, however, come a long way, and contemporary policies are growing more qualitative and participatory, with focus placed on cohesion, transparency and effective communication amongst key role players. The following provides an overview of rural development policy in South Africa, tracing its evolution from apartheid times to the country's current stance on rural development.

2.4.2 The Homelands

South African economic development between 1948 and 1976 is argued to have been strongly influenced by a number of Acts and pieces of legislation that allowed the government to assign land occupation and ownership according to racial divisions; namely the Group Areas Act of 1950, the Promotion

4 In 1931 former governor general of French Indo-China, Albert Saurrat, commented on the colonial situation:

"While in a narrow corner of the world nature has concentrated in Europe the powers of invention, the means of progress, and the dynamic of scientific advancement, the greatest accumulation of natural wealth is locked up in territories occupied by backward races who, not knowing how to profit by it themselves, are even less capable of releasing it to the greater circular current that nourishes the ever growing needs of humanity"

The colonial mindset with regards to development was ridden with racism, arrogance and intention to exploit, often cloaked in the garb of a concern for progress and the greater good of humanity. Unfortunately, traces of colonial thought can still all too easily be identified in development theory succeeding colonial times, as Arun Agrowal notes in his paper of 1997, 'The Politics of Development and Conservation: Legacies of Colonialism'.

5 An overview of the evolution of development theory, taken largely from Colin Ley's book of 1996, 'The Rise and Fall of Development Theory', is available in Appendix 1 of this document.

of Bantu Homelands Citizens Act of 1970 and the general 'Grand Apartheid' policy. Accelerated industrialization and mechanization at the time provided additional impetus for the facilitation of the 'Bantusan' policy – a reduction in the demand for labour in agriculture and industry lead the apartheid government to devise acts that would compel South African black people to become citizens of designated homelands within South Africa that corresponded with their ethnic group. As a result of this, many South African black people were forcibly removed from the urban areas in which they worked, and relocated in rural areas. Black people living in developed rural farming areas were also made to move into undeveloped rural areas. Consequently, South Africa's undeveloped rural areas, often displaying low economic potential, showed a drastic increase in population over these years (Kole, 2004, p2).

In the 1970s, the government took on a process of industrial decentralization – in an effort to draw investment out of established, industrialized metropolitan centers and into potential 'white' towns surrounded by rural homelands, government subsidized industries located in these areas. This only resulted in a superficial kind of rural development, where employment levels were increased, but at the expense of sustainable rural development (Kole, 2004).

The 1980s saw the repeal of pieces of legislation that regulated residential rights, and the years to follow would be characterized by a great influx of people into urban areas, resulting in 'urban poverty pockets' – parts of urban communities or spatially defined urban areas displaying high levels of poverty (Kole, 2004). A sustainable approach to rural development in South Africa was called for.

2.4.3 Rural Development in South Africa since 1994

Following the first democratic election of 1994, the former homelands and provinces were reconfigured into the present 9 provinces, and sub-national governmental jurisdictions were redrawn. All three spheres of government (national, provincial, and local) were to assume new responsibilities with regards to rural development. In the six years that followed the first democratic election, much focus was placed on addressing past and present inequalities through the design and implementation of government initiated programmes, notably the RDP (Reconstruction and Redevelopment Programme) of 1994 and GEAR (Growth, Employment and Redistribution Programme). In accordance with these programmes, government addressed issues concerning rural development in terms of economic development, social investment (i.e. social infrastructure), human resource development and natural resources (ISRDS, 2000, p13). Programmes implemented in rural areas generally addressed poverty alleviation through investment in infrastructure and the provision of social services.

Numerous pieces of post apartheid South African legislation have implications for rural development in South Africa, and all initiatives carried out take place within a specific legal framework[6], but the first document to be conceived that addressed rural development specifically, and which followed the launch of the RDP, was the Rural Development Strategy of the Government of National Unity, released in 1995 by the Ministry in the Office of the President. Following this, and developed by the Rural Task team of the RDP office, the 'Rural Development Framework' (RDF) was produced in 1997 by the Department of Land Affairs. This document focused on rural infrastructure, public administration, local government and rural non-farm employment. The RDF, however, was never confirmed as the government strategy for rural development, and the initiatives that emerged from different government departments were not based on specific targets or common indicators.

A number of achievements were made in South African rural development between 1994 and 2000, including improvements in the provision of access for rural people to water, electricity, telephone connections, cell phone reception and television signal; as well the introduction of facilities such as IT centers, software distance learning centers and web internet laboratories. Spatial Development Initiatives (SDIs) and community based public works programmes aided in job creation and economic upliftment in rural areas, and land reform policies ensured a fair distribution of land. The GEAR framework of macroeconomic stabilization, adopted in 1996, which focused on the economic situation of South Africa made provision for successful rural development from the top down, as did reforms in agricultural policy, and subsidies put in place by the government for investment in the construction of rural schools, clinics and infrastructure. In addition to these investments, programmes involving infrastructure, skills development, primary health care and adult basic education programmes (ABET) are said to have greatly improved the lives of many rural people.

However, despite these notable achievements, Rural Development in South Africa between 1994 and 2000 was beset by a lack of communication and co-ordination between the relevant divisions of government, and a single cohesive vision for rural development. In the absence of a clear mandate, the District Council failed to provide local councils with a clear understanding of the activities of the line departments within their jurisdictions (ISRDS, 2000, p16). Government institutions below provincial level were also often newly formed, and were overwhelmed by their new responsibilities. As a result of this lack of capacity and a sense of cohesion, and despite substantial investment, projects often neglected community needs and priorities. In the Eastern Cape, surveys concerning a large community based public works programme run by the National Department of Public Works, revealed that most of the rural people involved felt the projects implemented were inappropriate (ISRDS, 2000).

In addition to this lack of integration and co-ordination on at local level, another issue arose during these early years in that little assessment was ever carried out on the impact of government initiatives, and programmes receiving the most attention were those that could be quantified according to deliverables promised, meaning that any achievements concerning a qualitative impact on people's lives were often overlooked.

6 According to the ISRDS (2000, p13), South African Legislation that has implications for rural development are: the Constitution of the Republic of South Africa, Act 108 of 1996; the Housing Act, 107 of 1997; the Restitution of Land Rights Act, 22 of 1994; the Development Facilitation Act, 67 of 1995; the Extension of Security Tenure Act, 62 of 1997; the Transformation of Certain Rural Areas Act, 94 of 1998; and the Abolition of Racially-based Land Measures Act, 108 of 1991.

By 2000, South Africa was in dire need of an integrated policy on rural development, supported by government, with a common vision and objective that would filter through all tiers of government, from the national to the local, and inspire cohesion and communication amongst all bodies concerned, with emphasis on the requirements of the communities in question. In response, the Integrated Sustainable Rural Development Strategy (ISRDS) was developed, not to re-invent South African rural development, but to revise and redesign it.

2.4.4 The Integrated Sustainable Rural Development Strategy (ISRDS) of 2000

In 2000, approximately 70% of the South African population living in poverty lived in rural areas (ISRDS, 2000, piv). In response, the South African Government launched, 'a new stage of concerted effort to improve opportunities and well-being for the rural poor'. Consulting with a number of stakeholders, building on the previous 6 years of experience with rural programmes, and aligning itself with international policy, the Government devised the Integrated Sustainable Rural Development Strategy, which was to be, 'idealistic in its vision and practical in its focus on mechanisms of implementation' (ISRDS, 2000, piv).

The vision of the ISRDS was to 'Attain socially cohesive and stable rural communities with viable institutions, sustainable economies and universal access to social amenities, able to attract and retain skilled and knowledgeable people, who are equipped to contribute to growth and development' (ISRDS, 2000, 1). It was the strategic intent of the ISRDS to, 'transform rural South Africa into an economically viable and socially stable and harmonious sector that makes a significant contribution to the nation's GDP' – the intention of the strategy was not only to uplift rural people, cater for their constitutional rights and improve rural quality of life, but also to ensure that the economies of rural areas could be uplifted to the extent that they would become a valuable, self sustaining part of the national economy, making a substantial contribution. The objective was to 'Ensure that by the year 2010 the rural areas would attain the internal capacity for integrated and sustainable development'

With intentions to improve the efficiency of the application of public funds in rural areas rather than depend on additional funding from government, the strategy focused on the implementation of rural development in a participatory, decentralized fashion, with emphasis on the role of local government in recognizing the specific needs and potentials of the rural community it serves and in achieving 'synergistic rural development' (ISRDS, 2000, piv). Local government would thus be expected to lead in consolidation, formulation, implementation, monitoring and the evaluation of well coordinated programmes and projects (ISRDS, 2000, p1). Local governments would be supported by provincial governments, who would be responsible for coordinating, integrating and aligning planning outputs. The Presidency would, in turn, provide strategic leadership and coordination for provincial governments. The Medium Term Expenditure Framework would ensure that national and provincial budget structures would meet ISRDS objectives (ISRDS, 2000, piv).

Key Elements

Central to the ISRDS are three key elements reflected in its name: integration, sustainability and a meaningful definition of 'rural development'. Many initiatives of the past recognized the need for an integrated approach to rural development, but often failed to design a mechanism for such integration. The ISRDS was developed to address this, by clarifying and allocating specific roles to the various governmental bodies involved, and ensuring a transparent, communicative process for rural development, where community participation is vital, and community input is taken seriously. Sustainability would be vital in this new approach, and the support of rural people would ensure its long term viability. The revenue base of local government would be enhanced over time, and social

Selling local crafts to tourists may supplement rural incomes





Livestock near Port St. Johns: agriculture often forms an important element in rural economies

sustainability would become a focus: the extended social networks already existing in rural communities were found to hold 'a wealth of social capital' (ISRDS, 2000, p19), and development processes would do well to reinforce and sustain such social networks, which might enhance the initiatives, rather than disrupt them. Lastly, clarity as to the definition of 'rural development' was called for: rural development was to be understood as 'multidimensional, encompassing improved provision of services, enhanced opportunities for income generation and local development, improved physical infrastructure, social cohesion and physical security within rural communities, active representation in local political processes, and effective provision for the vulnerable' (ISRDS, 2000, p19). Rural development was to encompass far more than poverty reduction through social programmes.

In addition to these three key elements, the dynamics of growth in rural areas were also noted as important areas for investigation: the strategy intended to enhance economic growth in rural areas for their own upliftment and such that they would contribute positively to national economic growth. Thus, it became important to identify potential sources and linkages for growth. Often, the land itself would provide economic potentials in the form of agriculture or tourism, and these potentials were to be explored. However, the ISRDS noted that not all areas have high potential for growth, and that 'people, particularly the youth, must have opportunities to voluntarily move away from those areas over time' (ISRDS, 2000, p21). The document notes that many of these young people currently assume that they must move to the cities, and many will, but with a 'more active land reform', and growing tourism, as well as the positive effects of public investment in rural areas, the rural youth living in areas of low economic potential might be compelled to seek employment opportunity in more dynamic rural areas and towns – the sector will still be enriched, through the upliftment of its people.

Implementation

The ISRDS was to be implemented through the selection of a 'basket of services' – a number of successful initiatives of the past, as well as newly introduced programmes, were identified by government. Services appropriate in programme and budget for the rural areas in question would be chosen from this selection and implemented through an integrated, transparent approach, placing more responsibility with local government. The ISRDS would ultimately be implemented across the whole country, but initially 3 pilot nodes were chosen for the strategy,[7] namely Lusikisiki, Bushbuckridge and Nongoma. Lessons learnt from these pilot sites, as well as insights provided in more specific rural development plans devised by each provincial government, would then aid in choosing an appropriate approach to development for other nodes in the future.

Launch of the ISRDP

The ISRDS was officially implemented in 2001 with the announcement of the targeted pilot nodes during President Thabo Mbeke's State of the Nation Address that year. With the strategy in place as a guide, anchor projects were initiated under the ambit of the Integrated Sustainable Rural development Program (ISRDP), which would not be viewed as a separate programme in itself, but rather as a new integrated and coordinated system for implementing programmes in rural areas (Kole, 2004). The ISRDP would be a ten year programme, targeting specific communities. Following initial investigations into the 3 chosen pilot nodes, 13 nodes were identified in which the ISRDP would be implemented. Funding for the ISRDP in the 13 municipalities would be provided by national and provincial government, municipal budgets, NGOs, the private sector and the Intergovernmental Fiscal Revenue Base.

7 These nodes were chosen based on the impact of mining retrenchments on rural poverty, as highlighted in the May 2000 mining summit, which introduced the IDT and the Minister of Minerals and Energy to the South African Rural Development community (Everatt, 2003).

2.4.5 Contemporary Policy on Rural Development in South Africa

South Africa, as a member of the United Nations, is part of a global movement in rural development seeking to alleviate poverty and improve the quality of life of rural people. It is committed to the Millennium Development Goals of 2001. The intentions of the goals, derived from international development targets established at the Millennium Summit of 2000 in New York, are to spur development in the world's most impoverished countries through the improvement of social and economic conditions. The goals aim to eradicate extreme poverty and hunger; achieve universal primary education; promote gender equality and empower women; reduce child mortality; improve maternal health; combat HIV/AIDS, malaria and other diseases; ensure environmental sustainability; and develop a global partnership for development. It is intended that the goals be achieved by 2015 (UNDP, 2010).

South Africa is also committed to the goal of achieving 'Education for All' (EFA), which is concerned with 6 goals relating to children, young people and adults, also to be achieved by 2015. (UNESCO, 2010). The goals are to: expand early childhood care and education; provide free and compulsory education of good quality; expand adult literacy; eliminate gender disparities; and enhance educational quality.

While South Africa is committed to these international efforts, the rural development policy specifically designed for South Africa that is currently being implemented in South Africa's rural areas is the Comprehensive Rural Development Programme of 2009.

2.4.6. The Comprehensive Rural Development Programme of 2009

Succeeding the ISRDS, The Comprehensive Rural Development Programme (CRDP) is a strategy that has been developed by the South African Government for development in rural areas. It develops through all sector departments and clusters through the Medium Term Strategic Framework (MTSF, 2009-2014) and the Government's Programme of Action (DRDLR, 2009, p6). The Department of Rural Development and Land Reform acts as an initiator, facilitator, coordinator and catalyst within the program (DRDLR, 2009, p12) and, in the medium to long term trajectory for the programme (11/05/2009 to 11/05/2011), the vehicle for the coordination of the CRDP is the over-arching Rural Development Agency (RDA) (DRDLR, 2009, p31). The CRDP is intended to combat poverty and food insecurity by, 'maximizing the use and management of natural resources to create vibrant, equitable and sustainable rural communities.'(DRDLR, 2009, p3) Besides the goal to improve standards of living and welfare, the CRDP is also concerned with the rectification of injustices of the past in terms of patterns of distribution and ownership of wealth and assets, as well as human rights.

Specific Goals

In order to achieve this vision, the focus of the CRDP lies in: a contribution to the redistribution of 30% of South Africa's Agricultural land; addressing food security for the rural poor; the creation of business opportunities in rural areas; the de-congestion and rehabilitation of overcrowded former homeland areas; and expanding opportunities for women, youth, people with disabilities and older persons staying in rural areas.

Approach

The CRDP differs from interventionalist government strategies of the past in that it is based on a, 'proactive participatory community-based approach' to rural development, where policies are derived from baseline data emerging from interactions on pilot sites in the Northern Cape and Limpopo Province. The strategy encompasses three distinct components: Agrarian Transformation, Rural Development and Land Reform.

AGRARIAN TRANSFORMATION

Agrarian transformation may be described as the, 'rapid fundamental change in the relations of land, livestock, cropping and community' (DRDLR, 2009, p4).Key concerns are the establishment of: rural business initiatives, agro industries, co-operatives, cultural initiatives and vibrant local markets in rural settings, as well as the empowerment of rural people and communities (specifically women and youth), and the upgrading of facilities, public amenities and infrastructure (that is economic, social, information and communication infrastructure) in villages and small rural towns.

RURAL DEVELOPMENT

The intention of rural development is to enable rural people to take control of their destiny, dealing with poverty through 'optimal use and management of natural resources' (DRDLR, 2009, p4). It is a, 'participatory process through which rural people learn over time, through their own experiences and initiatives, how to adapt their indigenous knowledge to their changing world.'

LAND REFORM

Land Reform is a national priority covered in the Constitution of the Republic of South Africa, 1996 (Act no. 108 of 1996). Major concerns of the land reform programme, launched in 1994 are tenure reform, restitution and land distribution, and are being addressed in relation to the CRDP (DRDLR, 2009, p4).

Participation

In order for the CRDP to be effective, and meet the diverse needs of rural communities, a coordinated strategy requiring the participation of various government departments, non-governmental organisations (NGOs), research institutions and communities must come into play.

Job Creation within the Strategy

Of major importance in all areas of the CRDP is a job creation model, which will create, 'para-development specialists at ward level that will be equipped to train and mentor selected community members so that they become gainfully employed' (DRDLR, 2009, p4)

Associated Initiatives and Legislation.

The CRDP is based on a concept document prepared by the Minister for Rural Development and Land Reform, the Honorable Mr G. Nkwinti, and was presented during his budget speech in June 2009. A number of key policies and legislation informed the CRDP, namely the national Rural Development Framework, the Constitution, the Reconstruction and Development Programme (RDP), the Growth, Employment and Redistribution Strategy (Gear), the MTSF, the land reform programme, agricultural and economic development programmes, as well as other government programmes and non-governmental interventions (DRDLR, 2009, p6).

2.5 Conclusion

The following points emerge as having high relevance to the Rural University project.

Due to the Bantusan policy, employed by the apartheid government, which forced Black South African citizens to move to an undeveloped rural area allocated to them according to their ethnic group, South Africa's rural areas are unusually dense. The occupants of these areas were subjected to massive inequities in terms of land tenure, service provision and education, and South African rural development policy is largely concerned with addressing the injustices of the past. The Rural University project would assist in addressing problems of illiteracy and a lack of access to high quality education, its viability being justified by the unusually high population density in the country's rural areas: equity aside, the project would probably not sustain itself if the population was less dense and student turnover too low. The government's agenda to provide rural people with quality education (which will be covered in detail in the following sub-section), and unusually high densities, support the Rural University project.

Although the situation in South Africa's rural areas is often painted as quite bleak, much of rural South Africa holds economic potential in agriculture and tourism, and rural areas show high levels of social capital (reflecting trust and care within the community). Such potentials must be unlocked through investment in development initiatives, and by providing rural people with the necessary skills to take on the jobs created through such initiatives. The Rural University project addresses the latter.

It is important to note that, although agriculture and related economic activities play a key role in developing rural economies, the idea that eradication of rural poverty lies in agricultural growth is questionable: declines in the global market values of agricultural commodities, and well as the stresses placed on natural resources by agriculture work against agriculture-focused strategies. As Ashley and Maxwell (2001) predict, 'in most areas, agriculture will (soon) be a relatively small productive sector, commercial in its orientation and incorporated into national and international commodity chains. Most rural households will have a diverse and geographically dispersed portfolio of income sources: they will pursue multi-locational and multi-occupational livelihood strategies.' This is already the case in South Africa's rural areas, where remittances from urban areas form a major source of income for rural people, supplementing subsistence farming as a livelihood strategy. Thus, it is important to keep an open mind about rural development, which should not be focused on keeping young people in rural areas and persuading them to become farmers. Firstly, young rural people have a constitutional right to quality education. Rural development strategies must seek to fulfill this, and, through development initiatives, make rural areas attractive places to live and work. If the rural youth still intend to move, providing them with facilities to access high quality education close to home (without the added expenses of city life) will mean that they can afford to study their chosen subject, even if they work elsewhere. The ISRDS notes that not all areas have high potential for growth, and that 'people, particularly the youth, must have opportunities to voluntarily move away from those areas over time' (ISRDS, 2000, p21). It is likely that, even if the rural youth relocate after studying, that they will maintain linkages with their home, and that money will still flow into the rural area, as in the geographically dispersed portfolio that Ashley and Maxwell speak about. There is even a chance that the rural youth, relocated to the city, may be compelled to move back to a rural area: there is a growing trend for urban people to relocate to rural areas in pursuit of a higher quality of life, free of traffic and pollution, where they can maintain their modern lifestyle and city job through technology (Hogg, 2010). The Rural University should not focus on agriculture, but should offer a rich diversity of curriculums to rural students, perhaps promoting those subjects that will specifically benefit the area.

An opportunity for the Rural University to align itself with contemporary and recent government policy on rural development in South Africa emerges from this study. Should the development of programme, business model and design of the university be informed by the data available in contemporary development strategies, it is more likely that an appropriate, sustainable project will emerge that achieves a high level of integration within the community it serves. If the project aligns itself with policy, addressing rural problems and improving the local economy of the area in which it is situated as a rural development initiative in itself, the potential for government support (both financially and politically) increases.

The project already aligns itself with policy in that it addresses the provision of access to quality education for rural people, a crucial aspect of rural development. Such an intervention would uplift rural people, empowering them to support themselves and to uplift their community. As the CRDP notes, The intention of rural development is to enable rural people to take control of their destiny. Rural development is a 'participatory process through which rural people learn over time, through their own experiences and initiatives, how to adapt their indigenous knowledge to their changing world'. The Rural University will empower rural people by providing them with access to the body of human knowledge through technology, while giving them the opportunity to share their indigenous knowledge with the world.

As a new development in an undeveloped region, the project will naturally create employment opportunities in the various stages of its implementation (construction, maintenance, academic staff), and would serve as a catalyst for growth, increasing economic activity in the area. Such an effect would be increased by including functions in the university's programme that would draw visitors to the area, such as conference facilities, inducing a kind of tourism and increasing related revenues accordingly.

Another valuable function to be including in the programme would be that of a research facility for rural development: the CRDP notes the important role that research facilities play in the development of policies, and that community participation in the development of such policies is crucial. By placing a research facility in the field, the accumulation of baseline data through surveys (which is essential in the development of a qualitative, integrated policy) would be greatly facilitated. Such a research centre would also draw educated people to the area, the first step in establishing a centre of academic excellence, and might draw visiting students from other regions, expanding

on the notion of a conference centre and its benefits[8] .

The CRDP also notes the importance of providing rural people with services and infrastructure. By placing the university in a slightly remote area, services required by the institution (roads, ICT, etc) would be drawn to the area, as was the case in the Nelson Mandela Open Air Museum . Alternatively, the university could become a generator of services for surrounding communities, or at least a pilot project exploring alternative technologies in water provision, sanitation, heating, electricity production, road construction and ICT, achieving a degree of autonomy. Such technologies might be managed by the research centre, and developed for application in the surrounding communities.

Through such alignments with government policy on rural development, the project becomes more viable, sustainable, and integrated, and will not only be informed by development policy, but will create the opportunity to accumulate data, contributing to future policy. This project is closely related to rural development: it is informed by it, and will inform it.

8 Walter Sisulu University in Mthatha holds a Rural Development Conference every year – holding such an event in a remote, but fully serviced rural location could make it a more memorable event. Wits Rural Facility is a satellite centre of Wits University. In a similar way, it provides conference and tourist facilities, and may be used by visiting students for research projects.



Children walking home from a rural school near Palmerton in the Eastern Cape

3. Education for Rural People

3.1 Introduction

In order to devise an appropriate curriculum, programme and business model for the Rural University project, it is important to acknowledge problems experienced in education for rural people in the past, and to explore the options suggested by experts that may counter these issues. It is also important that any model adopted align with South African policy on education, in order to fulfil legal requirements, and to aquire the support of government and the Department of Education.

The following section covers problems and suggestions noted at the Education for Rural People in Africa seminar, held in Addis Ababa in 2005, as well as a more specific overview of education for rural people in South Africa. This is followed by an in depth exploration of the potentials held by Information and Communications Technologies (ICTs) for education for rural people, noting specifically potentials and possibilities in South Africa. An overview of government policy on education in South Africa is then provided, focusing on elements of relevance to this project, including Adult Based Education and Training (ABET), Further Education and Training (FET) and Higher Education (HE).

3.2 Education for Rural People in Africa

3.2.1 The ERP Initiative

A prominent contemporary global initiative in the provision of education for rural people is that of the flagship program, 'Education for Rural People', often abbreviated to 'ERP". The program, launched by the organisation, 'Education For All' (EFA), has been taken on by numerous governments and organisations, and its origins lie with the Millennium Development Goals (MDG) and Education for All goals described earlier, to which a number of countries are committed.

In order to achieve the Millennium Development Goals and the Education for All goals, UNESCO-IIEP (2006, p. 11) implores that, 'new partnerships and interdisciplinary alliances need to be forged between those working in agriculture and rural development and those working in education,' noting the link between education levels and income, productivity, maternal health, infant mortality and social cohesion.

Education is crucial for rural development, and, having recognized this, the Food and Agriculture Organization (FAO) and UNESCO launched, in September 2002 during the World Summit on Sustainable Development, the EFA flagship program entitled Education for Rural People (ERP). The intention of the program was to highlight the importance of education for rural people for the achievement of Education for All, the aims of the World Food Summit (Rome, 2006) as well as the goals of the World Summit on Sustainable Development. (UNESCO-IIEP, 2006, p. 15-6)

In order to bring the ERP initiative into effect, and facilitate interdisciplinary alliances between those working in agriculture, rural development and education, a number of seminars have been held, one of which was the regional seminar on Education for Rural People in Africa, held in 2005 in Addis Ababa, and which was attended by 96 participants, ranging from ministers of education, agriculture, rural development and fisheries from eleven African countries (one of which was South Africa.)

The Seminar focused on sub-Saharan Africa, where 71 percent of the population is rural, and will remain the majority over the next three decades (UNESCO-IIEP, 2006, p.12). Agriculture is a key sector in this region, and much focus is placed on improving technologies to make small scale farming viable and profitable[1].

Attendees of the seminar established that there is a strong correlation between illiteracy, food insecurity and poverty. It was noted that hunger, malnutrition and food insecurity 'erode cognitive abilities and reduce school attendance'. However, a lack of education 'reduces productivity and earning capacity, and increases vulnerability to hunger and extreme poverty'. Despite the strong evidence of this dire cycle, 'there is a low level of awareness among decision makers of the impact of rural illiteracy on development' (UNESCO-IIEP, 2006, p. 27). Thus, the intention of the seminar was to increase awareness and interdisciplinary discussion, and consider problems, goals and initiatives with regards to education for rural people in Africa.

1 The viability of such projects is coming into question, as noted by Ashley & Maxwell (2001).

3.2.2 Challenges Faced

Education for Rural People is crucial for development, but it faces many problems in a developing African context – most sub-Saharan countries lack the numbers of skilled teachers and other trained people, as well as the resources and infrastructure, necessary to plan and deliver effective basic educational services to rural people. Conversation between agriculture, rural development and education departments is minimal. Major challenges for the ERP initiative are described below, and include low access to basic education, gender inequity, poor quality and relevance in the curricula (which tend to be urban biased), and negative perceptions of the rural.

LOW ACCESS

Rural people generally have fewer opportunities to access basic education than those in urban areas.

GENDER INEQUITY

The gender gap in rural areas is often two to three times higher than in urban areas. While increasing the school enrolment of girls is the first step, true equity can only be achieved through equal opportunities to attend school, equality in the learning process, and equality in the workplace.

QUALITY AND RELEVANCE

the positive effects of schooling on food security, sustainable rural development and poverty reduction depend not only on the number of years of exposure to the school system, but also very much so on the quality and relevance of the education received. The curricula and textbooks in rural schools are often urban-biased, and content is generally not relevant to the needs of rural people, nor does it equip them with skills appropriate for the economic context in which they live, reducing employment opportunities after school.

PERCEPTION OF RURAL COMMUNITIES AND PARENTS

Many parents in rural communities send their children to school in the hope that they might escape their rural plight and migrate to urban centers. Performance at school is often valued with this in mind. In this context, 'it is imperative that education at all levels be relevant to the livelihood options of the rural people. Otherwise education will simply be a passport for emigration from rural areas, which is quite often the case.' [2] (UNESCO-IIEP, 2006, P. 28)

3.2.3 Strategies Proposed

Due to the problems of poverty, bad governance, conflict and HIV/AIDS, general development in sub-Saharan Africa has proved challenging, and the region is thus lagging behind other continents in achieving MDGs and EFA goals. Attendees of the seminar agreed that, 'addressing the educational needs of rural people through the traditional approach alone would be difficult, if not impossible,' (UNESCO-IIEP, 2006, P41) and thus suggested the following innovative approaches to the matter:

Distance Education

This is a generalized term relating to multiple types of educational provision involving, 'a tangible distance between the source and consumer of construction, where construction will no more bring the learner and the instructor within the confinement of a classroom' (UNESCO-IIEP, 2006, p. 41). This kind of learning overcomes barriers of time, gender, creed, community and religion, and has great potential for application in rural areas where populations are dispersed and skilled teachers are in short supply. Distance education, as a complementary approach, allows for increased access and improved quality. Rural radio already plays an important role in distance education. However, there are challenges regarding distance education including funding constraints, infrastructure limitations and administrative problems.

Non-Formal Education Programs

The principle behind Non Formal Education (NFE) is that of the recognition of individual ability differences, allowing for accelerated learning and growth. NFE increases access and provides alternative channels to basic for out-of-school children and adults. Problems faced with this methodology are: the absence of a clear policy framework that might guide stakeholders; negative perceptions of NFE as an inferior form of education; lack of financing and the absence of a standard assessment and certification system. NFE is often recognized for its potential as a gateway to formal education, although, should these problems be addressed, and NFE be made to provide relevant, quality learning outcomes in its own right, it might become a valuable approach to education in rural areas that doesn't merely support formal education.

School Feeding Programmes

These initiatives, which have proven effective in several countries, address mal-nutrition and education simultaneously. Nutrition is introduced as part of the curriculum, and children are provided with snacks and take-home rations for there families. Food is an enabler that allows families to send their children to school, regularly.

Strengthening Childhood Care and Learning

Taking into account the period between child birth and the age at which formal schooling begins, early childhood development (ECD) is concerned with the survival, development, growth and learning ability of a child, taking into account the political, cultural, economic and social climate of the child's immediate environment. Focus on ECD is recognized as crucial in achieving the Education For All goals.

Establishing Feeder Schools and Clusters

Due to a lack of resources and staff, and the dispersed nature of settlement in many rural areas, the provision of a primary school for every village is generally not a possibility. However, young children are often unable to travel great distances by foot to the nearest school. This proposal suggests smaller 'feeder' schools within a community that initiate the education process, attended by young children until they are mature enough to walk further distances to the local primary school. A 'network' of teachers is suggested.

Promoting Multi-grade Classrooms

Multi-grade teaching challenges traditional methods of teaching in that pupils of different ages, grades and abilities are taught at the same time. Often, multi-grade teaching in rural areas is not undertaken by choice, but is the only option where teachers are scarce. As a result, the principle is generally viewed negatively, as the concept puts strain on teachers who aren't trained in the method, teaching a national curriculum designed for traditional single-grade classes. If these problems are addressed, multi-grade teaching might have great potentials in rural areas.

Reforming Teacher Recruitment and Deployment

Although a lack of qualified teachers in a country may lead to rural schools being understaffed, it is generally more likely that the deployment of teachers across the country is poor. In order to attract teachers to rural areas, a number of policies are adopted. Some sub-Saharan countries practice centralized deployment, where the government assigns teachers posts. This takes out any choice in posting, and may lead to dissatisfaction. In a market system, teachers are not sent to schools, but may apply to them. This, however, often leads to the best teachers receiving more highly paid urban posts, while the least qualified of teachers take up positions in rural areas. In a targeted recruitment approach, teachers formerly from rural areas are approached with positions in their home villages. This approach depends on the attractiveness of the return to their rural home to the teacher. Lastly, financial incentives such as bonuses and housing for rural teachers might be employed, as well as career incentives, where newly qualified teachers are made to take up a rural post temporarily in order to advance their career.

Promoting Vocational Education for Rural Development and Sustainable Livelihoods

It has been found that, often, basic education is focused on preparing pupils for university, and ultimately white collar jobs. However, it is often the case in rural areas that the curriculum that has been taught has no immediate application in terms of the economic situation in the area, and young adults leaving school, who don't move to urban areas for tertiary education,

2 This kind of mentality is slightly worrying: South Africa's Integrated Sustainable Rural Development Strategy of 2000 asserts that: not all areas have high potential for growth, and that 'people, particularly the youth, must have opportunities to voluntarily move away from those areas over time' (ISRDS, 2000). Ashley and Maxwell (2001) also point out that rural livelihood strategies are leaning towards geographically dispersed portfolios.

are left unskilled and unemployed in their rural homes. UNESCO-IIEP (2006) suggests vocational training, introducing agriculture[3] into the curriculum such that young adults are immediately employable after leaving school, and will provide a strong work force in rural areas where agriculture is a focus.

All these approaches have their merits and downfalls, and the success of the approach will be dependant on the specificities of the context. In addition to these specific approaches, it was agreed that certain disadvantaged target groups need to form a focus in any initiatives, specifically girls, disabled people, children at work (children performing household/farming chores that prevent them from attending school), refugees, minority ethnic groups and nomad/pastoralist communities (UNESCO-IIEP, 2006, p57-59).

It was noted that, central to the Education for All agenda in sub-Saharan Africa is the pursuit of quality and relevance in curriculum. The aspects identified that are vital for achieving quality in education for rural people are the relevance of curriculum to livelihood, learning materials, training and incentive for teachers and community ownership and partnership (UESCO-IIEP, 2006, p60).

3.2.4 Education for Rural People in South Africa

The Bill of Rights, contained in the Constitution of the Republic of South Africa, 1996, states that every South African has the right to basic education, including adult basic education and further education, which the state, through reasonable measures, must make available and accessible (South African Government, 2004).

However, this has not always been the case and, according to Gordon & Qiang (2000), the inequitable effects of apartheid, and even colonialism, have shaped education in South Africa's rural areas to such an extent that the effects have been felt long since the fall of apartheid.

Education for Rural People during Apartheid

Prior to 1994, the rural youth accessed basic education via schools in small towns, farm schools on commercial farms and community schools in the former homelands or bantusans. In the bantusans, the resources required for building and equipping schools were administered by education departments within each homeland, and often a large amount of power over this administration was placed with the local chief. The provision of these resources thus depended largely on the specific political, demographic and economic circumstances prevailing in that area, and homeland governments, although hardly held accountable for spending decisions made within the budget they were given, did not have the power to question that budget. On commercial farms, decisions as to the quality of schooling available, as well as whether a school would be available at all, were left up to the owner of that farm, and thus depended heavily owner's attitude toward the provision of schooling. Both within the homelands and on commercial farms, the needs of the community were rarely addressed – a top-down approach prevailed (Gordon & Qiang, 2000, p17). South Africa was clearly lacking in any national standard with regards to the provision of resources for the construction of schools, and government was making no effort to ensure that all South Africans had access to basic education. To compound the matter, the portion of the state budget allocated to education was minimal. As a result, rural schools during apartheid operated under very poor conditions, if at all, without the necessary resources to ensure quality education.

Rural Education under a New Democratic Government

Following the first democratic election of 1994, and with the adoption of the revised Constitution in 1996, laudable efforts were made to rectify injustices of the past through a number of initiatives and pieces of legislation that have been noted in section 2.5 of this document. However, goals set within many of such initiatives were unrealistic; and the newly formed government departments, including education departments on national, provincial and local levels, often lacked the capacity and resources to fulfill the objectives set by national ministry. This situation was especially prevalent in provinces with high rural populations.

Thus, the quality of education in rural areas remained poor for some time. In a report entitled, 'Education in Rural areas of China and South Africa: Comparative Perspectives on Policy and Educational Management' (2000) Adele Gordon and Wang Qiang note that in 2000, South African rural schools still had less equipment, teaching resources and specialized facilities such as libraries and science laboratories than urban schools, and provinces with higher proportions of rural schools generally had more un(der) qualified teachers. Pass rates, in general, were poor. In 2000, 63% of South Africans were illiterate (had attained less than a Grade 7 education – i.e., had not attained a basic education), and 19% of the population had received no education at all. The majority of the illiterate lived in South Africa's most rural provinces, namely Northern Province, Mpumalanga, Kwa-Zulu Natal and the Eastern Cape. More females than males were illiterate. Gender disparities were prominent, with more boys entering school than girls, numbers equalizing by grade 5, and the number of boys significantly dropping by grade 12 due to migrant labour systems. Although more girls remained in school, they struggled to complete their school-leaving examination, and their access to school was, as it is in many countries, influenced by cultural, social and economic circumstances. However, in hearings held with rural communities at the time, education was revealed to be central to community demands, when parents in rural areas raised the issue of the poor quality of education, asserting that educational standards were higher in the towns and noting that many children failed to attend school as they could not afford to travel there, or to buy uniforms or books' (Gordon & Qiang, 2000, p20).

Government's Response to the Situation

In response to low pass rates, and in an effort to provide equal opportunities of access and outcome in education and training to all South Africans, the government initiated a curriculum reform focused on a relevant, learner centered system that encouraged 'critical thinking, economic growth and development, and social responsibility' (Gordon & Qiang, 2000, p27). A National Qualifications framework (NQF) and

3 Again, a reliance on agriculture for the development of an area is questionable. The inclusion of vocational studies in the curriculum is a valid suggestion, but such studies should cover a range of vocations appropriate in the area, not just agriculture.

implementing agent, the South African Qualifications Authority (SAQA) were established. The NQF was devised as a human resource development system, focused on an integrated approach to education that meets the economic needs of the country, as well as the needs of the individual student. Different forms of learning, including full-time, part time, distance learning, work based learning and life long learning are all recognised and accredited within the NQF, such that individuals are enabled to improve their education regardless of age, circumstance or level of education.

Key in the curriculum reform was the concept of Open Learning, which is concerned with a number of principles, including learner-centredness, lifelong learning, flexibility and improved access to learning facilities, recognition of previous learning experience, the provision of learner support, and the assurance of quality in learning materials and support systems. Guided by international innovations in approaches to learning, the new framework encouraged the exploration of techniques such as self guided study and the use of media in facilitating learning.

Vital to the success of Open Learning is the principle of learner centeredness, where education is not perceived as a one-way transmission of information from the source of knowledge (whether that source is an educator or a media based course) to a passive learner. Instead, the leaner is to be an active participant in the learning process, and should be encouraged to engage, critically, with the information being taught. Learner centredness focuses on the development of the whole person, and particularly of the ability to understand oneself and the world in which one lives, all the while building on a learner's own experiences as the starting point of the learning process.

Academic Response to the Situation

Gordon and Wang (2000) make a number of valid suggestions with regards to the improvement of education in rural areas. Having analyzed the situation concerning education in rural areas in both China and South Africa, they come to the conclusion that upgrading schooling in rural areas cannot be successful unless it is approached holistically – understanding community needs and problems is vital. School improvement programmes generally require substantial financial support, and partnerships between the state, the public sector, NGOs and donors have proven successful in the past. Gordon and Qiang also note the importance of teacher training for rural education, pointing out that most rural aspiring teachers have to leave rural areas to study in the city, and often are less likely to return to their rural homes. They suggest that universities provide distance training programmes so that teachers can continue to teach at rural schools whilst furthering their studies. Another interesting alternative is offered through short term, on-site training programmes offered by mobile training centers, such as those provided by McGill University in Canada for the training of teachers in remote areas of Peru. Mobile teaching units often run as mixed mode programmes, where some instruction is carried out through distance education, (through printed or electronic media and satellite broadcasting techniques) and on site lectures with classroom support. Gordon and Qiang note that a number of universities and NGOs have begun training rural teachers using such techniques. They warn that teacher training cannot be carried out through distance education alone, and on-site support is necessary for quality education, and programmes that work in clusters, or that involve a 'buddy' system or teachers, prove the most successful.

3.3 ICTs and Education for Rural People

3.3.1 Introduction

On 1 July, 2010, the Finnish telecommunications regulator stated that broadband internet access should be a basic human right, promising 1 mbps connectivity on demand and 100mbps by the year 2015. It is the first country in the world to do so and, although the project will not be subsidized by the government, it concerns a basic low cost connection provided to all Finns by the country's internet service providers. 96% of Finns currently use the internet, and 99% of Finnish households are wired to receive the internet. Singapore has recently reported that 100% of its residential complexes are wired to receive the internet, and the UK aims to achieve the same goal by 2012, when it will offer a 2 mbps connection as a basic right (Sen, 2010). The USA is set to follow suit, and its Federal Communication Commission is attempting to reform the Universal Service Fund, which currently focuses on ensuring access to a telephone line, to ensure that all Americans have access to broadband (Higgenbotham, 2010). The value of information and communications technologies (ICTs) has extended beyond the realm of industry and personal luxury: ICTs are becoming a basic human necessity.

This growing dependency on technology can be attributed to shifts in the world market, and an emphasis on service based economic activity. Hudson (2006) notes that the growth of the service sector is a key feature of the new global economy, and that information based activities account for the largest portion of growth in this sector, while other sectors become increasingly information intensive: efficient communication and the transfer of data facilitated by advanced digital technologies and supporting infrastructure have become fundamental to most economic activities in a competitive market. Hudson points out that although services are generally a more visible component of urban economies, their effect on rural economies in industrialized countries is evident as public and private services dwarf agriculture and manufacturing. She notes that, although such changes are not yet obvious in the rural economies of developing countries, urban and rural economies throughout the world are being drawn into the global market. Economic development, whether rural or urban; in industrialized or developing countries, is becoming increasingly dependant on ICTs.

According to Hudson, in our current technological context, focus is placed on developments in speed of transmission and processing of data, and on storage capacity. Digitization means that data can be digitally compressed so that it uses up less bandwidth, reducing costs and allowing for the transmission of larger amounts of data. It also means that a range of media, from data and graphics to voice, music and video can now be transmitted using the same technology: various industries are converging. Innovations concerning the medium of transmission are vital in ICT development: fibre-optic communication systems have revolutionized the telecommunications industry, allowing for increased bandwidths (data rates) over longer distances.

Satellites and some terrestrial wireless technologies also allow for dramatic increases in bandwidth. In addition, wireless technologies (such as cellular networks) allow for a reduced dependency on infrastructure, and make communication more flexible. Wireless broadband technologies have developed so that they can cover not only buildings and campuses but entire neighbourhoods.

3.3.2 Information Poverty and the Digital Divide

However, access to such technologies is far from equitable, and those living in rural areas in developing countries tend to benefit from ICT developments the least. The term 'digital divide' is used to describe gaps in access to the internet both within industrialized countries and between industrialized and developing countries. Those on the negative side of this digital gap have been termed the 'information poor', and the United Nations has noted that information poverty must be urgently addressed (Hudson, 2006). Main reasons that the information poor cannot share in the communications revolution are that they lack affordable access to core information resources, cutting edge technologies and sufficient telecommunications systems, and the required infrastructure. They also lack the capacity in skills and funding to construct, operate and maintain such technologies. Perhaps the largest obstruction to their development, however, is a lack of effective government policy promoting equitable participation in the information society, 'as both producers and consumers of information and knowledge' (Hudson, 2006).

Despite these inequities, many have recognized the enormous potentials offered by ICTs for rural development, and implemented numerous technologies in initiatives involving education, healthcare, business and cultural discussion in rural areas. Here, I will focus on education based initiatives.

3.3.3 ICTs and Education for Rural People

In her book of 2006, 'From Rural Village to Global Village – Telecommunications for Development in the Information Age', Heather Hudson, often speaking from first hand experience, describes numerous ways in which ICTs have been implemented in education for rural people. She identifies three key aspects of their use: the improvement of the quality of education through the provision of additional teaching resources, the extension of the reach of institutions to those living in remote areas, and the provision of instruction when qualified teachers are unavailable, justifying the fact that ICTs can be valuable tools in ensuring that education within a country is equitable.

Improving classroom instruction

In order to improve the quality of formal instruction in the classroom, ICTs may be used focusing on the teacher or the students. A common problem in rural areas is a lack of fully qualified teachers. Should a teacher lack training in an aspect of the curriculum, an approach that might be adopted is the use of ICTs such as radio, video or the internet to teach the students, while the teacher acts as a tutor or aide. A more successful approach is the training of the teacher using similar technologies: in Namibia, a teacher education project involving distance education was adopted upon the introduction of English into the curriculum: through a combination of radio broadcasts and printed material, teachers' fluency in English was improved. English language radio programmes were included in the project to help with English comprehension.

Access to Classroom Materials

A major problem in developing regions is the lack of sufficient teaching material for students. Public libraries stocked with relevant textbooks can work, but generally require outside funding. An alternative solution would be to provide study materials for teachers to use in classrooms from online sources, which would not only ensure that teaching material is available, but that it is up do date and relevant. The internet could also provide access to additional research material for students that wouldn't ordinarily be locally available. Films, television programmes, video and radio programmes are also valuable in exposing students to science topics, history, and other cultures outside of the classroom. In the United States, a project called LearnAlaska distributed educational programmes to schools in Alaskan villages via satellite, airing the programmes on unused satellite television channels at night so that teachers could record them and play them back for the students.

Access to Continuing Education and Training

ICTs can greatly enhance correspondence learning for working adults. In the past, short courses would typically require participants to travel to major cities, or to take time off work. Correspondence courses allow students to complete such courses in their own time, but traditionally required that students study on their own and submit assignments and tests by mail. ICT based strategies not only enrich the content of these courses, but have been found to reduce drop out rates, by reducing feedback time and allowing for interaction with instructors and other students via conferencing technologies. The University of the West Indies and the University of the South Pacific offer regular audio tutorials with instructors for their correspondence students from extension centres using audio conferencing and interaction through email and group activities. In Australia, the school of the air uses email and online conferencing to reach children studying by correspondence on isolated homesteads in the outback. Teleconferencing funded by USAID has proven highly successful in high jungle areas of Peru.

Distance Education

One of the most common educational applications for ICTs is distance education, various technologies enable institutions to reach learners who cannot attend classes in schools or on university campuses. In distance education, ICTs may be used to achieve any of the goals already mentioned, improving accessibility and quality. A number of approaches might be adopted in distance education.

In the 'virtual classroom' approach, students may take courses anywhere they have an internet connection, either on a campus, at work, or at home. Although many people in developing regions are unlikely to have internet access at home, Universities are designing courses for students in developing regions who could access them at their workplace or a local school or telecenter. UNISA in South Africa has included an electronic component in its correspondence courses that allows students to submit assignments online and interact with other students. The African Virtual University, based in Nairobi,

partners with traditional universities to offer certificates and degree courses in English and French, where course material includes CDs and DVDs enriched with email and web-based interaction. In Indonesia, the Open University combines hard copy correspondence materials with televised lectures, making use of community internet access sites called Warnets. The University of Maryland and the University of Phoenix amongst others in the USA also offer online degree programmes.

In the 'curriculum sharing' model, ICTs are used to connect rural schools that lack in teachers trained in specific subjects. In some rural areas in North America, schools are linked by microwave or fiber optic cable so that teachers and classes may be shared. This does, however, pose organizational problems.

In the 'outside expert' model, course content that is not available in rural schools is identified. Specialized instructional programming is developed at a central source and delivered to the schools. STEP Star is an American satellite based educational network that operates in multiple states, offering interactive courses via satellite ranging from foreign languages and sciences to high school equivalent courses, curriculum enrichment and professional development courses. Students viewing the programme on DVD rather than live may use a toll free homework hotline to interact with instructional staff after hours.

In the 'consortium model', which is focused on higher education, several universities join together to deliver a curriculum to remote students. In the United States, the National Technical University was a consortium of engineering schools at a number of US universities delivering graduate technical courses via satellite, the internet, CD-ROMs and cassettes to engineers at their workplaces both in the US and overseas. Most of the courses had already been produced for local use, and thus production fees were reduced. The consortium approach also meant that a central campus was not necessary, as with the 'outside expert' model.

Lastly, 'the 'educactional broker' model serves as an intermediary, sourcing existing content that may be of use to educational institutions, packaging the content and leasing the communication capacity (such as time on a satellite). Courses may be viewed at the participant's workplace or at central locations such as conference centres. Typically, the receiving site pays a fee, and markets the programme in its region In the US, the National Teleconferencing Network offers a variety of adult and continuing education programmes from many sources.

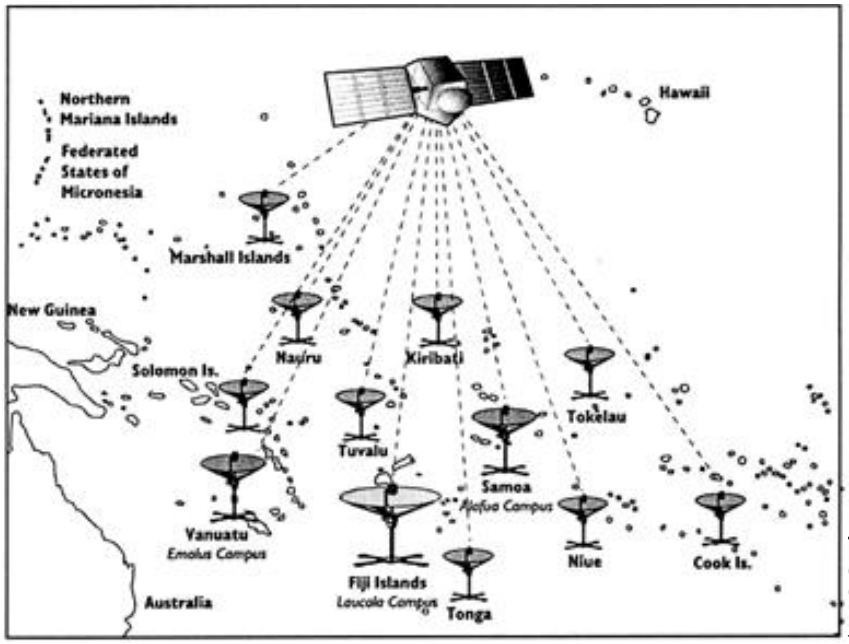


Figure 3: USPnet Satellite Network
Lectures are broadcasted live from the main campuses in Fiji, Samoa and Vanuatu to extension centres scattered across twelve islands in the South Pacific
Source: Hudson, 2006

A striking example of an institution implementing distance education strategies is the University of the South Pacific (Figure 3). The university, with its main campus based in Fiji, and two other campuses in Samoa and Vanuatu, the university makes use of a satellite based network called USPnet to provide tutorials to correspondence students scattered across twelve island nations of the South Pacific. The network was established in 1974 in order to bridge the main campus, other campuses and extension centres, using technologies evolving from HF radio and the NASA Peacesat satellite (with a single VHF channel) to the current dedicated VSAT network owned and operated by the university. USPnet enables students to participate in audio tutorials from any campus, watch a live video broadcast of a lecture from any of the three campuses, and communicate with lecturers and other student via email. The network has proved invaluable in saving time and money for staff on travelling across vast expanses of ocean that cover several time zones to visit the various extension centres.

Similarly, the University of the West Indies has established an audio teleconferencing network called UWIDITE (UWI Distance Teaching Experiment) linking campuses in Jamaica, Barbados and Trinidad with university extension centres in 15 other Caribbean nations. The network can be used for lectures, tutorials and meetings, enabling students to complete certificates and participate in outreach programmes.

The University of South Africa (UNISA) is a notable example of an institution employing distance education in South Africa, and will be explored in detail in section 4.3 Programmatic Precedents

Multi-use facilities

Vital to the success of ICT dependant education initiatives is the allocation of multiple uses to a single technological facility. In areas where access to ICTs are lacking, versatile facilities can be an asset to the entire community, and not just a specific group of users. Internet access can be shared between students and the community – schedules and time slots become an important aspect of programming. In Rankin Inlet, a Canadian Inuit community settled in a highly remote area, one in five residents have email accounts: at night, locals make use of a local school classroom as a community internet access centre called Igalaaq, meaning 'window'. The facility enriches the school curriculum as students exchange information with children in the Australian outback and Hawaii, and study biology through a virtual frog dissection kit (there are no frogs where they live). The facility also enables the community to strengthen and share their culture, as an elder photographs and publishes images documenting traditional techniques for sewing clothing from caribou skins. The Canadian Inuit have also made use of telecommunications to strengthen their political voice with regards to land claims, seeking to use the internet to unite isolated Inuit communities, as well as other remote aboriginal communities that call themselves the 'fourth world', sharing concerns and organizing press concerning human rights and environmental issues. A facility, brought about by a specific, bold initiative, can have a far wider reaching effect, if implemented in the right way, with the support of the community.

Challenges

ICTs have great potential to improve quality and access regarding education for rural people, but will prove unsuccessful if they are not implemented through a realistic and sustainable approach. Providing computers for a rural school means nothing if no one is capable of operating or maintaining the facilities, or if there are too few computers for all the students to use effectively. A lack of the necessary infrastructure and bandwidth to provide effective internet access can also prove to be a large obstruction. Organizational barriers also tend to surface when resources are shared, or when institutions and decision makers have conflicting interests. Ultimately, a capital investment in hardware for rural education will amount to little if the necessary infrastructure, skills and support of the community are lacking. (As I discovered on a site visit, this situation has played out in a university project in Mthatha, where the support of local chiefs and communities was not attained – the centre lies dormant, filled with equipment that no one can, or wants to use. CART – the Centre for Alternative Rural Technology, is attempting to establish an institution there with the support of the community that can put the existing facilities to good use, focusing on training in basic skills such as carpentry and plumbing.)

3.3.4 ICTs and Education for Rural People in South Africa

According to Fourie (2008), 'South Africa is two economies in one country' – the first is advanced, highly skilled, and becoming increasingly globally competitive, while the second is informal, marginalized and unskilled, and rarely reaps the benefits of the former. The national economy is changing, like most country's economies, moving away from primary and manufacturing activities and towards tertiary activities: the service sector, as Hudson (2006) noted, is growing increasingly stronger. However, Fourie's 'second' economy (which includes South Africa's rural economic sector) is in danger of falling behind without bold government intervention. Although the people of South Africa's second economy remain, for the most part, information poor, ICTs hold great potential for the upliftment of the previously marginalised, playing an important role in rural development in the areas of medicine, business, politics, the strengthening and sharing of indigenous culture, and education. In order to explore the potentials ICTs might offer for the education of rural people in South Africa, it is important to understand the availability and accessibility of ICTs in the country.

South Africa's ICT Landscape

Telecommunications

According to the ICT Regulation Toolkit (2010), under the South African Telecommunications Act 103 of 2006, no entity can provide telecommunication services without a license. As a result, the South African telecommunications landscape currently consists of a number of licensed providers ranging from small to large enterprises. These are: the public switched telephone network (PSTN) which includes Telkom and Neotel (which is not yet operational); mobile communication network operators which include Vodacom, MTN and Cell C; the country's single multimedia and international carrier of carriers, Sentech; a number of small an medium sized enterprises providing telecommunications services in geographic areas with a teledensity of less than 5% in accordance with Under-Serviced Area Licenses (USAL) and Value-added network services. The South African government's ownership in the telecommunications sector is substantial, with 100% holdings in Sentech, the South African Broadcasting Corporation and Infraco (a new State Owned Enterprise (SOE) selling high capacity long distance transmission services to licensed telecommunication service providers so that they can extend the reach and capacity of their own networks). The government also has 37% holdings in Telkom, 30% in Neotel, and 50% holdings in Vodacom (Fourie, 2008). The government holds a lot of power in the telecommunications sector.

Although a lot of South Africans (especially rural South Africans) do not have household access to fixed landlines (Telkom's fixedline proportion is 52%: low, compared to the 74% global standard), cell phones are proving a successful alternative, providing access to personal communication to millions who were previously marginalised. Cell phone technology has made it possible to service rural areas at a much lower cost than would have been possible with landlines, and Vodacom and MTN provide coverage over most of the country, and access to personal communication is increasing, with South Africa ranking as the world's fourth fastest growing cellular communications market.

Computer and Internet

Slingsby (2005) describes the internet as a 'vast interconnecting network of data pipes' comparable to a river network; with large main connectors carrying substantial amounts of information that divide into smaller channels and tributaries that provide internet access to billions of people around the world. ADSL was first introduced to South Africa in August 2002 by Telkom,

offering a maximum speed of 1mb/s in 2005, and commencing with 4mb/s trials in 2006, phasing out their 192 kb/s package and upgrading clients to 384kb/s free of charge. In 2009, Telkom began trialing 8 and 12mb/s ADSL offerings, but South Africa continues to lag behind countries like France and South Korea, that were offering over 20mb/s speeds as early as 2005.

ADSL charges in South Africa consist of three parts: the ADSL line rental, analogue phoneline rental and an ISP account dictating the amount of data one can download per month. Prices in ADSL have been decreasing steadily with the introduction of competition from the cell phone industry and the availability of the SEACOM cable (an alternative to the original SAT 3 cable, which was previously the only international cable available).

Wireless internet in South Africa offers an alternative to ADSL, over which Telkom holds a monopoly. Cell C offers GPRS and EDGE, while MTN and Vodacom offer 3G with up to 14.4mb/s HDSPA (an enhanced 3G mobile telephony communications protocol that allows for higher data transfer speeds and capacity.

Despite the availability of such services, the price of personal computers remains a barrier to private access to the internet for most of the population, and up to 75% of South Africans have never used the internet (Fourie, 2008). In the same way that cell phone technology offers telecommunication services to those who were previously geographically isolated, the wireless internet services offered by cell phone networks have the potential to bring the internet, and the world, to rural people.

3.4 South African Policies on Education

The following section provides insight into the South African Education sector as it exists today, noting the importance that government places on education, the categories into which the education sector has been divided, the current structure of the Education department, and contemporary education policies and strategies that are relevant to this project as well as the key role players associated with these initiatives, focusing on education for adults in the form of Adult Basic education and Training (ABET), Further Education and Training (FET) and Higher Education (HE). It concludes with achievements made in this sector over the years, noting areas where there remains room for improvement. Unless otherwise stated, the following data has been extracted fro the online article 'About SA – Education' by the Government of South Africa (GoSA) (2004).

3.4.1 Government's Commitment to Education

The South African Government, in accordance with the Constitution, is committed to making basic education (including adult basic education and further education) available and accessible to all South Africans. South Africa has one of the highest rates of government investment in education in the world, with a budget totalling R122.8 billion in 20008/9.

On an international level, the Department of Education co-operates with a number of United Nations agencies and donors in an effort to improve the quality of education in South Africa, and the Ministry of Education plays a leading role in developing the Southern African Development Community Protocol on Education and Training. The Department maintains a strong relationship with the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and is committed to pursuing the goals of UNESCO's Education For All (EFA) initiative.

3.4.2 The Importance of Education for Development

In a census conducted in 1996, it was found that households headed by people with higher education levels generally have greater access to basic services that determine quality of life, such as water, sanitation, electricity and refuse removal (Lehohla, 2001). Households headed by men also proved more likely to have access to such services. Although the relevant statistics did not imply causation, Lehohla notes that it can be argued that household heads with an education are likely to receive a higher level of income (an important variable missing in this particular analysis), and those receiving a higher income are likely to have greater access to services. Education is integral in the improvement of quality of life in South Africa.

Analysis of the situation concerning people under 26 years old showed that in 1996, South Africa had relatively high levels of school enrolment, with minimal gender disparity, although population-group and rural/urban differences remained to be addressed. However, analysis of the situation of those over 26 years old confirmed more explicitly the legacy of apartheid, with low levels of education and obvious inequalities in terms of population group, location and gender. It was confirmed that people with a higher level of education are more likely to be employed, and, if employed, to have higher incomes. It was shown that at any level of education, men were more likely to be employed, and to receive a higher income, than women. Although it may not directly address the problem of gender disparity in the workplace, higher education is a valuable factor in social transformation and the development of South Africa, as it unlocks the potentials of South African people, increases their chances of employment and places them in a higher earning bracket, thus improving their chances of access to services that would improve their quality of life.

3.4.3 Categories of Education in South Africa

Education in South Africa is now categorised according to three levels: GET (General Education and Training), FET (Further Education and Training) and HE (Higher Education) (South African Government, 2004), as described in Figure 2.

The GET band consists of Grades 1 to 9, as well as an optional reception year R. GET also includes an equivalent qualification attained through ABET (Adult Basic Education and Training). Learners attend school for 13 years, but only grades 1 to 9 are compulsory. The FET band includes grades 10 to 12 in schools, as well as qualifications attained through the National Qualifications Framework at levels 2 to 4 (the equivalent of grades 10 to 12), and N1 to N6 qualifications attained in FET colleges. The HE band consists of a number of certificates, degrees and diplomas up to postdoctoral degrees. These levels are noted in the NQF, provided by the South African Qualifications Authority (SAQA) Act 58 of 1995, to be described in more detail under 'Relevant Statutory Bodies'.

3.4.4 Structures in the Department of Education

The National Department of education is responsible for formulating policy, setting norms and standards and monitoring and evaluating all levels of education, including school education, early childhood development (ECD), FET and ABET. The National Department also funds HE through subsidies, and provides financial support to HE students through the National Student Financial Aid Scheme (NSFAS). Provincial Education Departments then set their own priorities and implementation programmes, guided by the national policy. The Constitution places a lot of power with provincial legislatures and governments in the running of all educational affairs besides those involving universities and universities of technology. Responsibility at school level is further devolved through the South African Schools Act 84 of 1996, by delegating the governance of public schools to democratically elected School Governing Bodies (SGBs), consisting of parents, educators, non-educator staff and secondary school learners.

The Department of Education is divided into 8 branches, namely: Administration; Auxiliary and Associated Services; Systems Planning and Monitoring; Social and School Enrichment; Quality Promotion and Development; General Education and Training; Further Education and Training, and Higher Education. The

3.4.5 Policy Development

The government has devised a number of policies in pursuit of its goals with regards to education. The following are relevant to this project:

Adult Basic Education and Training

According to Gordon & Qiang (2000), a person is considered illiterate when their level of education is below grade 7. In 2000, only 37% of South Africans were illiterate, but the country has seen a drastic increase in literacy rates and, according to Development Indicators (2008) 74% of South African Adults were literate by 2006. However, illiteracy is still a common problem, and provinces with the largest numbers of illiterate people are Kwa-Zulu Natal, Limpopo, the Eastern Cape followed by Gauteng, Mpumalanga and Northwest. Kwa-Zulu Natal has the largest number of illiterate people with no education, and Limpopo has the highest proportion, but the highest concentration of illiterate people exists in the Eastern Cape. Language groups most affected are isiZulu, isiXhosa and Sesotho sa Leboa. To address this problem, the Department of education is reviewing its ABET programmes in order to expand provision and to ensure that the programmes respond to the diverse needs of adult learners.

Literacy Initiatives

In 2008, the Kha Ri Gude ('let us learn') campaign was launched with a budget of R6.1 billion over two years. The campaign was intended to enable 4.7 million South Africans to achieve literacy by 2010, and aimed to reduce adult illiteracy by: mobilizing potential learners and educators to participate in the campaign; developing the necessary support material for learners and educators; setting up relevant systems at local, provincial and national levels to facilitate the national campaign; and recruiting and training volunteer educators.

The Bridges to the Future initiative is an ICT based literacy pilot programme currently being developed in Limpopo through a partnership involving the Department of education, Limpopo Department of Education, The International Literacy Institute, Nedbank, the Kellog Foundation (USA) and the Molteno Project

Further Education and Training Colleges[4]

Recent transformation in the FET sector has resulted in the merging of 152 technical colleges to from 50 multisite-campus FET colleges, each operating under a single governing council.

In addition to the traditional theoretical aspects of high school education, the FET curriculum involves a practical component that may be carried out in a simulated or real working environment so that learners are trained in a particular vocational field. FET colleges now offer a broad range of relevant programmes of study in a variety of vocational fields that respond to skills demands in the South African economy, such that learners have a higher chance of finding employment after leaving college. Should learners take the appropriate subjects at an FET college, an FET qualification - the new National Certificate (Vocational) (as recognised in the NQF) will give learners the opportunity to enter HE studies.

To facilitate access to FET education, the Department of Education has allocated R600 million to the sector, to be issued through bursaries to students. The NSFAS is administering this process.

Higher Education[5]

The South African Government notes that, 'Higher Education is central to the social, cultural and economic development of modern societies,' (South African Government, 2004). The band of Higher Education and training, also refereed to as 'tertiary education', provides the highest level of education available, and may be entered into upon acquiring a grade 12 pass, a grade 12 pass with exemption, or an equivalent qualification as recognised by the NQF, such as FET qualifications. In terms of the Higher Education Act of 1997, all private institutions offering HE must register with the Department of Education.

The Role of HE in South African Education is threefold:

HE develops Human Resources: through a lifelong approach to learning, HE mobilizes human talent and potential, thus contributing to economic, cultural and intellectual life in a rapidly changing society

4 Pieces of South African Legislation that are relevant to FET are: The FET Colleges Act 16 of 2006; The Education White Paper 4 on FET (1998); The General and Further Education and Training Quality Assurance Act 58 of 2001; National Education Policy Act of 1996. Relevant statutory bodies and organizations are: the Umalusi Council for Quality Assurance in General and Further Education and Training

5 Pieces of South African Legislation that are relevant to HE are: The HE Act of 1997; The Education White Paper 3 on HE (1997); The Abet Act 52 0f 2000; The White Paper on Education (2000); The General and Further Education and Training Quality Assurance Act 58 of 2001. Relevant Statutory Bodies and Organizations are: the Umalusi Council for Quality Assurance in General and Further Education and Training; Education, Training, Development Practices (ETDP) Sector Education and Training Authority (SETA)

HE trains people in skills of a high level, providing 'person-power' to support enterprises, services and infrastructure in South Africa. HE develops socially conscious, globally competitive professionals who make a vital contribution to national development and social transformation.

HE facilitates the production, acquisition, and application of new knowledge: by integrating the research and training capacity of HE with the needs of industry and social reconstruction, HE can be made to support continuous technological improvement and innovation, improving national growth and competitiveness.

Thus, HE is a valuable tool in developing South Africa's people to their full potential, so that their professional skills can support the social and economic growth of South Africa as it operates in a competitive global context. Where GET and FET ensure that the rights of South African citizens are fulfilled, HE has the potential to allow South Africa and its citizens to thrive in a global context.

The National Plan for HE is centered on the pursuit of the improvement of access, transformation and quality in the HE system in order to achieve its objectives. Funding, increased enrolment, improvement of access to black people and women, and the reconfiguration of the institutional landscape are integral issues within the National Plan.

Funding
Government allocates a substantial portion of the Budget for education to Higher Education: In 2008/9, the budget for HE was R18.5 billion. R15.1 billion was transferred to HE institutions in the form of block grants or earmarked funds, for the NSFAS, foundation programmes, infrastructure and efficiency allocations.

Enrolment
The National Plan aims to increase enrolment within institutions of higher education to 20% in 2015, proposing a shift in balance towards a 40%:30%:30% ratio of humanities: business and economics: science, engineering and technology between 2001 and 2010.

Equity
In order to establish equity in HE, increased access for black and female students is to be matched with increased success of these students in key disciplines and post-graduate programmes. Institutions have been directed to reach equity targets with an emphasis on areas in which black and female students have been under represented in the past by developing viable strategies to meet these objectives.

Consolidation
The National plan has called for the restructuring and reconfiguration of the institutional landscape, creating new institutional and organizational forms to address racial fragmentation within the system as well as administrative, human and financial capacity constraints. HE provision has thus been consolidated through the reduction of the number of institutions, but not the number of delivery sites on a regional basis. Thus, a number of institutions have been amalgamated, resulting in the 25 institutions making up the current higher education landscape in South Africa, which are listed in Appendix B of this document. Applied to this project, this policy of consolidation suggests the formation of a satellite centre of an existing institution rather than the establishment of an entirely new institution.

3.4.8 Statutory Bodies

Statutory bodies of relevance to this project (i.e. bodies associated with ABET, FET and HE) are described in detail in Appendix C of this document, but are here described in brief: The Umalusi Council for Quality Assurance in General and Further Education and Training is responsible for ensuring continuous quality improvements in the delivery and outcomes of the GET and FET sectors. The South African Qualifications Authority (SAQA) ensures that South African qualifications are of high quality, and are internationally comparable, and is responsible for developing and implementing the NQF.[6]

6 The NQF consists of a set of principles and guidelines on which records of learner achievement are registered, focusing on outcomes rather than input. It enables national recognition of acquired skills and knowledge, thus ensuring an integrated education system and promoting life long learning

The Council on Higher Education (CHE) is, amongst other tasks, responsible for advising the minister of education on all policy matters relating to Higher Education and managing quality assurance in the sector. The National Board for Further Education and Training (NBFET) is responsible for advising the minister of education on matters relating to the transformation of FET. The National Student Financial Aid Scheme (NSFAS) is responsible for: allocating loans and bursaries to eligible students in HE; developing criteria and conditions for the granting of such loans; financial matters such as the raising of funds, and advising the minister of education on these matters. The NSFAS also manages 3 bursary schemes: The Funza Lushaka bursary scheme for teacher training; bursaries for FET college students, and bursaries for the training of social workers. In line with government's efforts to double the output of universities in priority sectors, the Department of education is aligning the NSFAS with subsidy funding with scarce skills. In support, government committed R439 million over the 2007-2009 period for the improvement of teaching and learning infrastructure.

3.4.9 Partnerships and Funding

The development of an education sector of high quality depends on a collaborative effort and the establishment of dynamic partnerships between the public sector, civil society and international partners. The Department of Education, educator unions, The South African Council for Educators (SACE), Education Labour Relations Council and the ETDP Seta work together in the development of the sector.

A number of public-private partnerships have been consolidated, including the Business Trust, a partnership between business and government, operates in the education sector through three NGOs: the Read Educational Trust; Jet Education Services and the National Business Initiative Colleges Collaboration.

3.4.10 Improvements in quality of education over the years

In the 2008 edition of the Development Indicators, which

consists of data compiled by the South African government up until April 2008 relating to human development and social change in South Africa (PCAS, 2008), the South African Education system has shown considerable improvements since the first democratic election in 1994. Learner-Educator ratios in public ordinary schools have dropped from 34:1 in 1999 to 31.4:1 in 2007, and the senior certificate examination pass rate has increased from 58% in 1994 to 65.2% in 2007, with an increase in the number of students writing, although the percentage of learners studying and passing mathematics remains lower than government targets. In line with the Millennium Development Goals and Education For All goals, government is on track to reducing adult illiteracy by 50% between 1990 and 2015, with a reduction in illiteracy from 30.4% in 1995 to 25.6% in 2006, although the goal is far from being achieved. With regards to students graduating in Science, Engineering and Technology (SET), trends began to improve in 2002, with the number of SET graduates increasing from 23 679 (25.5% total graduates in all subjects) in 2000 to 35 562 (28.5% total graduates in all subjects) in 2006. SET graduates are considered to be important skilled workers who are critical in the support of economic growth, and improvement in graduation rates in this sector act as a signpost for prospective economic and social improvement in the country.

Through successful government initiative, great improvements have been made to the education system in South Africa since 1994, but the situation is far from ideal – Mathematics, Science and Technology (MST) is still an area of concern, as is gender disparity, and while adult literacy rates are improving, targets are far from being met.

3.6 Conclusion

For the Rural University to prove a viable and sustainable project, it is important that problems associated with education for rural people are addressed in its curriculum, programme, and business model.

As was noted at the Education for Rural People seminar in Addis Ababa in 2005, there is a strong correlation between illiteracy, food insecurity and poverty: hunger, malnutrition and food insecurity 'erode cognitive abilities and reduce school attendance', while a lack of education 'reduces productivity and earning capacity, and increases vulnerability to hunger and extreme poverty' (UNESCO-IIEP, 2006). Lehohla (2001) notes the importance of education for the improvement of quality of life in South Africa: in a census conducted in 1996, it was found that households headed by people with higher education levels generally have greater access to basic services that determine quality of life, such as water, sanitation, electricity and refuse removal. Household heads with an education are likely to receive a higher level of income and those receiving a higher income are likely to have greater access to services. Poverty inhibits education, but, in turn, can only be eliminated through education – education for rural people is a vital component of rural development, and sub-Saharan Africa requires it urgently – in this region of the world, where 71% of the population is rural, illiteracy is rife. In South Africa, in 2000, 63% of the population was illiterate, and 19% of the population had received no education at all, the majority of the illiterate living in the country's rural areas. An innovative approach to education for rural people is required.

Low access to quality education is a common problem faced in education for rural people: rural people often have less opportunity than urban people to acquire a basic education. When education is available, it is often of a sub-standard quality, owing to a lack of adequately qualified teachers in rural areas, and insufficient teaching resources such as textbooks, equipment and specialize facilities such as libraries and science laboratories. Often the curricula taught in rural areas are urban biased and irrelevant in the rural context, and fail to prepare rural children with the skills relevant in the economic context in which they live. Gender inequity also poses a problem, with a reduced enrolment of girls in rural schools due to cultural. Negative perceptions of the rural amongst parents and communities living in rural areas also affect the situation, as parents send their children to school hoping that they might escape the area with a better education, rather than staying in the area and contributing to its improvement.

A number of strategies have been suggested that stray from conventions in teaching, catering specifically for the rural situation. The following strategies will be explored for application in this project:

Distance Education is a highly viable strategy, and can be described as the provision of education involving 'a tangible distance between the source and consumer of construction, where construction will no more bring the learner and the instructor within the confinement of a classroom' (UNESCO-IIEP, 2006, p. 41). The South African department of education notes the importance of Higher education as a valuable tool that mobilizes human talent, developing South Africa's people to their full potential, so that their professional skills can support the social and economic growth of South Africa as it operates in a competitive global context. It is the intention of this project to provide rural South Africans with access to quality Higher Education through distance learning, facilitated with. Distance education has great potential for application in remote areas where educators are scarce, although challenges may arise with regards to the funding and the operation of technologies that facilitate this type of learning. A variety of models in distance education have been described in section 3.5 ICTs and Education for Rural People. The Rural University will adopt a 'virtual classroom' approach: the university will associate itself with an existing university (an idea supported by governments consolidation policy in higher education, which reduces the number of HE institutions but not the number of access points). As an extension centre of an existing institution, the university will tap into an established database of knowledge and network of skilled educators via the internet. A UNISA model for distance education might be a viable model to adopt: the Rural University could become a UNISA learning centre (as described in 3.5 ICTs and Education for Rural People, and later in detail in 4.3 Programmatic Precedents), differing from a typical learning centre in that it would be modified to suit its rural context, offering support systems appropriate to the area and promoting courses responding to economic and social requirements of the region. Emphasis should be placed on employing technical staff that will assist students in operating communication equipment, namely computers and appropriate software. By adopting this holistic approach, issues of access, quality and relevance will be addressed. It is also important to note the limits and potentials of ICTs in South Africa: although the infrastructure required for internet access and high bandwidths may not be currently available in rural areas, access to the internet through cellphone technology provides an innovative solution to the problem. Internet speeds up to 14.4 mb/s are available with Vodacom and MTN through 3G technology, and speeds are rising. If this project was to be supported by government (which is a viable prospect, as established in section 2. Rural Development in South Africa), and with government owning substantial shares in South African communications, as was noted in 3.3.4 ICTs and Education for Rural People in South Africa, subsidies in the use of wireless services such as these become a realistic possibility.

A school feeding program is another strategy worth investigating: addressing issues of mal-nutrition and education simultaneously, providing learners with food at school and food to take home to their families, such initiatives have proven successful in the past (UNESCO-IIEP, 2006). Agricultural fields for the production of food will be included in the programme of the Rural University, as well as a kitchen and dining hall that will serve students and staff with a subsidized meal program. Students may be employed by the university to maintain the fields in return for their studies in a kind of financial aid scheme.

The 'feeder school' principle described in 3.2.1 The ERP Initiative, proposing a network of schools serving the dispersed population, with a few main schools teaching specialist subjects, will be adopted in a sense: this project has to do with decentralization and, while focus will be placed on the design of a 'main' campus for the Rural University, the institution will

in fact encompass a network of smaller extension centres in the region, linked via communication technologies (internet, cell phone) to the main campus. Major events might happen at the main campus, but every-day learning would occur at the extension centres.

The notion of 'multi-grade classrooms' described in 3.2.1 The ERP Initiative, will also be adopted, in a sense: the Rural University, as a flexible model facilitating self study in an area where this would ordinarily be difficult, will provide an open space for learning, where multiple disciplines will be housed under one roof (clustered loosely according to subject choices), creating a supportive student community and promoting interdisciplinary discussion.

A lack of adequately qualified teachers in General Education and Training (GET) is a major problem in rural areas: the Rural University should respond to this, promoting teaching as a course and providing adequate support systems (tutorials, resources) for this area of study. Persons already occupied as teachers may also choose to further their studies and increase their level of qualification. The Rural University should cater for this.

In 3.2.1 The ERP Initiative, the notion of vocational studies is mentioned. The South African Department of Education has catered for this idea in its policy for Further Education and Training (FET), a category which describes a curriculum covering, in addition to the traditional theoretical aspects of high school education, a practical component that may be carried out in a simulated or real working environment so that learners are trained in a particular vocational field. Having completed the FET course, which runs over 3 years, learners will have the equivalent of a matric qualification, with the added advantage of a vocational skill which may make them more employable, or better prepare them for higher education. The Rural University will offer such training, catering for students who would like to further their studies, but not necessarily in the form of a degree.

Illiteracy in adults (a level of education lower than that of grade 7) is prevalent in rural areas. The Rural University should accommodate this portion of the population by offering courses in Adult Education and Training (ABET).

Thus, the Rural University will address problems in education for rural people by adopting innovative strategies in the provision of relevant, high quality education, providing support services suitable in a rural area, and offering a range levels of qualification in a variety of subjects, promoting the development of skills required in the area, and catering for the diverse needs of the rural population.



A typical rural highschool in the Eastern Cape

4. Rural University: Tertiary Education for Rural People

4.1 Introduction

One aspect of this project is the challenging of typology: it is the intention of the following section to explore and question widely held notions of what a university is, or should be, and to introduce innovative expamples where the traditional university 'type' has been placed in a rural setting, and appropriated to suite its context. No data has been found that specifically focuses on the architecture of such institutions, thus the following examples of rural universities serve as programmatic precedents. Also included in this section is an overview of the UNISA university model, which this project may adopt.

4.2 What is a University?

The word 'University' is derived from the Latin universitas magistrorum et scholarium, meaning roughly 'community of teachers and scholars', and the term was originally used in medieval Europe to describe specialized associations of students and teachers with collective legal rights guaranteed by charters, which were issued by princes, prelates, or the town in which they were situated (Chisolm, 1911).

Our modern understanding of the term can be traced from this medieval definition, and today we come to associate the word 'University' with an institution of high level education in which students study for degrees and in which academic research is undertaken (Pearsal,1999). The Metric Handbook (Adler, 1999) identifies 4 types of higher education institutions: the university, the college of further education (or technical college), the college of education (or teacher training college), and the open, or 'correspondence' university. It focuses on the 'provincial' type of university, identifying this as the archetype.

The provincial university type consists of a number of subject departments and faculties, as well as a variety of central facilities including residential accommodation. It may be integrated within a local community, with buildings dispersed throughout a town, as is the case with Rhodes university in Grahamstown, or it may take on a campus model, where most of the university buildings are arranged on a single, large site as is the case with the University of the Witwatersrand. Such Universities are designed with possible extension in mind, and may be molecular in layout (where departments are located in buildings dispersed across a site, leaving space between for expansion), linear (where functions are placed along sequential strips which may extend at either end) or radial (where a nucleus is defined and expansion occurs outward from this point). A university will often comprise teaching spaces, both specialised (laboratories, workshops and studios) and non-specialised (tutorial and lecture rooms), a library, a computer centre, academic staff offices and research spaces, administrative buildings, residential buildings and amenity buildings, such as cafeterias and sports facilities (Adler, 1999).

The architecture of an institution of this type is often monumental, intended to convey a sense of prestige and grandeur. In my research, I have found that most people tend to associate the term 'university' with the grand buildings and expansive campuses of such institutions more than anything else; these physical manifestations symbolizing the prestige attached to the academic qualifications that the institutions award.

However, In 'Zen and the Art of Motorcycle Maintenance: An Inquiry into Values', Robert Pirsig questions such a notion when the university at which he is based as a lecturer is in danger of losing its accreditation. His students begin to worry that, upon losing accreditation, the university would cease to exist, and one student suggests that physical defence of the campus might prevent this. In an attempt to rectify this fundamental misunderstanding of what comprises a university, he explains the proper meaning of 'University' in a lecture:

The real University, he said, has no specific location. It owns no property, pays no salaries and receives no material dues. The real University is a state of mind. It is that great heritage of rational thought that has been brought down to us through centuries by a body of people who traditionally carry the title of professor, but even that title is not part of the real University. The real University is nothing less than the continuing body of reason itself.
In addition to this state of mind, "reason," there's a legal entity which is unfortunately called by the same name but which is quite another thing. This is a nonprofit corporation, a branch of the state with a specific address. It owns property, is capable of paying salaries, of receiving money and of responding to legislative pressures in the process.
But this second university, the legal corporation, cannot teach, does not generate new knowledge or evaluate ideas. It is not the real University at all. It is just a church building, the setting, the location at which conditions have been made favourable for the real church to exist.
Confusion continually occurs in people who fail to see this difference, he said, and think that control of the church buildings implies control of the church. They see professors as employees of the second university who should abandon reason when told to and take orders with no backtalk, the same way employees do in other corporations.
They see the second university, but fail to see the first. (Pirsig, 1999, p150)

Pirsig is responding to a threat placed on the academic staff at the University for teaching a controversial curriculum, pointing out that closing the buildings and that particular institution does not destroy the body of knowledge to which such facilities provided access. However, his reasoning holds for this project. Although the buildings and spaces that we associate with universities provide important access to the 'body of knowledge', they are not the University. The real University consists of a network of students and teachers who may access and interact with the 'body of knowledge' (Pirsig's first University), as well as the set of criteria for qualification that

determine excellence and quality. Although buildings play a vital role in providing access to knowledge and a space for discussion, and support Pirsig's intangible 'University',and convey a sense of prestige that promotes confidence in an institution, a 'great hall' does not a university make. The typologies we associate with the university have proven successful, but are still open to questioning and reinterpretation, which has already manifested in open universities such as UNISA, and foreign institutions that allow one to study through correspondence.

The first two examples in the following section are revolutionary in that they place the University in a rural setting, devising an appropriate curriculum for the area, and giving rural people access to the body of knowledge that has remained the privilege of city dwellers for so long. The University of South Africa is also included as a programmatic precedent, employing technologies accessible in South Africa to achieve effective learning through correspondence.

4.3 Programmatic Precedents

4.3.1The African Rural University (ARU), Kagadi, Uganda

An initiative of the Uganda Rural Development and Training Programme (URDT) The African Rural University for Women is located in the rural area of Kagadi, a five hour drive from the nearest urban centre of Kampala, and opened its doors to its first 30 women students in September 2006 (URDT, 2006). The institution is focused on uplifting rural Uganda by empowering its women through access to knowledge that is of a high quality and relevance, and is particularly aware of Africa's place in an international arena: on its web page, the ARU quotes from a 1998 speech by U.N. Secretary General Kofi Anan:

Today, globalization is affecting all aspects of our lives, from the political, to the social, to the cultural. Only knowledge, it would seem, is not being globalized. In an age where the acquisition and advancement of knowledge is a more powerful weapon in a nation's arsenal than any missile or mine, the knowledge gap between the rural and the urban is widening. This trend must be reversed…

The URDT is of the opinion that Africa (which is still made up largely of rural areas) is struggling to 'catch up' to industrialized countries and compete in a global market due, in part, to the imposition of western approaches to both development and education on African rural economies – in addition to inappropriate and unsustainable economic interventions, educational systems are often based on a European, industrialized curriculum that is not suited to the economic situation of an African rural area, lessening chances of employment upon graduation and resulting in rural-urban migration.

It is the intention of the ARU to attend to this issue – its 'African educators and leaders engage with the rural people where they live, recognising and building on local wisdom, and developing ways to partner with the West and North that empower, rather than erode, Africa's international voice' (URDT, 2006).

Characteristics of an ARU graduate

Noting the important role that women tend to play in rural areas in Uganda, the ARU has focused on higher education for women that will address gender disparity, turning young women into training 'Community Transformation Specialists' capable of helping other rural people to empower themselves. The young women attending the institution, many of whom will be graduates from the URDT Girl's School and the URDT Institute for Vocational, Business and Media Studies, are intended to 'learn by doing', taking advantage of resources already made available through the URDT's other programmes, both on campus and within the ten counties in which the URDT operates. After three years of study and the completion of their dissertations, ARU graduates will have the characteristics of visionary leaders, entrepreneurs, rural development experts and gender and technology professionals. A visionary leader is an individual who inspires change in the community through high ideals, strength of vision, humanity and creativity in a calm and just way. An entrepreneur graduating from ARU is a self motivated, innovative person who creates situations that advance personal and collective visions, mobilizing the necessary resources in order to deliver value to customers and stakeholders. A rural development expert is knowledgeable about the many international models of rural development and, through a thorough understanding of the aspirations and philosophies of the local people, develops innovative models for change that are appropriate, integrated, holistic and thus effective in the local situation. A gender and technology professional demystifies technology, enabling all rural people to use technology to its full potential in fulfilling their needs.

Curriculum

In addition to the Bachelor Degree in Visionary Leadership, Entrepreneurship, Rural Development and Gender, which is completed over three years of study, the University also offers diplomas and certificates to men and women with at least a basic education in vocational studies, business and media through the Vocational Institute. Vocational studies include building and construction, metal works and mechanics, weaving and crafts, carpentry and joinery, solar electricity, food processing, tailoring, beekeeping and sustainable farming, humanities, entrepreneurship and business management. Business courses include accounting, business management, computer skills, customer care, entrepreneurship, group formation and dynamics, leadership and secretarial skills. Media Courses include journalism and radio programming, and students may hone their skills at KKCR, the URDT's community radio station. The URDT also offers vocational training through a number of programmes, including Appropriate Technologies (which investigates concepts such as solar drying and energy saving stoves); ICT and Computer Training; Solar Electricity Training Centre; the Artisan Support Programme (which supplies tools), Sustainable Agriculture; and Professional Group Formation (for groups wishing to form co operatives.) upon completing vocational studies, students may be awarded with the equivalent of a school leaving certificate.

Partnerships and Funding

The ARU is involved numerous partnerships and works in close collaboration with a number of organizations and foundations, receiving funding from various national and international donors, without which the initiative would not be possible.

Long Term Vision

Ultimately, it is the goal of the ARU to graduate women community transformation specialists who will then infuse rural communities and uplift them economically, socially, culturally and politically, making rural areas attractive places for living and working, ensuring that mothers and fathers have equal dignity but separate identity in the household, and revitalizing African philosophy and ways of learning and living through a participatory approach to research and design. The ARU is to be a centre of excellence that makes a valuable contribution to international theory, developing models and theories that might be adopted globally, and facilitating interaction with international students and teachers in education and through conferences.

Conclusion

The ARU approaches education and rural development from the bottom up, recognising the potentials of rural people (women in particular), and supplying them with the resources they require to develop those potentials so that they might uplift themselves and their community to such an extent that they not only overcome poverty, gender disparity and other rural problems, but actually thrive, economically, academically, socially, culturally and politically. Approaches devised for development are integrated and innovative, and aspire to ultimately place Africa in a comfortable position within the global market, giving the continent a strong international voice. The academic institution embodies the ethos of development by the community, for the community.

4.3.2 Gandhigram Rural Institute deemed University, India

The Ghandigram Rural Institute, with its campus of nearly 200 acres situated in a rural area near the Sirumalai mountain range in India, was founded in 1956 as an initiative devised by Dr. T.S. Soundaram and Dr. G. Ramachandran (GDIDU, 2010). It achieved the status of a Deemed University in 1976. Dedicated to Mahatma Gandhi's revolutionary 'Mai Talim' education concept, which states that knowledge and work are not separate, the curriculum developed at Ghandigram has been developed to be appropriate in its rural setting, and offers courses through seven academic faculties: Rural Development, Rural Social Sciences, Rural Oriented Sciences, English and Foreign Languages, Tamil, Indian Languages and Rural Arts, Rural Health and Sanitation, and, Agriculture and Animal Husbandry.

The University is recognised nationally and internationally for its contribution to rural education, and currently offers Doctoral, Master's and Bachelor's Degrees, Diplomas and Certificates to its 2300 students. It employs 125 teaching and 250 non teaching staff, and programmes offered attract students from abroad every year.

The Gandhigram Rural University, like the African Rural University, is a centre of academic excellence that allows students in rural areas to uplift themselves through an education that is relevant economically, socially and culturally to their rural context, employing an innovative approach to rural education that has earned it national and international recognition.

4.3.3 University of South Africa (UNISA)

Although UNISA is not a Rural University, it would be valuable to investigate the model it adopts as a programmatic precedent.

UNISA is a correspondence or 'open' university, as has been described earlier in this document in 3.3 ICTs and Education for Rural People – its main campus is located in Pretoria, but students may study UNISA courses anywhere: students are supplied with coursework material, and must take on the responsibility to study and complete tutorials and assignments (which may be submitted online) in their own time. Students are supported by lecturers, tutors and a community of other students who may be contacted via telephone or online. Additional support is provided in the form of learning centres, which offer academic and psychological counseling, career guidance, opportunity to join a student body such as the SRC, library facilities, study spaces, computer and internet facilities and traditional tutorials held on weekends to accommodate all learners, some of whom may work during the week. Learning centres are also equipped with facilities for interactive, broadcasted lectures: a tutorial room will be fitted with two screens and a camera. A lecture held in Pretoria, at the main campus, will be broadcasted to learning centres across all nine provinces in South Africa via satellite, and displayed on one of the screens. Students at a learning centre may ask questions: a supervisor will then call the main campus telephonically and pose the questions to the lecturer. The camera in each learning centre may film students asking questions and broadcast the visuals to the main campus or other learning centres: communication is not only possible between main campus and learning centre, but amongst learning centres as well, allowing for additional interaction amongst students (Phaka, 2010).

It may be fitting to assume UNISA as a potential 'client' in this project: UNISA prides itself as, 'Africa's premier distance learning institution', whose, 'vision "Towards the African university in the service of humanity" drives us to find answers to Africa's education and developmental problems'. The institution asserts that, through the formation of international partnerships, it will, 'help the people of Africa achieve their dreams'. Such a vision aligns strongly with that of this project, which is concerned with empowering rural Africans through knowledge, and allowing them to interact with an international academic community, and share indigenous knowledge with the world. UNISA's institute for African Renaissance Studies also supports this vision, with intentions to contribute to the development and harnessing Africa's intellectual capital and heritages globally in an effort to realise the 'African Renaissance' (UNISA, 2010). UNISA's ethos aligns with that of this project.

As a well established institution, UNISA already has all the mechanisms in place to support correspondence learning: a staff of qualified educators are constantly available to support students via correspondence, and the 'African Digital Library', accessible through UNISA, is committed to providing digitized texts to students in Africa via the internet, and in so doing, 'contributing to the revitalization of education and life long learning on the continent and alleviation of the digital divide between First and Third world countries', aligning with the spirit of the African Renaissance (ADL, 2003). By tapping into an established database and network of educators, and through the adoption of an established business model, the establishment of the Rural University would be simplified greatly.

Thus, the Rural University will be designed in line with a UNISA business model, as a UNISA learning centre, appropriated (with the necessary support systems) to suit a rural setting.

4.4 Conclusion

The Metric Handbook (Adler, 1999) provides us with a concise overview of the various functions a university needs to accommodate. This is a good starting point. However, for a centre of academic excellence to achieve success and longevity in a rural area, such a programme needs to be modified and adapted. An ordinary, 'provincial' university model will not suffice: a lack of educators and budget for specialist equipment (for laboratories and workshops) prevents such a model from sustaining itself. A conventional 'open' university, however, will also prove insufficient, as a lack of infrastructure and technical knowledge inhibit such a model's success – most rural people cannot study via correspondence in the traditional sense as they do not have the facilities to study from home, and, should a learning centre be put in place, most would be unable to operate its computers. Exacerbating this problem, low standards in the teaching of mathematics, science and English in rural areas also prevent rural students from achieving university exemption.

In order for the Rural University to prove successful, it must draw from both models, employing a correspondence university business model, but assisting learners with self study by preparing them for higher education with bridging programmes, providing them with a place and the equipment they need to study, and supporting them with technical assistance in operating that equipment. Traditional functions such as cafeterias and residences may also be investigated, appropriated in this new context.

What has been drawn from the African Rural University in Uganda, and Gandhigram Rural University in India, is that an appropriate curriculum is crucial: by focusing on the economic and social needs in the surrounding areas, both institutions have sustained themselves by producing graduates with relevant skills that enable them to uplift their communities. Both also offer a range of qualification levels, from certificates in vocational studies through to degrees and even doctorates, catering for the diverse range of abilities in rural people rather than restricting their curricula to courses in HE. Its also worth noting that Gandhigram University started small, as a research institution that attracted educated people to the area, initiating the establishment of an academic centre of excellence.

5. Conclusion: the Beginnings of a Brief

Through the exploration of rural development in South Africa, policies on Education for Rural People, and specific examples of existing rural universities, the viability of the Rural University project, as well as an appropriate approach to the development of curriculum, programme, business model and design, have been identified:

5.1 Viability

Although it is impossible to determine whether such a project would be viable prior to site analysis, the following points support its viability: Due to the Bantusan policy during the apartheid regime, South Africa's rural areas are unusually dense, leading to a higher number of potential students than may have otherwise been expected. The project also aids in the fulfilment of South African rural development goals, providing quality education and thus rectifying injustices of the past, and uplifting a rural area as a development initiative in itself, creating jobs, drawing services to the area, and possibly increasing the influx of visitors to the area. By including a research facility in the programme, the centre will not only fulfil policy, but will contribute to it. By acknowledging policy, the centre is also more likely to be integrated within its context, achieving greater longevity. Through such alignments with policy, the prospect of government funding becomes more likely, and, should government be involved in such a project, new developments in cell phone technology may be explored for high speed internet connections, subsidized by government (who owns massive shares in South African communications).

5.2 Curriculum

While agriculture may prove an important component in rural economies, its value as a driving force behind rural development is coming into question. And, while projects like the African Rural University in Uganda, and Gandhigram Rural University in India demonstrate the value of teaching a curriculum highly relevant to the area, it has been pointed out that rural livelihoods are tending towards a multi-locational, multi-occupational livelihood strategies, so that most rural households will have diverse and geographically dispersed portfolios of income sources in years to come. The ISRDS also points out that some rural areas show little economic potential, and that young people in rural areas should have the option to relocate should the wish. Thus, the Rural University will promote the study of courses of high relevance in the area, by providing strong learner support in these areas, but will not limit students to these areas of study, instead offering a much broader range of subjects.

Higher education has been identified as key in mobilizing human talent, and developing South Africa's people to their full potential so that their professional skills can support the social and economic growth of South Africa as it operates in a global context. Higher education will form the focus at the Rural University, and will be made possible through distance education. However, Illiteracy in adults is rife in the area, and, due to a lack of qualified teachers in subjects such as mathematics and science, a lot of rural matriculants are not prepared for university. Thus, the Rural University will also offer Adult Based Education and Training, Further Education Training (Vocational Studies), as well as bridging courses. By offering a variety of levels of qualification, the university will cater for a broader range of rural people.

5.3 Business Model

The Rural University will employ a distance education model, so that, through communication technology, it may tap into the existing knowledge databases and educator networks of an established university. The university will be designed as a UNISA learning centre appropriated in a rural setting, as the vision of UNISA aligns with that of this project (as is discussed in 4.3.3 University of South Africa (UNISA)), and, as a successful open university in South Africa, UNISA would be capable of providing the support necessary in this project.

5.4 Programme

The Rural University will consist of:

> Spaces for learning, including classroom spaces for tutorials and lectures, spaces for group work, and spaces for self study and research

> A kitchen and dining hall, as well as agricultural fields, in line with the 'school feeding' strategy.

> Research facilities for research in rural development

> Conference facilities and accommodation (which could double as residences?)

> Offices for academic and administrative staff

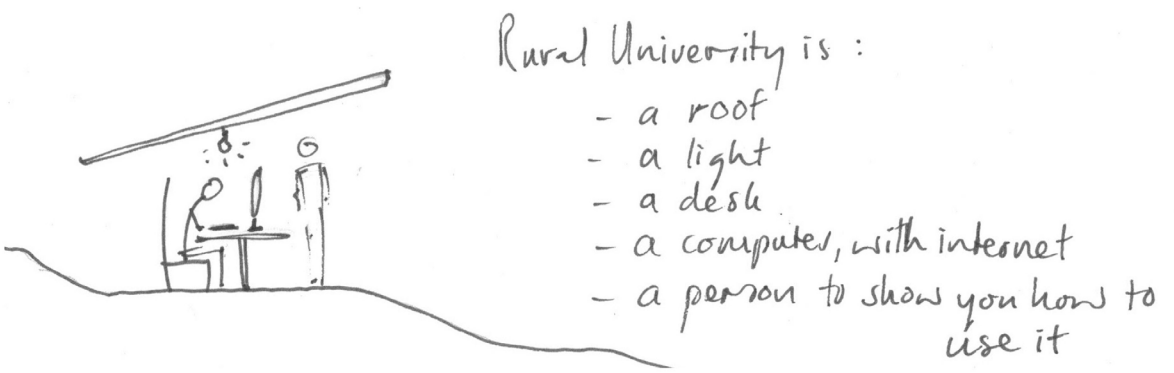
> Sports facilities, to ensure that a student's life is well rounded

A multi-use strategy will be employed: facilities will not only serve the students of the university, but also the surrounding community.

5.5 Design

From the data considered, it can be noted that a project of this nature must rely on interaction and participation with the community in order to prove successful: rigorous site analysis that divulges the needs and desires of the community is necessary, and must inform the design. The design will draw from the existing, not necessarily mimicking, but will evolve through an understanding of key principles. In an area where resources are low, the design also needs to show a level of efficiency and minimal waste, possibly resulting in a building and landscape that are productive, serving as more than shelter and space, producing active surfaces that collect water and energy; process waste; generate heat, power and food.

In the process of developing an appropriate brief for the Rural University, conventional notions of what a university should be have been challenged, arriving at the beginnings of a university molded in programme and design to suit its context.



2. Site

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3.2 Climate

3.3 People



1. Introduction

The following section describes the process undertaken in choosing an appropriate site for this project, placing it in a broad physical context. An in depth analysis of the physical site follows, considering land, climate and people, pointing out constraints, potentials, and local architectural principles to be carried through in design.

2. Choosing a Site for the Rural University

2.1 The 13 Rural Nodes of the ISRDP

In 2006, the Department of Social Development (DSD) commissioned socio-economic and demographic baseline studies in the 21 nodes that made up the Integrated Sustainable Rural Development Programme (ISRDP) and the Urban Renewal Programme (URP). The nodes were selected because of the deep poverty in which their citizens live (Everatt, Smith & Solanki, 2006). It was the intention of the ISRDP and URP to transform their nodes into 'economically vibrant and socially cohesive areas', through anchor projects and kick start programmes and better coordination in government, ultimately providing a suite of services to all citizens, especially those living in poverty.

Thirteen of the nodes fall under the ISRDP, and include O.R. Tambo, Alfred Nzo, Chris Hani, and Ukhahlamba District Municipalities in the Eastern Cape; Thabo Mofutsanyane in the Free State; Ngu, Umkhanyakude, Umzinyathi and Zululand in Kwa-Zulu Natal; Mopani and Sekhukhune in Limpopo; Ehlanzeni in Mpumalanga; Kgalagadi in Northern Cape and Central Karoo in Western Cape. Kwa-Zulu Natal and the Eastern Cape have by far the highest number of rural nodes of all the provinces, and with four out of its seven district municipalities identified as rural areas experiencing deep poverty, covering an extensive portion of land, and as evidence in the essay preceding has suggested the Eastern Cape could be said to be one of South Africa's most rural provinces, and I have decided to investigate it further.

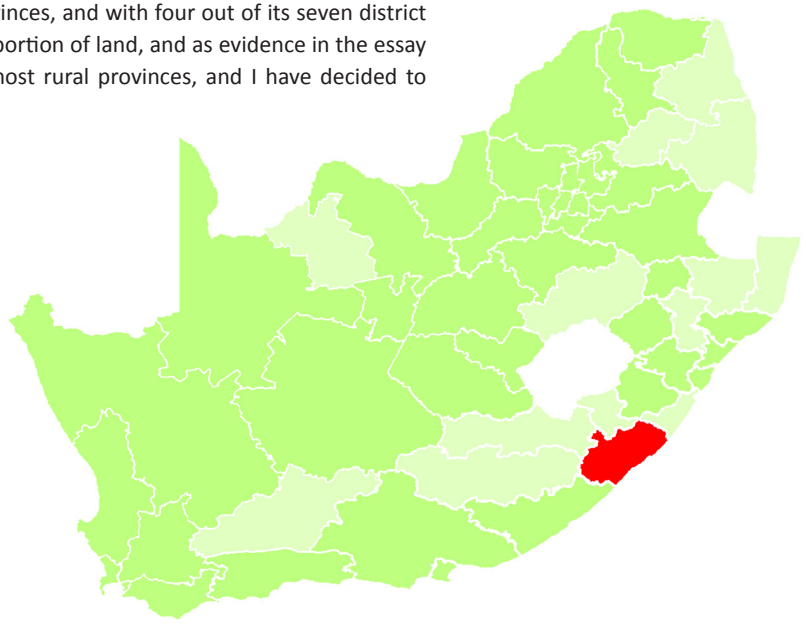


Figure 4: OR Tambo District Municipality
The 13 rural nodes identified in the ISRDS are illustrated in this graphic as pale green regions. OR Tambo District Municipality is highlighted in red
Source: after DPLG, 2010



Typical settlement in OR Tambo

2.2 OR Tambo District Municipality

In the four ISRDP nodes of the Eastern Cape, Xhosa is predominantly spoken. Of the four nodes, O.R. Tambo is only the third largest in area – 15 535 square km (Department of Provincial and Local Government (DPLG), 2010), but has the highest population – 1 676 480 people live in OR Tambo, and thus the district has a relatively high density. It is the poorest district in the Eastern Cape in terms of all poverty measures, with the lowest Human Development Index and the highest poverty gap in the province. 64.6% of the people living in OR Tambo live in poverty, and the literacy rate is 42.2% - low compared to the national average of 74.4% in 2006 (PCAS, 2008). The unemployment rate in the area is high – 65.6%, and 76.3% of the population is not economically active, a situation which is resulting in an increase in crime in the region (DPLG, 2010). 99.53 % of the population is African; and females outnumber males in a 55:45% ratio. The population is predominantly made up of people below the age of 20 years old (58%), which is likely to be attributed to rural-urban migration upon school leaving age, although 47.6% of the population still falls within the 15-65 age bracket which constitutes the economically active population.

In terms of economics, the district generally lacks a major economic base due to the fact that emphasis is put on implementation of fragmented non-economically viable projects, and strategies to improve the situation are urgently required as the area is in danger of falling into further economic decline. The government sector is the largest contributor to Gross Economic Product, and, despite the fact that Umtata is the largest town and the economic hub of the district, it is largely dependant on wholesale and retail sectors, both of which have little potential for growth (DPLG, 2010). Agriculture is currently predominantly subsistence, and, although there is a potential for commercial farming in the area, it is undermined by a lack of infrastructure, training and financial support. High potential lies in tourism, marine-agriculture and agro-forestry, although these sectors have yet to be developed.

In terms of services and infrastructure, 93% of the population has no formal sanitation services, and 78.3% does not have access to a formal RDP water supply. Telkom operates an established telecommunications network in this region, and the concentration of telecommunication in urban areas is growing through the application of Digitally Enhanced Cordless Telephone System (DECT) as well as Vodacom, Cell C and MTN services accessible in over 70% of the study area (DPLG, 2010). Eskom is responsible for electrical distribution, and has initiated a shift from focus on urban areas to include the provision of electricity in rural areas, undertaking numerous installations. There are 1892 primary and secondary schools in the district, and the Walter Sisulu University is based in Umtata. Education levels are, however, generally low.

In terms of settlement, people generally choose to build inland, mostly along ridge crests and sometimes in valleys and on flat land, while coastal areas are sparsely populated. The average size of a household is 5.3 people per dwelling, and 81 323 households are formal dwellings, 213 397 are traditional dwellings and 6 311 are informal (inadequate) dwellings. Migration has resulted in urban growth in places such as Umtata, Lusikisiki and Port St Johns. While the regional area around Umtata is the most urban, the smaller towns of Libde, Ngqeleni, Qumbu, Tsolo, Port St John's, Luikisiki, Flagstaff, Ntabankulu and Bizana also show some urban characteristics. The majority of the population, however, resides in peri-urban centres and rural villages. Farms, Game Reserves and Holiday Resorts also accommodate small numbers of people. 93.3% of the population lives in rural areas.

Key challenges that OR Tambo faces are food security and malnutrition, high unemployment levels, the development of SMMEs, infrastructure backlogs, housing shortages, low numbers of health facilities, environmental degradation, HIV/AIDS and low levels of education.

Thus, as the most poverty stricken node in the Eastern Cape with low levels of education, a prevalence of unemployment and a stagnant economic sector in danger of deteriorating further, and with 99% of its population living in rural areas, OR Tambo requires urgent attention in terms of development. However, it holds great economic potential in tourism and a number of forms of agriculture and, according to the ISRDP Baseline Survey (Everatt, Smith & Solanki, 2006) has one of the highest social capital indices of the 21 nodes investigated, which relates to cohesion within the community as a result of trust and care for ones neighbours. With a large number of people still living in traditional dwellings, and the dominance of the Xhosa language, tradition and indigenous culture is still rich in this node that is placed within the former homeland of the Transkei. Despite its high levels of poverty and lack of development, this area is still socially and culturally rich, and shows great potential for growth. Thus, I have decided to investigate further the potentials that a centre for adult education might offer in the upliftment of this area in particular, narrowing down the selection of sites by investigating the seven local municipalities that make up OR Tambo.

2.3 Qaukeni Local Municipality

OR Tambo District Municipality is divided into seven Local Municipalities: Mbizana, Ntabankulu, Qaukeni, Port St. Johns, Nyandeni, Mhlontlo and King Sabata Dalinyebo.

King Sabata Dalindyebo, Nyandeni and Qaukeni Local Municipalities stand out in this investigation for their generally high populations (as a percentage of the District), their high rural populations and large numbers of traditional dwellings. Although it does not have the highest rural population of the three, Qaukeni does have the highest ratio of rural: urban dwellings (54.1: 1).

In an interview on the 16th of April 2010 with Robert Bwowe, a quantity surveyor for BTKM who worked on a lot of the rural schools recently constructed in the area, it was established that Qaukeni would be a viable area for this project: Lusikisiki, one of the main towns in the area, is the Royal Home for the chief of the region, and the area has strong sense of culture. Although a lot of investment has been made in the area in terms of primary and secondary schooling, there exists no facility for Further Education and Training. Bwowe suggested that I meet with Mrs. Mbabane, the principal of a thriving secondary school in a rural area just outside of Lusikisiki that has recently undergone renovations that BTKM oversaw. The school was sponsored by the Nelson Mandela Fund, and currently serves approximately 7 communities within a 5 km walking distance.

In an Interview with Mrs. Mbabane at Sangoni Secondary School on the 17th of April 2010, she noted her approval of such a project, identifying the demand for further and higher education in the area. She pointed out that most learners aspire to leave Lusikisiki upon acquiring a school leaving certificate in pursuit of higher education and/or employment in the cities, although generally students cannot further themselves this way because they simply cannot afford to. She noted that, even if tertiary education were to be subsidized or made free by government, the high costs of relocation and high rentals for accommodation in urban areas still place young rural people at a disadvantage with regards to higher learning. She advocated the idea of a satellite university that maintains a relationship with an established urban university, and which might be attached to an existing secondary school in an urban area such that the school would feed the university with students, and facilities might be shared.

Thus, I have decided to investigate further the town of Lusikisiki and its rural surroundings in search of a potential site for this project.

2.4 Lusikisiki

The mapping in Figures 5, 6 , 7 and 8 illustrates settlement distribution patterns, road networks and the distribution of high schools in the Qaukeni region (the grey settlement pattern markings indicate rural settlement patterns in Figures 7 and 8). Through this mapping exercise, a kind of clustering of highschools emerged, most likely relating to the density of settlements, and illustrating high numbers of high school students in the area, who would be potential students of the Rural University. I have chosen to investigate further the cluster surrounding Lusikisiki. Sangoni Secondary School (Figure 8), of which Mrs Mbabane, my contact in the area, is principal, is located within this cluster, and such a connection would provide me with valuable insight into the needs and potentials of this area.

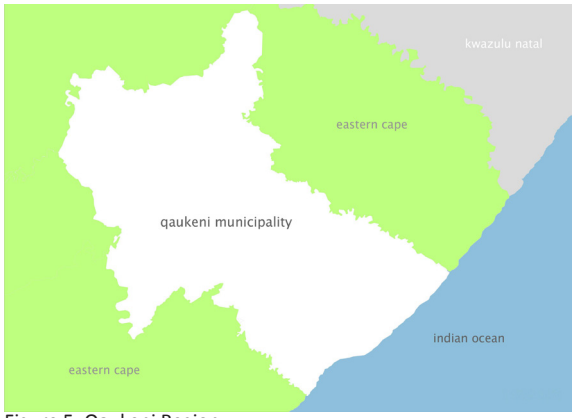
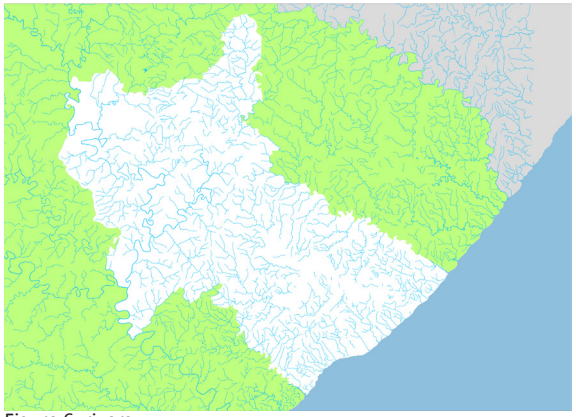
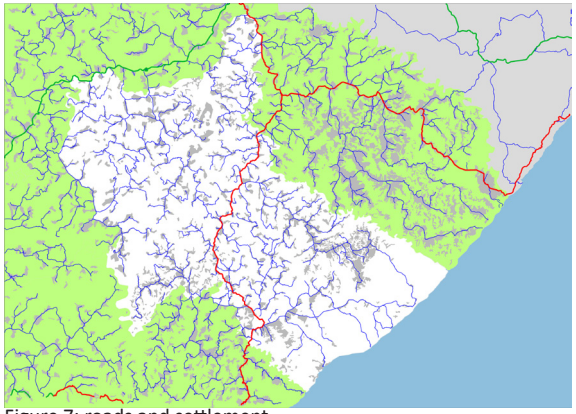


Figure 5: Qaukeni Region


Figure 6: rivers


Figure 7: roads and settlement

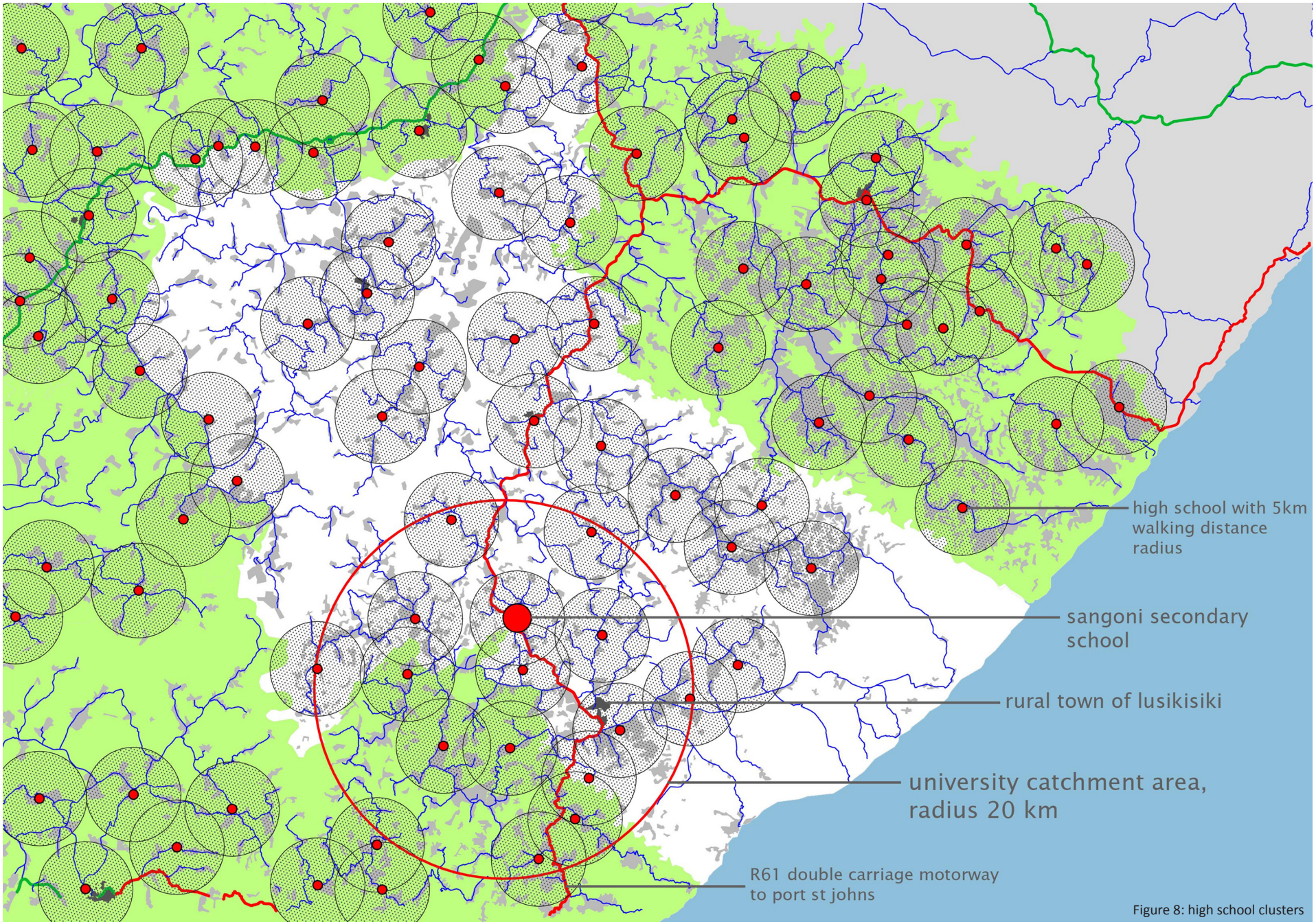


Figure 8: high school clusters

2.5 University Catchment Area

The university ‘cluster’ or catchment area covers 20km, a conservative radius, derived from Wits’ 30km catchment radius, outside of which students are allowed to stay in residences on campus. This radius provides me with an idea of the number of students that might attend the institution. With 15 schools falling within the 20km radius circle, and another 15 just outside, within in the 30km radius circle, and around 50 matriculants at each school, approximately 1500 students matriculate in this cluster every year, at a very rough estimate.

The main road in the region – the R61 (indicated in Figure 9, which is a double carriage-way, tarred road connecting Port St. Johns to the N2, runs through the region, and is the lifeline the area, connecting a number of communities to each other and to the only urban element, the town of Lusikisiki. I decided to place the University on the loop road, indicated in Figure 12. This road, partially dirt and partially tarred, connects a number of dense communities, and links back to the R61. The four sites Identified are located in the centre of the catchment area, along this loop, a short distance away from the main road. Ultimately, I have chosen to work on Site 4, as it would seem to prove the most accessible Site of the four: it is located centrally between a number of dense settlements, but on a rare patch of open land: it does not compete with subsistence farming (a problem encountered on other sites). It is also located near the intersection of a number of dirt and tarred roads, as well as foot paths, indicating further its central location. Further increasing its accessibility, it is located a 15 minute drive on well maintained tar road from the main road, meaning that communities along the R61 would be able to reach the site quite easily. It is also connected by tar road to the communities to the east of the R61. Thus, Site 4 was chosen as the site for the Rural University

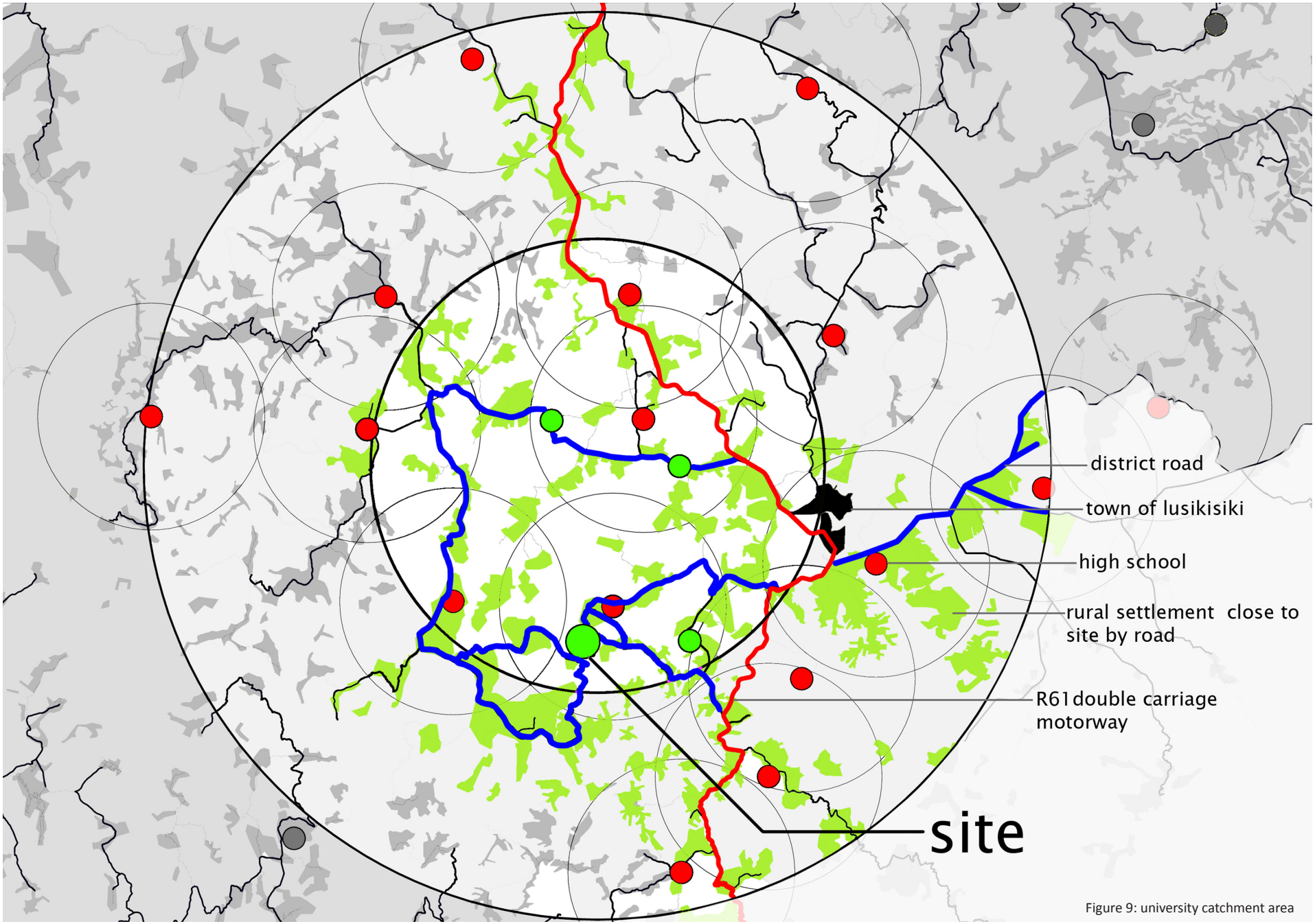
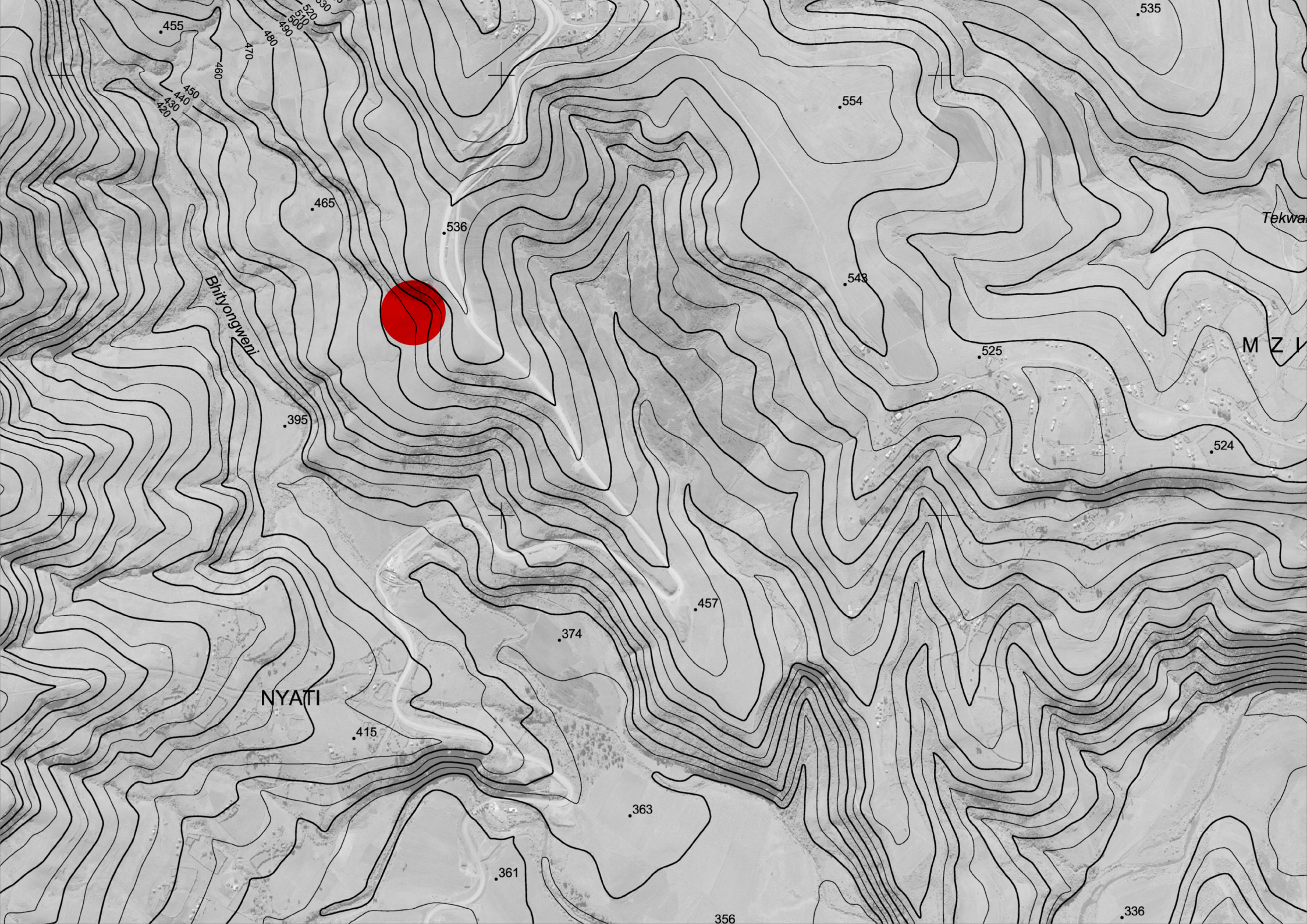


Figure 9: university catchment area


455
470
480
490
500
510
520
530
460
450
440
430
420
535
554
465
536
548
Bhityongweni
525
395
524
457
374
NYATI
415
363
361
356
336

3. Physical Site

3.1 Land

Taking a closer look at the site reveals a rolling hillside of natural platforms and mounds, which suggested opportunities to create platforms of activity on the site, separated by height. The slope is steep, as is common in the area, but not too steep to traverse. Access from the tarred road is at the top of the hill, and the Bhityongweni river flows through the valley at the bottom of the site, an indication that water for drinking and agriculture is accessible, which is vital in an area where the government often fails to provide services.



View of the waterfall to the North

To the north east, the river runs over a steeper area in the valley, resulting in a waterfall that can be heard from around 300m away, halfway down the hillside, a pleasant sensory experience on this quiet, remote patch of earth. The land is currently used for cattle grazing, and a permeable design is called for that will allow the cattle to move between buildings and graze on the site, knitting the university into its context.



View to the NorthWest



View to the West



On arrival, the view north is dominated by uninhabited hillside, while in the view south a nearby community is clearly visible. Electricity is available on the site, although the provision of water and sanitation is unlikely and must be dealt with. Telephone communications are available, but cellphone technology would prove a more innovative, and less infrastructure-heavy alternative to explore.



Approach from the South

3.2 Climate

The climate in the region is a temperate one, due to proximity to the sea, and midday temperatures range from 20.2degC in July to 25.5degC in February. Rainfall is high, at 874mm per year (Johannesburg receives 604mm per year), and occurs mainly in the summer months (SA Explorer, 2008). High levels of rainfall support rain water collection as a viable strategy for the provision of water, and such a strategy is already common in the area, as people collect water on the roof of their dwelling and store it in a water tank. A prevailing cold wind from the South West blows in the winter, and should be dealt with. Being on a hillside, the site is also subject to mountain winds, blowing downhill at night and uphill during the day. Due to temperature inversions, the best place to locate a building would be in the middle of the slope, avoiding the crest or the valley as these are subject to colder temperatures.





3.3 People

The social situation in the area with regards to poverty and education has already been described in 2.3 OR Tambo District Municipality. Here, focus will be placed on settlement patterns and architectural customs, economic opportunity and skill requirements, and the desire for a rural university.

3.3.1 Settlement Patterns and Architectural Customs.

The whole Qaukeni Municipality landscape appears almost as a homogenous blanket of rolling hills sprinkled with rural homes; the odd rural town comes up every now and then as one drives along the main road, but the land is dominated by these clusters of small rural dwellings, often hand built, accessed by dirt roads and paths, and positioned on the hillside to watch over a family's land, and take in the view. People build close to rivers and ponds, as the government generally fails to provide drinking water, and trips must be made daily to a water source, usually by the women of the household, especially if the family doesn't eploy rainwater catchment. Unusually, orientation does not seem to be a major concern, probably due to the density in the area: people are forced to build on the shady side of the hill as space runs out.



In plan, the rural town emerges as a stamp of regularity on the land, with ordered perpendicular roads and larger structures clustered closely together. RDP housing, close to the town, emerges as a monotonous, repetitive pattern of small rectangles, with little concern for topography or orientation. The further one moves from the town, however, the more closely the settlements work with the contours: huts are built in a line across the hill, and lines formed by structures, fences and vegetation along the boundaries of fields are either parallel or perpendicular to the contour, while paths and roads tend often to run diagonally, achieving gentler gradients.





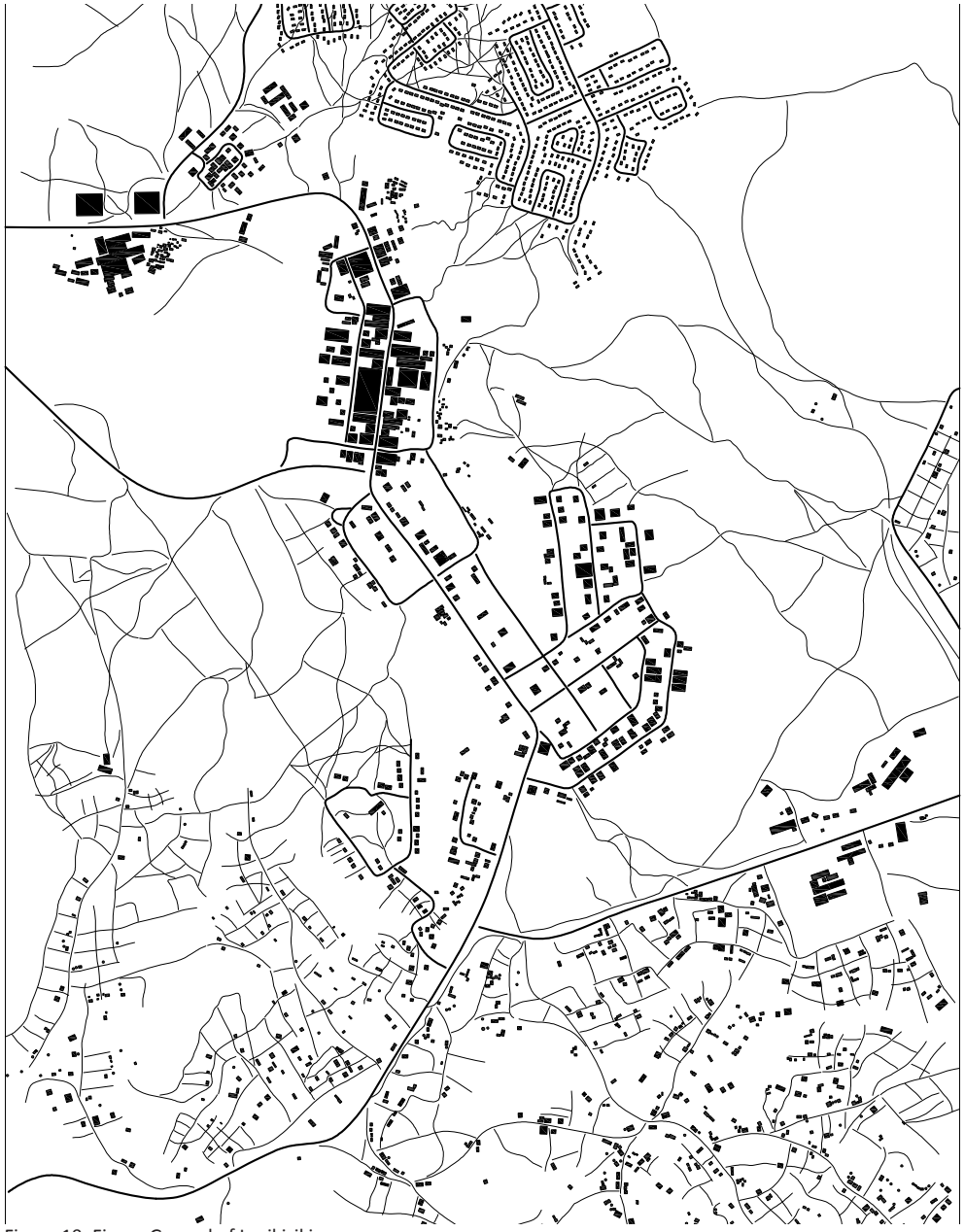


Figure 10: Figure Ground of Lusikisiki
This figure ground illustrates the increase in scale of footprint within the rural town, and the regularity imposed on the landscape through this touch of urbanity. The rural settlements to the south reflect a closer relationship with the contours.

Typically, people build with materials found on site, using earth, grass, and timber from nearby forests. Dwellings may be constructed with mud bricks, produced on site by hand, or in a kind of wattle and daub technique, where timber sticks are placed in holes in the ground; the earth is tread on to hold them fast, and mud is filled into a lattice of timber. With either technique, the walls will be plastered with mud, and painted with ikalika, a white substance mixed with coloured pigment to achieve glowing aquamarines, greens, pinks and blues. Thatching with grass is still popular, although many have taken on corrugated steel sheeting on trusses as a roof material (JJ, 2010). This sensitive approach to construction and the landscape, and the use of materials gathered on the site, will be carried through in design.







The traditional rondawel is still prominent, although many clusters consist of both rondawel and rectangular building, the latter probably facilitating the arrangement of modern furniture.







A family will construct a cluster of dwellings along the contour, watching over their agricultural land, which usually consists of a maize field, a vegetable garden with onions and cabbage, and an animal pen. Generally, every building functions as a room (Mbabane, 2010) – a hut may be allocated as a sleeping hut for the girls or boys in a family, or for a married couple, another will be allocated to cooking. Mandela notes in his autobiography (1994), that the three huts over which his mother presided when he was a boy were each used for sleeping, cooking and storage: every hut is a room, and the veld becomes the connective tissue between these spaces. This notion of watching over something one cares for, and of the veld as a permeable circulatory space between structures are ideas to be carried through in design.

The process of procuring land in the area is quite different to that in the city: the land is not divided into plots, but is communally owned. In order to build on a piece of land, one must first gain the permission of nearby villagers, then the village headman, and then the chief of the area, bringing him gifts of brandy and local beer: one has to gain the approval of the community (JJ, 2010).

3.2.3 Economic Opportunity and Demand for Skills

Economic opportunity exists in the area in agriculture and tourism, although, as was established in the essay preceding, the value of architecture as a solution to rural poverty is questionable. However, as has been mentioned, the area lacks any major economic base owing to the fact that emphasis is placed on the implementation of fragmented, non-economically viable projects. In an interview with Mrs Mbabane (2010), it was established that skills urgently required in the area are: teaching, nursing, training for government workers, and training (in law) for the police (who apparently constantly lose court cases due to their poor knowledge of law). Education in these areas should be promoted at the Rural University.

3.2.4 Demand for a Rural University

On a site visit on date 27 July 2010 I conducted a survey with Mrs Mbabane's matric class at Sangoni Secondary school, in order to establish the social viability of the project (asking the students whether they would like to attend a centre for higher education in their area, and why); to find out what the students would like to study next year (whether they had the opportunity or not) and to investigate the student's situation with regards to services and technology.

The questionnaires handed to the class of 55, as well as the tabulated results of the survey, have been included in appendix D of this document. The following conclusions have been drawn from this data:

Access to services

Although 46 of the 55 students (83%) have access to electricity, provided by the government, only 16 students (29%) have access to water, and 9 students (16%) have access to telephone facilities. 32 students (58%) have access to toilet facilities. While it would seem that the majority of students have access to electricity, and over half of the students have access to toilet facilities, government has failed to provide most with water and telephone facilities. However, 23 students who answered the question relating to cell phones, 19 students (79%) use a cell phone, and all of these students use MTN: cell phone technology would seem to be well supported in the area, particularly by the service provider, MTN.

Advantages and Disadvantages of Living near in a Rural Area
Generally, when asked what they like or dislike about living in their area, students seemed to value natural beauty, a strong sense of community and tradition, familiarity with the area and the fact that their family lives there. Students disliked the prevalence of crime and drugs, poor service delivery and a lack of infrastructure (one student noted that they still have to fetch drinking water from rivers), a lack of access to information, long distances between their homes and their school, and a lack of job opportunities. Many students noted that there is no university or technikon in the area.

Popular Subject Choices

Although a broad variety of areas of study were put forward when students were asked what they would like to study after school, the most popular areas of study were economics, nursing, human resources, social work and teaching.

Viability of the Rural University

Of the 55 students in the matric class, only 39 answered the question as to whether they would like to attend a university of sorts in their area (the class was pressed for time, and I think that a few of the students grappled with the long winded question, a shortcoming on my part). However, of the 39 who answered, 29 students (74%) said that they would attend such an institution, some of them pointing out that they wouldn't be able to afford to study elsewhere. Only 10 students (26%) would not want to attend, as they'd like to move away from the area and experience an urban lifestyle.

Conclusion

The majority of students who partook in the survey would like to attend an institution of higher education in their area. Students seem to have an appreciation for the natural landscape, and a sense of tradition, community and closeness to family are important to many. Crime, drugs, and a lack of access to services and information, as well as a lack of employment opportunities form main concerns. It would seem that the 'Rural University' concept would be a viable one in this area, as there is a demand for such a facilityi it would uplift the area economically as a catalyst for growth, and it would enable young rural people to continue their studies while maintaining a close relationship with their family and culture. The project should address issues such as service provision, acknowledge the desires of the students in terms of curriculum, and possibly explore the idea of appreciating the rural landscape.



3. Design

Contents

1. Programme

2. Design Principles & Building Techniques

3. Design Response

1. Programme

1.1 Introduction

At a very rough estimate, approximately 1500 young rural people matriculate within the catchment area each year (assuming that there are around 50 matric students attending each high school - data on the number of students at each school was not available, but it is known that the matric class of Sangoni Secondary School, a typical highschool in the area, is made up of 55 students (Mbabane, 2010).

However, not all of these school leavers form the body of potential students at the university. 74% of the students at Sangoni, who took part in the survey conducted and described in section 3.2.4 Demand for a University, noted that they would like to attend the institution. As a prestigious institution, however, the university would not accept all applicants: a safe estimate of the number of students to design for would be a third of all matriculants in the area leaving school each year - this would make up the body of first year students, a number likely to decrease with each year of attendance at the University. This amounts to approximately 500 first years, a number which will decrease as years of attendance increase: I've decided to design for around 800 students in Higher Education

1.2 Curriculum

The University will offer the following courses:
•An 8 week ABET course covering literacy, numeracy and computer skills (optional), providing learners with a qualification equivalent to a grade 7.

•3 year FET courses offering vocational subjects in addition to the traditional theoretical aspects in a high school education, through which learners will attain the qualification: National Certificate (Vocational) - the equivalent of a matric qualification, with additional skills that make learners more employable after high school, and preparing them for studies in Higher Education

•Bridging courses that will enable students to improve their skills in subjects such as maths and science so that they can achieve university exemption, as well as computer training courses that will prepare students to take on the technology that facilitates distance education.

•A variety of UNISA courses, to be studied via correspondence. The Rural University will act as a UNISA learning centre, offering computer facilities, spaces for private study, spaces for interactive group work sessions and spaces for tutorials and lectures, which would be held on weekends to accommodate all students. Students may apply to study any course offered by UNISA, but courses of particular relevance in the area (teaching, nursing, training for government workers and police officials, and agriculture related courses) will be promoted through the introduction of additional support in the form of contact tutorial sessions.

Thus, the university will offer a variety of courses at varying degrees of qualification in order to accommodate the diverse rural population, promoting courses of relevance in the region that will uplift the area economically, and respond to the areas demand for skills, increasing chances of the students employment after studying.

1.3 Building Users

The University will accommodate at any one time:

Academic Staff
1. Chancellor
2. Vice Chancellor
3. Secretary/ Assistant
4. Head of Higher Education
5. Head of Further Education and Training
6. Head of Adult Based Education and Training
7. Head of Finances
8. Head of Administration
9. Receptionist/Assistant
10. Receptionist/Assistant
11. Career Guidance Counsellor
12. Academic Counsellor
13. Psychological Counsellor

A staff of approximately 10 researchers

Maintenance staff of approximately 20 cleaners

Body of Students (approximately 960 students)
> A class of 40 Abet students, partaking in an 8 week course
> 120 FET students (3 classes of 30 students to make up the three years of study for an FET course)
> Approximately 800 undergraduate and postgraduate students studying UNISA courses through correspondence

Members of the public (varying numbers)

1.4 Spaces Required

As has already been noted in 5.Conclusion: The beginnings of a brief, the University will comprise:

> Spaces for learning, including classroom spaces for tutorials and lectures, an auditorium for 'virtual lectures', broadcasted from Pretoria (and to be used for conferences, and by the general public for performances etc.) Spaces for group work, and spaces for self study and research. All spaces to be housed within a 'digital library' - a flexible space that harnesses the technology required for correspondence learning in this situation.

> A kitchen and dining hall, as well as agricultural fields, in line with the 'school feeding' strategy.

> Research Offices for research in rural development
Conference facilities

> Accommodation (a few apartments for students, and accommodation for visiting researchers and conference attendees.

> Offices for academic and administrative staff

> Sports facilities, to ensure that a student's life is well rounded

> Facilities to support 'independence strategies' - alternative approaches to service provision, to be maintained by the research staff

> Agricultural land, to support the school feeding programme and independence strategies (such as bio-fuel), to be explained in the following section.

1.5 Spatial relationships

Spatial relationships are better explained through the diagram below (Figure 11). Having arrived at the top of the site, one approaches the grand entrance space, which feeds off into academic offices and the digital library space. The digital library watches over a green 'social garden' - an outdoor social space. The dining hall and sports field feed off of this space. Residences are located furthest from the entrance, as the most private programming in the University (facilities to be used by the public are located closest to the entrance, to ensure that they are accessible). A road will provide access to a parking lot near the dining hall kitchen, for servicing reasons and for residence parking. The kitchen also has a relationship with the university vegetable garden, which in turn has a relationship with the research offices and digital library, as researchers and agriculture students will use this piece of agricultural land for research in agricultural technology. Solid lines indicate major connections, dotted lines indicate minor links, and dotted arrows indicate views

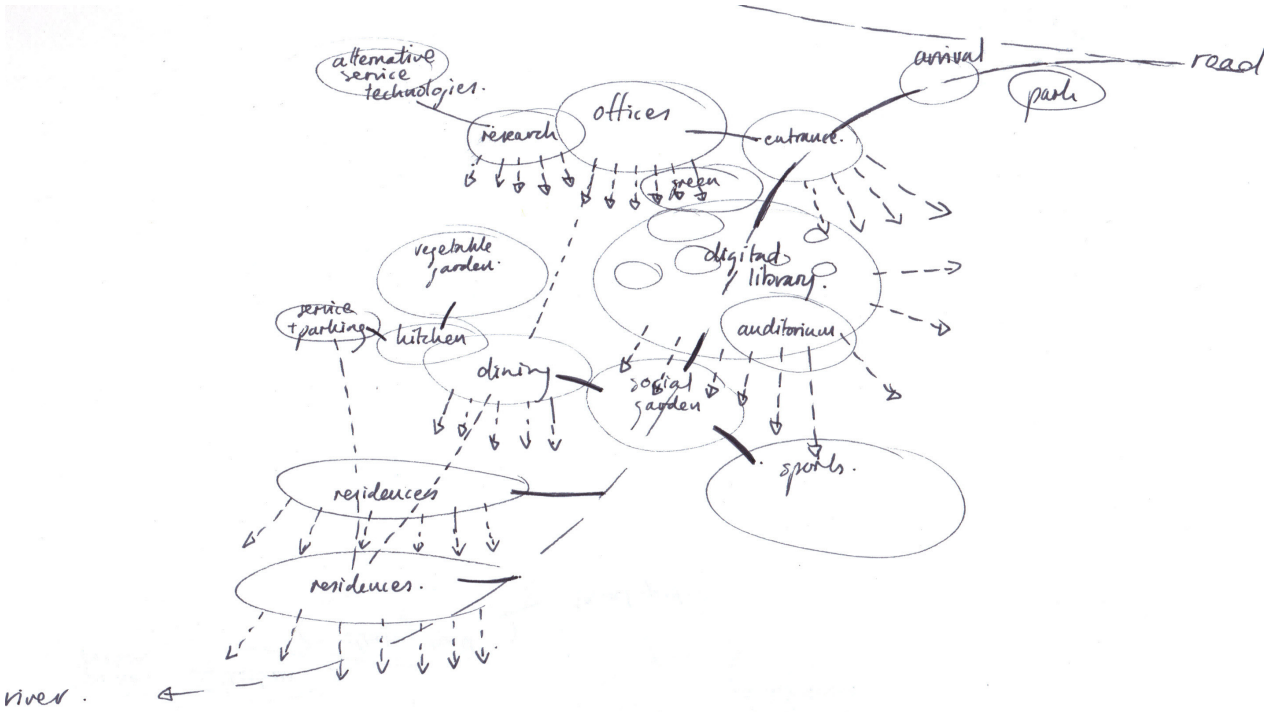
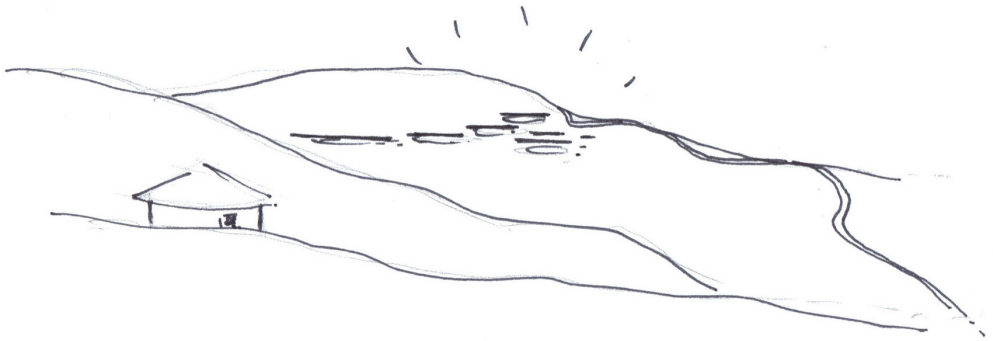


Figure 11: Abstract Arrangement of Programme

2. Design Principles and Building Techniques

2.1 Beacon on a hill

The Rural University needs to be monumental in a sense - an icon in the landscape (although not imposing on it); a symbol of hope for the surrounding communities, rep[resenting the opportunity to achieve a better quality of life through education and self improvement. It needs to convey a sense of prestige and grandeur, as is fitting of a centre of academic excellence - a notion drawn from the traditional university typology, appropriated to suit this context.



2.2 Traditional practices in the area

Ideas have been drawn from traditional building practices in the area: apart from integrating the building within its context in a deeper conceptual sense, these principles drawn from traditional and informal practices are often quite beautiful in their own right. The following ideas will be carried through in design.

2.2.1 Permeability

The notion that the veld becomes the permeable connective tissue between spaces, knitting the centre into its context, so that cattle can move between buildings and graze on the land as they always have, will be carried through, as will the idea of watching over what you care for – the offices of the academic staff will be positioned at the top of the hill, symbolically watching over the digital library.



2.2.2 Acknowledging the Contours

Acknowledging the contours becomes an important aspect of the design: as was seen in the figure ground, the few urban interventions in the area impose a strong, orthogonal grid on the landscape. Creating thin platforms for habitation parallel to the contours will require minimal alteration to the landscape, mimicking the traditional approach – the land is moulded to suit human activity, but only through minor interventions.



2.2.3 Building with Earth

As has been noted, it is common practice in the area to build with mud, either with wattle and daub, or by producing mud bricks with earth dug up on the site. These structures, if left unattended, will eventually melt away in the rain (JJ, 2010) – truly touching the earth lightly. This notion will be carried through: using a product called ecobond, a polymer mixed with soil in a proportion of 3% in order to strengthen it for road and brick construction, soil on the site from excavations will be used to produce bricks for the construction of wall elements. Rammed earth construction techniques will be used for feature elements, celebrating this principle. In this sense, a common informal practice will be formalised and put into focus as a beautiful way to build with the land. Ecobond also has a much shorter life span than materials like concrete – left unattended, it will biodegrade after 200 years, mimicking traditional practice over a less transient time span.



2.2.4 Sheet Metal Roof

The sheet metal roof, a prominent architectural element in the area, will also be celebrated and scaled up: the simple, cheap and effective element that provides shelter and becomes an important surface for rain water harvesting will become a feature of the design.

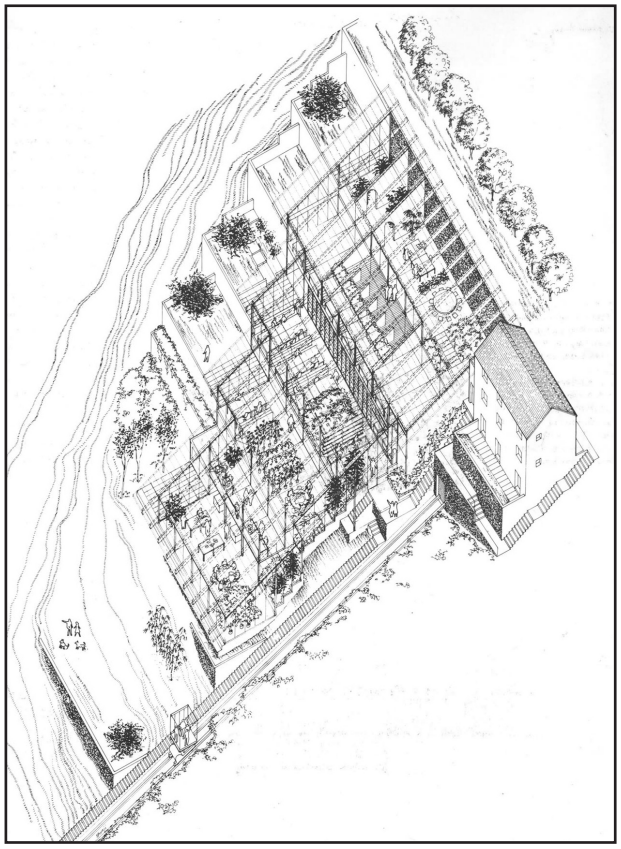


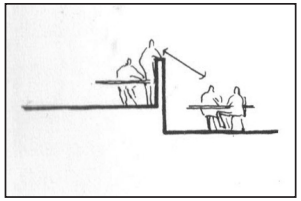
2.2.5 All under one roof

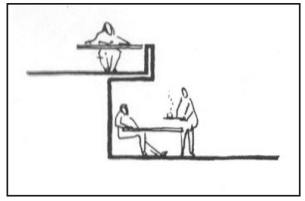
Drawing from the design of Renzo Piano's offices in Rural Italy, a sense of cohesion will be created by placing all learners under one roof, promoting interdisciplinary discussion between faculties. Change in height will be used to define space rather than wall elements. Hertzberger (2009) notes on the matter,

"…the openness of the different places is just as fundamental as their separateness, indeed the two are complementary, so that enclosedness and openness can each exist only by the grace of the other; they relate dialectically, as it were. The degree in which places are separate open vis a vis eachother, and and the way in which it is done, lies in the hands of the designer, and consequently you can regulate the desired contact in a particular situation in such a way that privacy is ensured where that is required, while the range of vision of 'the other' does not become too restricted. By introducing changes in level the scope of possibilities is expanded…"

With such a steep slope (as is common in the area), the site almost calls for this approach.







2.2.5 View

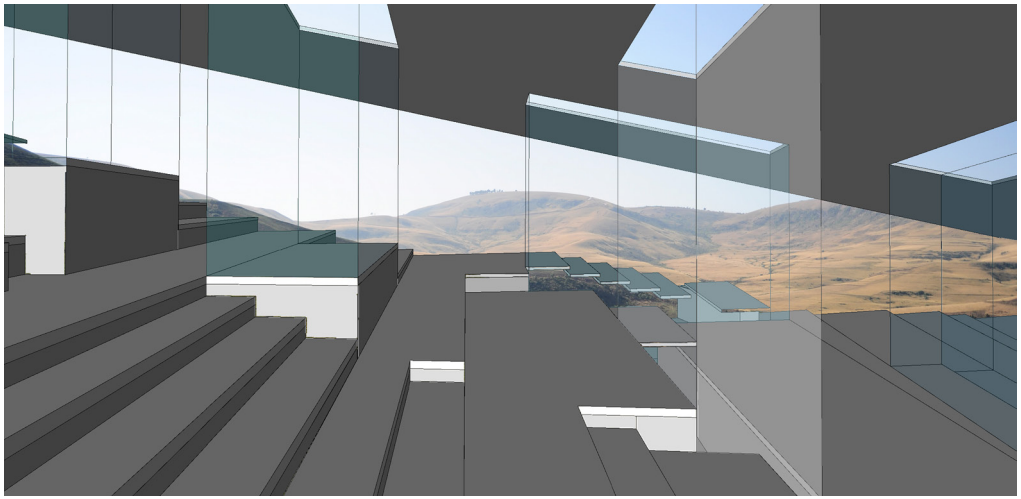
A theme running between the lines of this project is that of a sensitive approach to rural development - every city was once a rural landscape, until someone decided to lay the first brick. Knowing what we know now, and with the technologies currently available to us, how might we go about designing for our rural, greenfield sites?

While the design does draw from the sensitive approaches to development already practiced in the area in the form of traditional/informal architecture, I would like to explore an alternative Way to experience the landscape than what is currently practiced. Most structures in the area tend to be massive, with apertures framing views. While this notion will be retained in places, the intention will be to open up the view. Hertzberger (2009) notes,

“It is the principle of shelter that receives special attention in the history of the origins of architecture, as it gradually acquired an increasingly articulated form, from hut to house, in the course of human history and the rise of the city. For us the History of the view is just as important as that of shelter. And what we mean is, apart from having a view of one another, having a view of the outside world. Just as spatial relations influence personal relations, so they should determine the way we relate to the environment. But instead of maintaining the opposition of interior-exterior as a fundamental contrast, we know, in the twentieth century, that interior and exterior are relative concepts, and therefore depend on where you stand, and in which direction you look.

It is no coincidence that the character of twentieth century architecture is so much more open than it has ever been in the past. Not only do we now have the means with which to achieve this, there is also more need for openness. We have opened all the windows and so we have embraced the outside.”

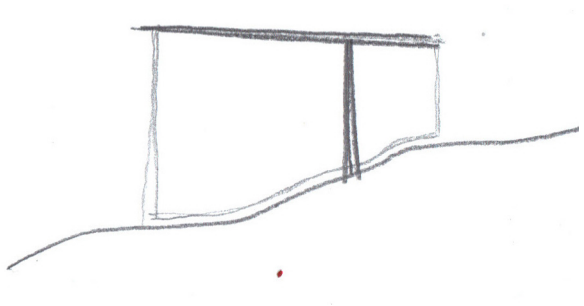
By opening up the windows, one will not only be able to study with a view of the pristine landscape: one will study within it.



2.2.6 The character of a hill under glass

In Maya Lin's work, 'Character of a hill under glass', she explores the notion of placing a landscape indoors, and how one experiences that landscape differently, I would imagine almost noticing it, for the first time, in a different way.

In this design, a simple but bold sheet metal roof will become a defining feature, an element of rigidity, visible from far away, floating above the landscape. Glazing will fall down from its edges, ouching the earth lightly where it must, following its profile – a habitable hillside under a roof.



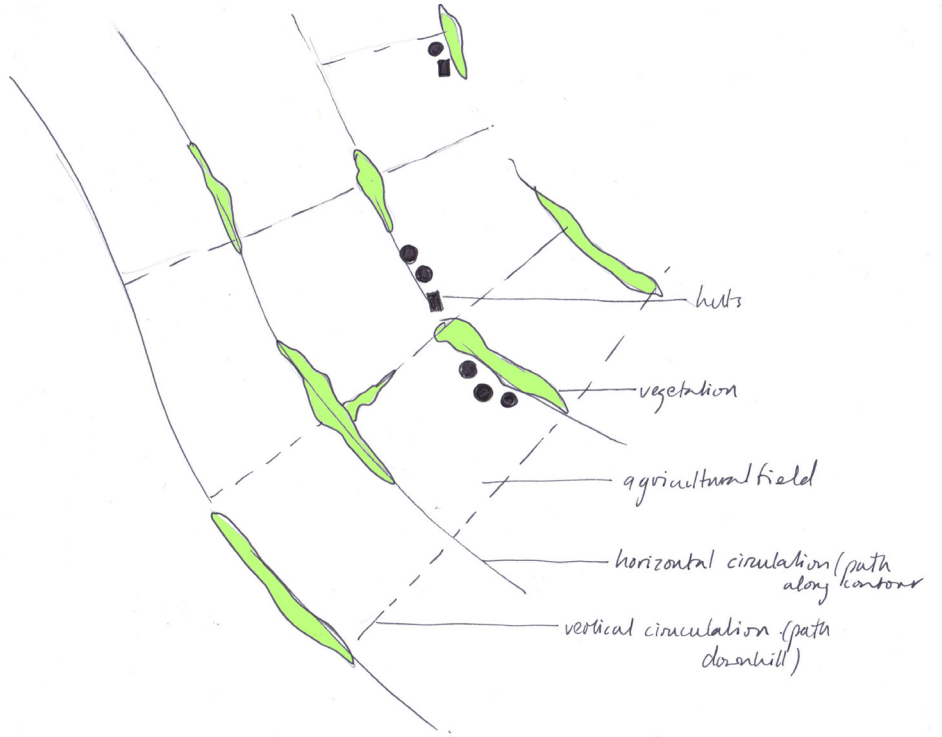
2.2.7 Platforms of Activity

This sheltered landscape will form a series of platforms descending the hillside, and will begin to mimic the natural layout of human activity on the land: generally in the area, agricultural fields stand out as regular patches, running parallel to the contours. Between these fields, natural vegetation begins to grow, untended, and starts to form a kind of boundary between fields, a screen separating one field from another.

In this design, planted light wells will have this effect, bringing light into the wide, sheltered space and separating one open field of activity from another as a kind of screen, still transparent but creating privacy and acoustic separation

2.2.8 Independence Strategies

In response to poor service provision in the area, the design will employ independence strategies: alternative approaches to service provision. Rainwater will be harvested from roof surfaces and filtered for drinking; ablutions will link up to bio-digestors that will produce bio-gas for heating; a solar panel wall will provide additional power for the digital library; and wireless technologies such as cell phone access will be investigated as an alternative to landlines for Internet access.



3. Design Response

From left to right, these three images depict: the existing site, the design intervention (roads and buildings), and agricultural fields, including neighbouring subsistence farming and agriculture on the site. To the East, a road at the top of the hill provides access. A river bounds the site on the west.

The images on pages 90 – 91 illustrate the logic of the master plan: the university takes on a linear plan, where each function is allocated a zone along the 'university path', which leads from the access point at the top of the site down to the waterfall to the north, in a kind of symbolic trip down to the water, a trip that many people in the area make daily. Spaces are defined by platforms running parallel to the contours; each zone is restricted in size perpendicular to the contours, but may expand parallel to them.

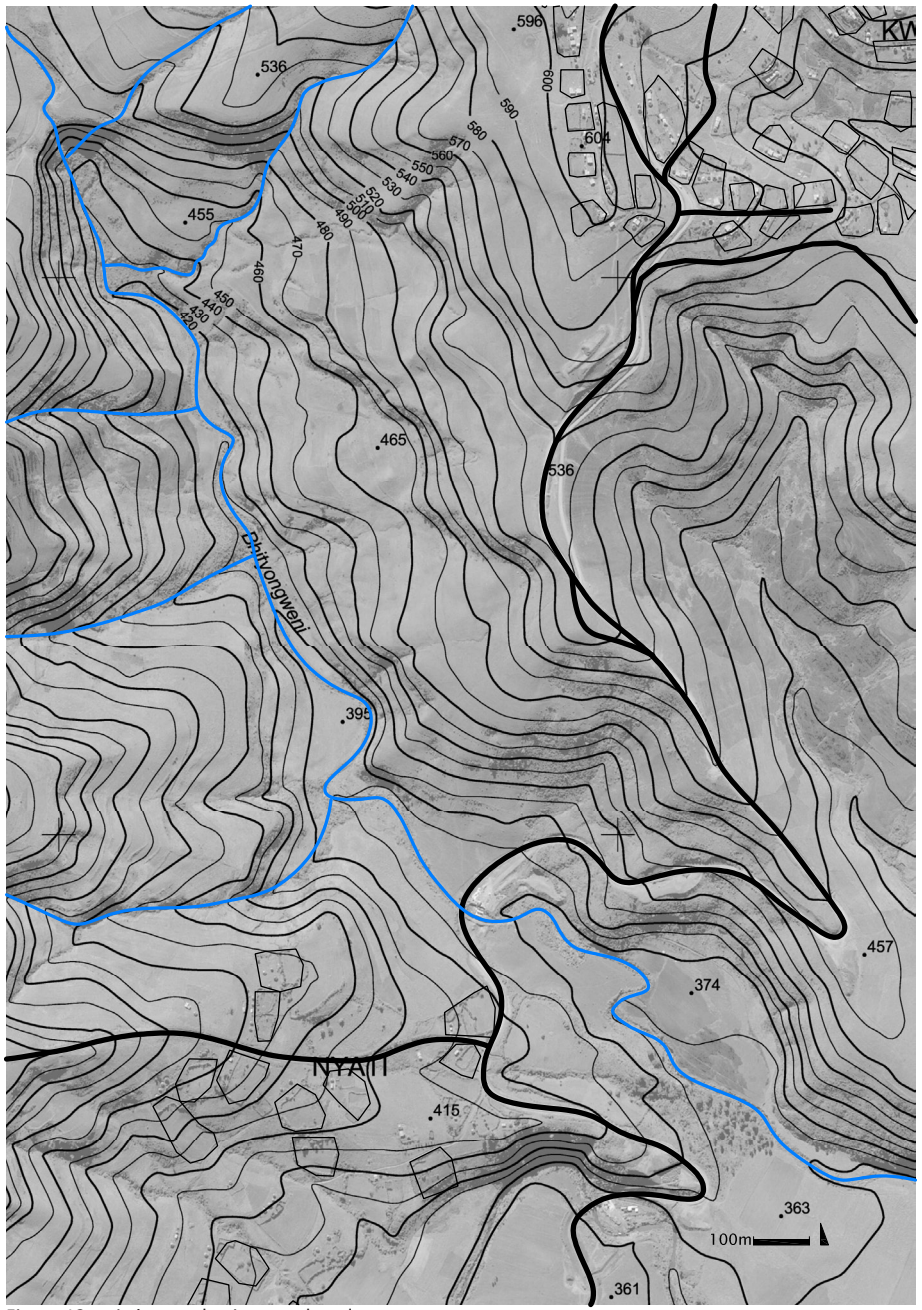


Figure 12: existing roads, rivers and settlement

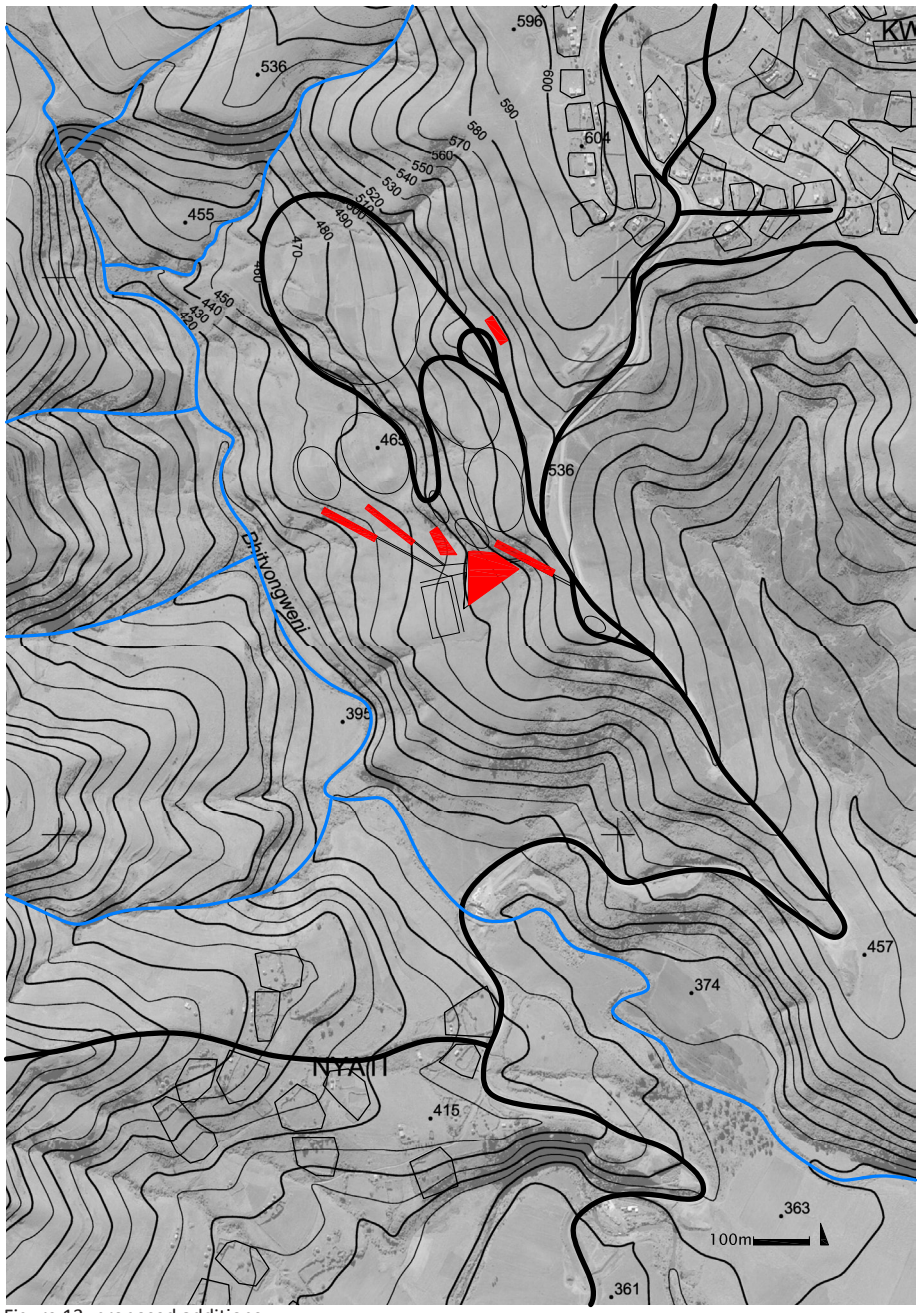


Figure 13: proposed additions

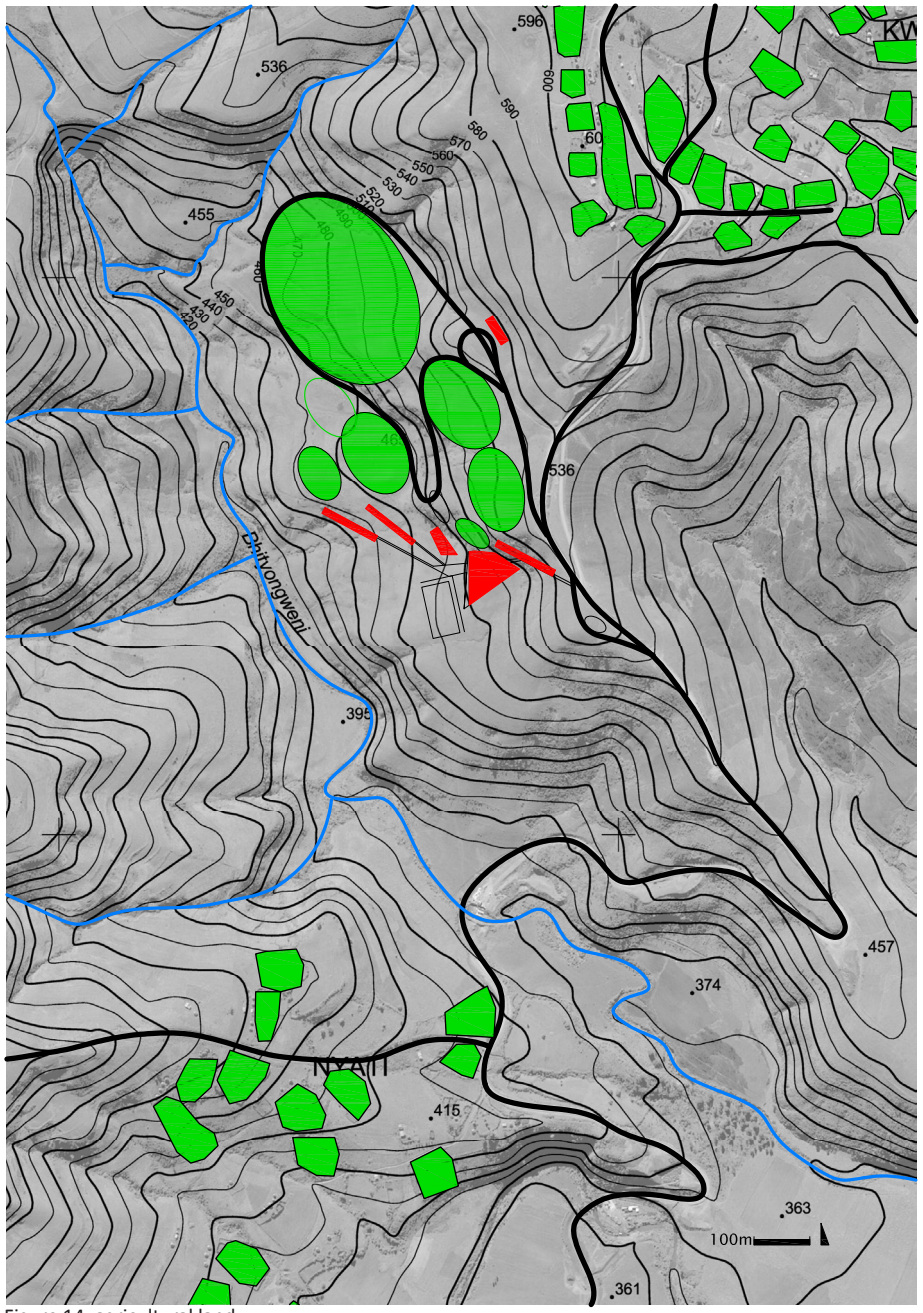


Figure 14: agricultural land

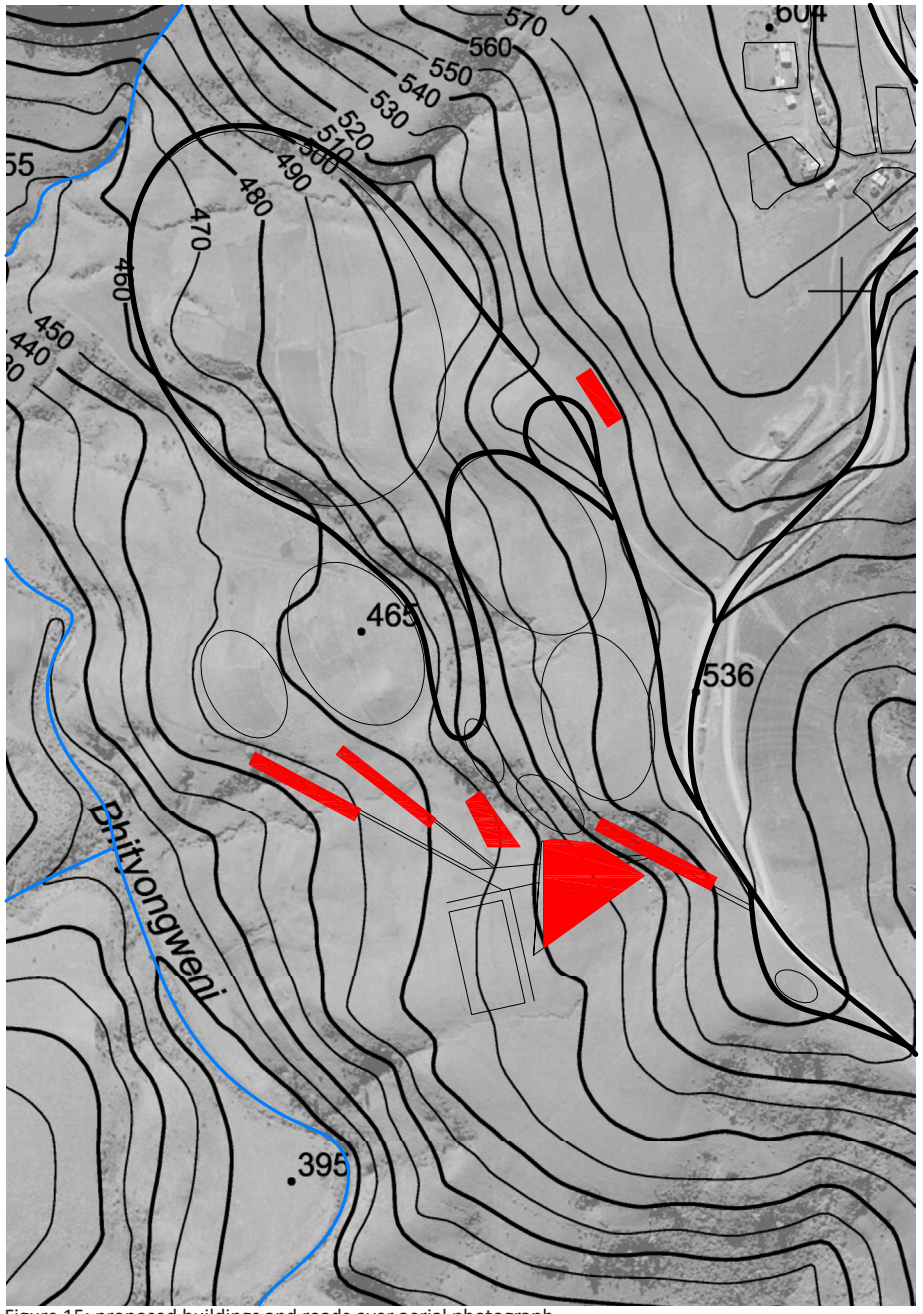
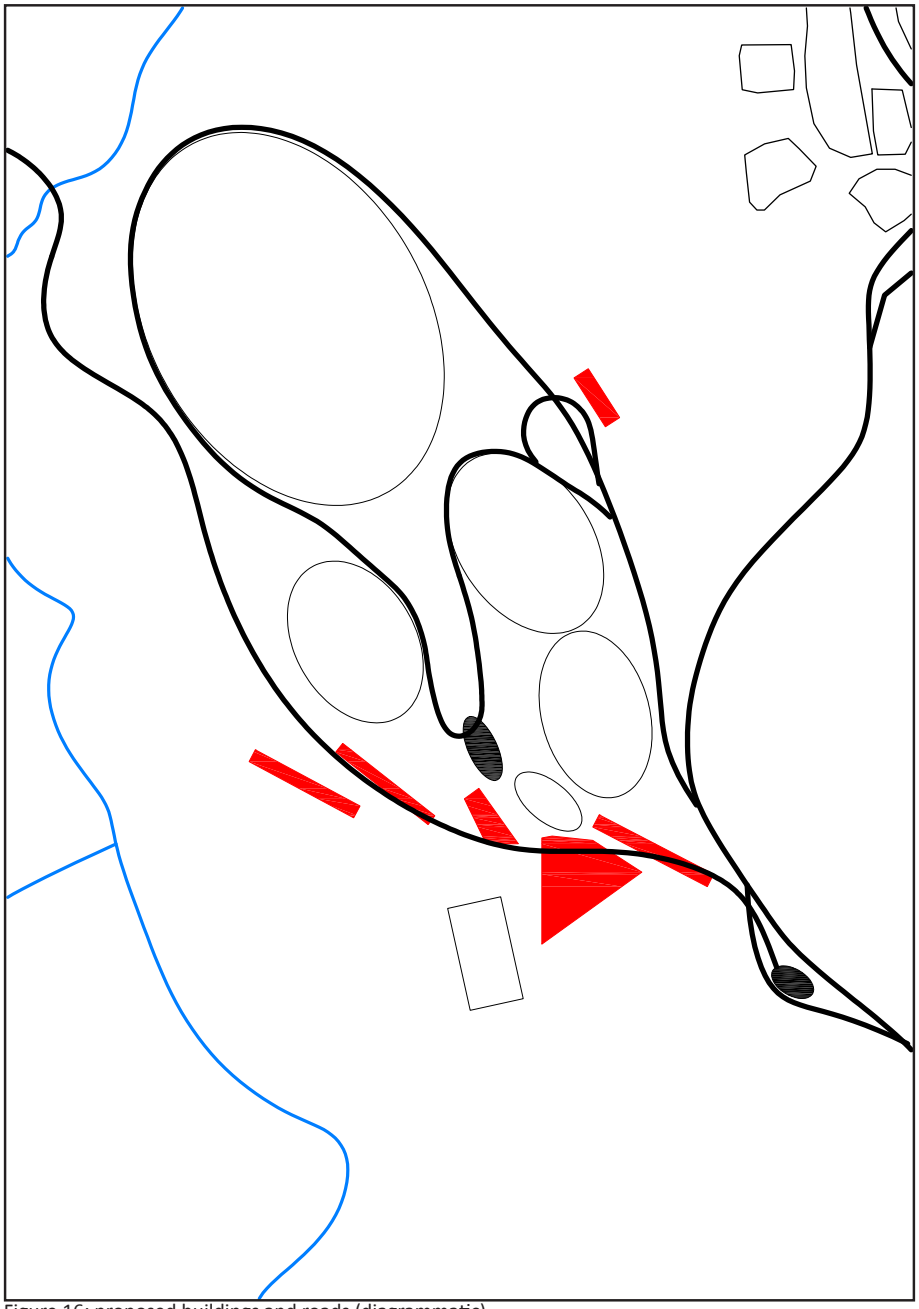


Figure 15: proposed buildings and roads over aerial photograph


Figure 16: proposed buildings and roads (diagrammatic)

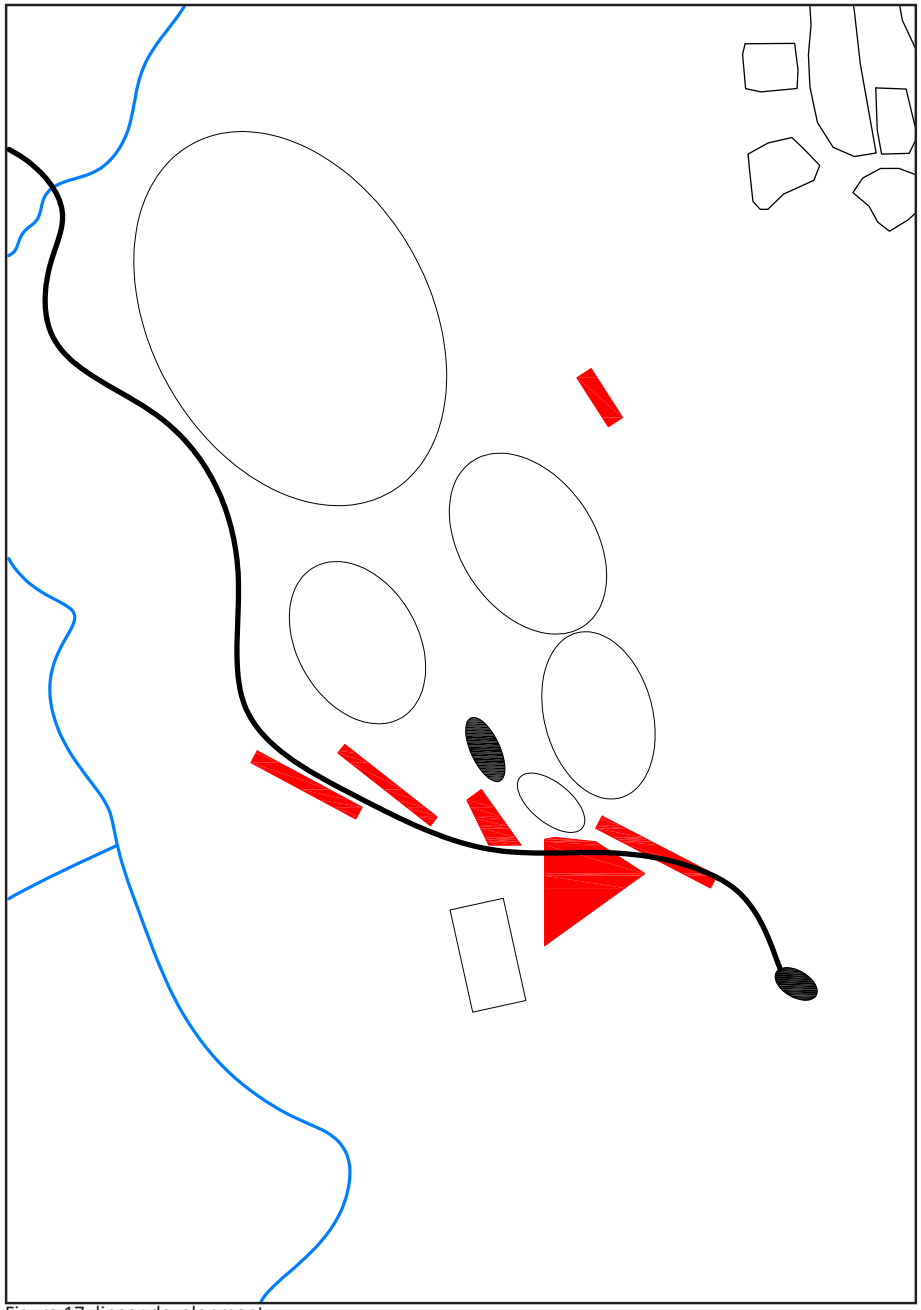


Figure 17: linear development

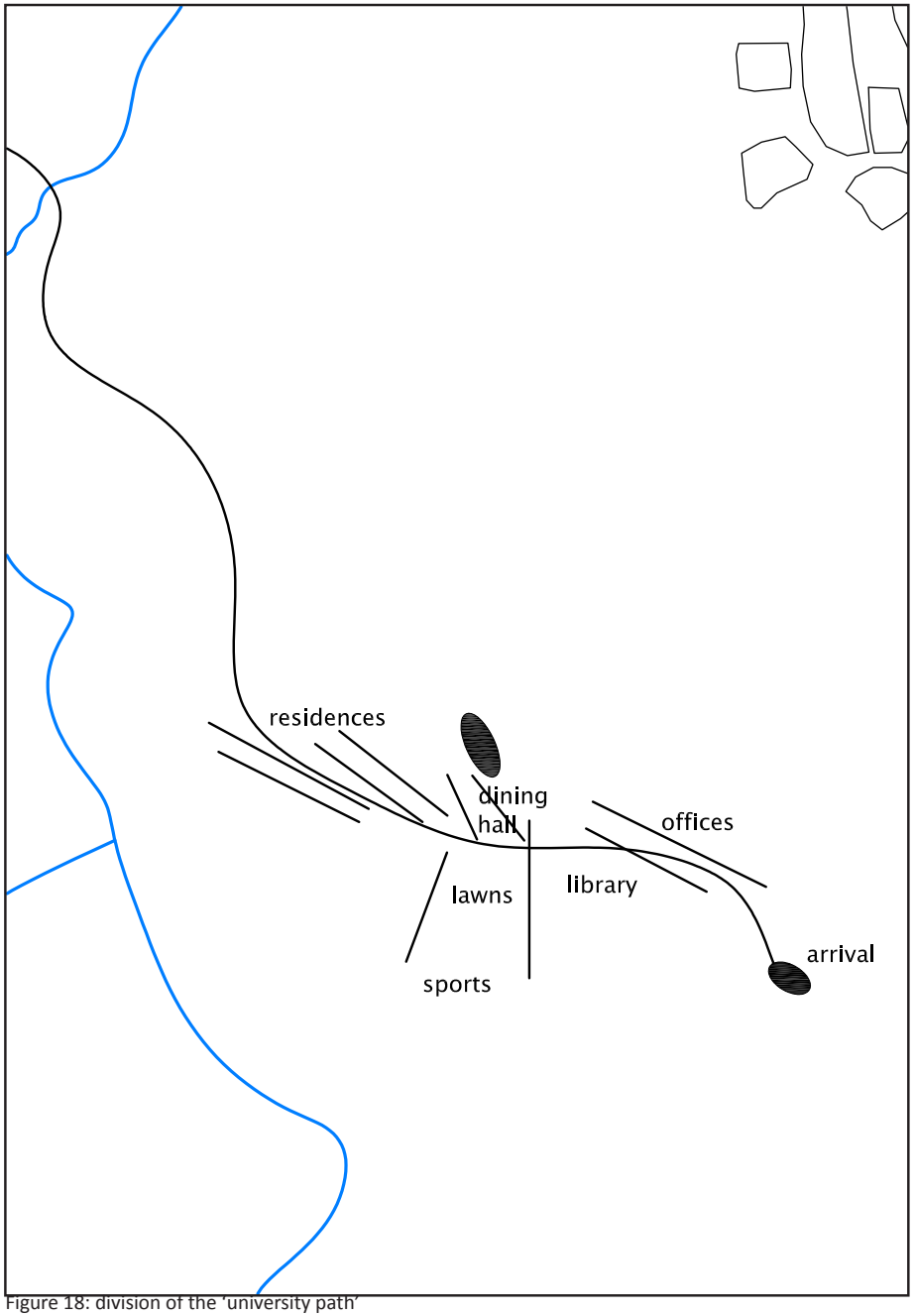


Figure 18: division of the 'university path'

Site Plan

The site is approached from an existing tarred road to the East. Parking for day visitors to the university, as well as a bus drop off area are located at the top of the hill to the east of the site, and may be accessed from this road. Alternatively, residence parking and the loading zone for the university dining hall may be accessed via a constructed access road that encircles the university's agricultural fields. The same road provides access to parking for university busses, located alongside the biodigester plant, which will produce bio-fuel for the buses with maize grown on the site and in surrounding areas. Researchers at the Rural Development Research Centre, one of the first buildings to be constructed on the site, will oversee such processes amongst others, experimenting and developing new technologies that may be employed in the surrounding rural areas that are generally deprived of services.

The Research Centre and administrative offices for the university are located near the top of the Eastern hill; the first structure approached along the University Path downhill to the waterfall. As well as housing the academic staff of the university, this structure acts as a grand entrance to the site - not dramatic in itself, the structure simply provides shelter as one takes in the emerging view of the digital library in the landscape.

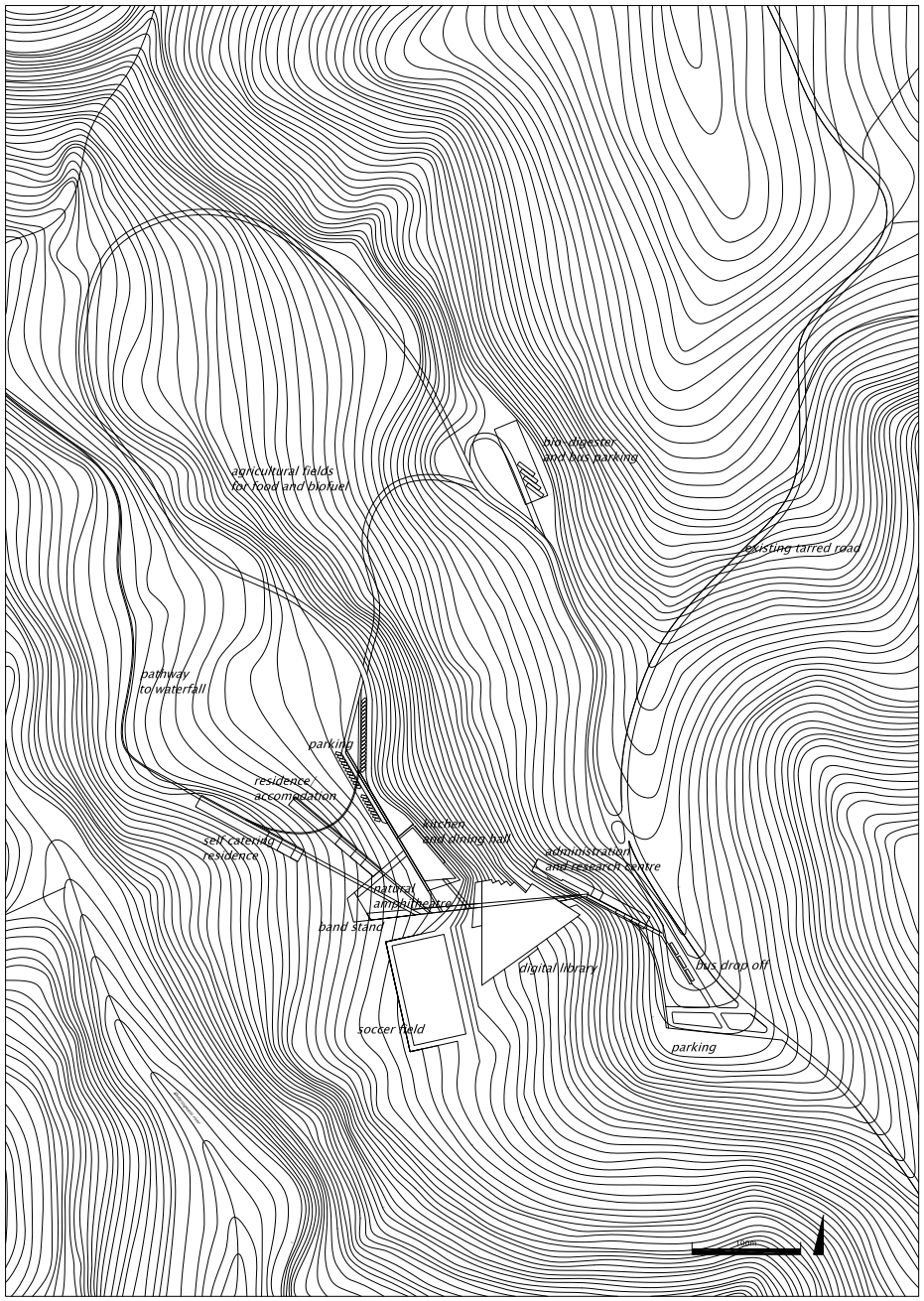
The University Path then draws one into the digital library - the heart of the university, which will be explained in more detail later in this document. The path runs through this building, becoming an internal circulatory spine.

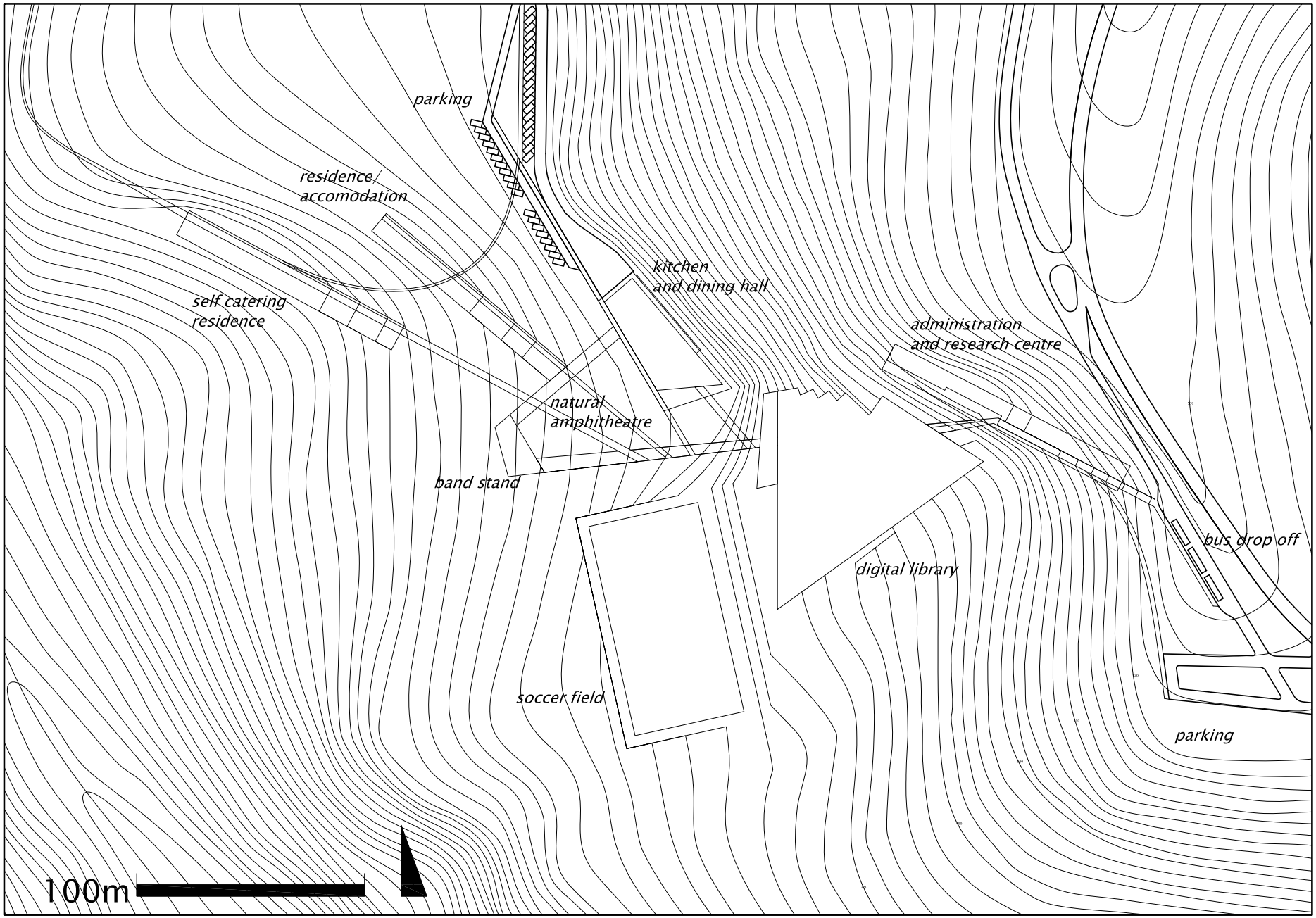
As one exits the Digital Library (halfway down the hillside), they will find themselves at the top of a natural amphitheatre, flanked by the dining hall to the right, and a soccer field to the left. The contours, manipulated slightly, are moulded to form the seating for the soccer pitch, and change room facilities are tucked in under the digital library, watching over the space from uphill. The kitchen and dining hall, with loading access from the north, are perched to watch over a gently sloping amphitheatres space with a small bandstand facility at the bottom of the hill to be used for entertainment purposes by students and the public. The dining hall will be used on a daily basis to feed the students and staff at the university, but may occasionally be used for celebrations in the surrounding communities such as weddings. The kitchen, located close to the agricultural fields and vegetable garden, will make use as much as possible of food produced on site.

The residential units for students and visitors are located at the bottom of the hill, furthest from the public entrance, and closest to the waterfall. From here, the sound of the water rushing over rocks is quite loud, amplified by the natural amphitheatre. The thin slithers of buildings, one apartment wide, are positioned to take in the view, and slope gently downhill under a single roof, in order to facilitate the drainage of waste water to biodigesters located at the end of each block. These biodigesters, operating on a much smaller scale to the digester producing biofuel, producing gas that will be used to heat water for the residents.

The path continues past the residences, passing a small pavilion at the waterfall and connecting to existing pathways that connect communities in the area.

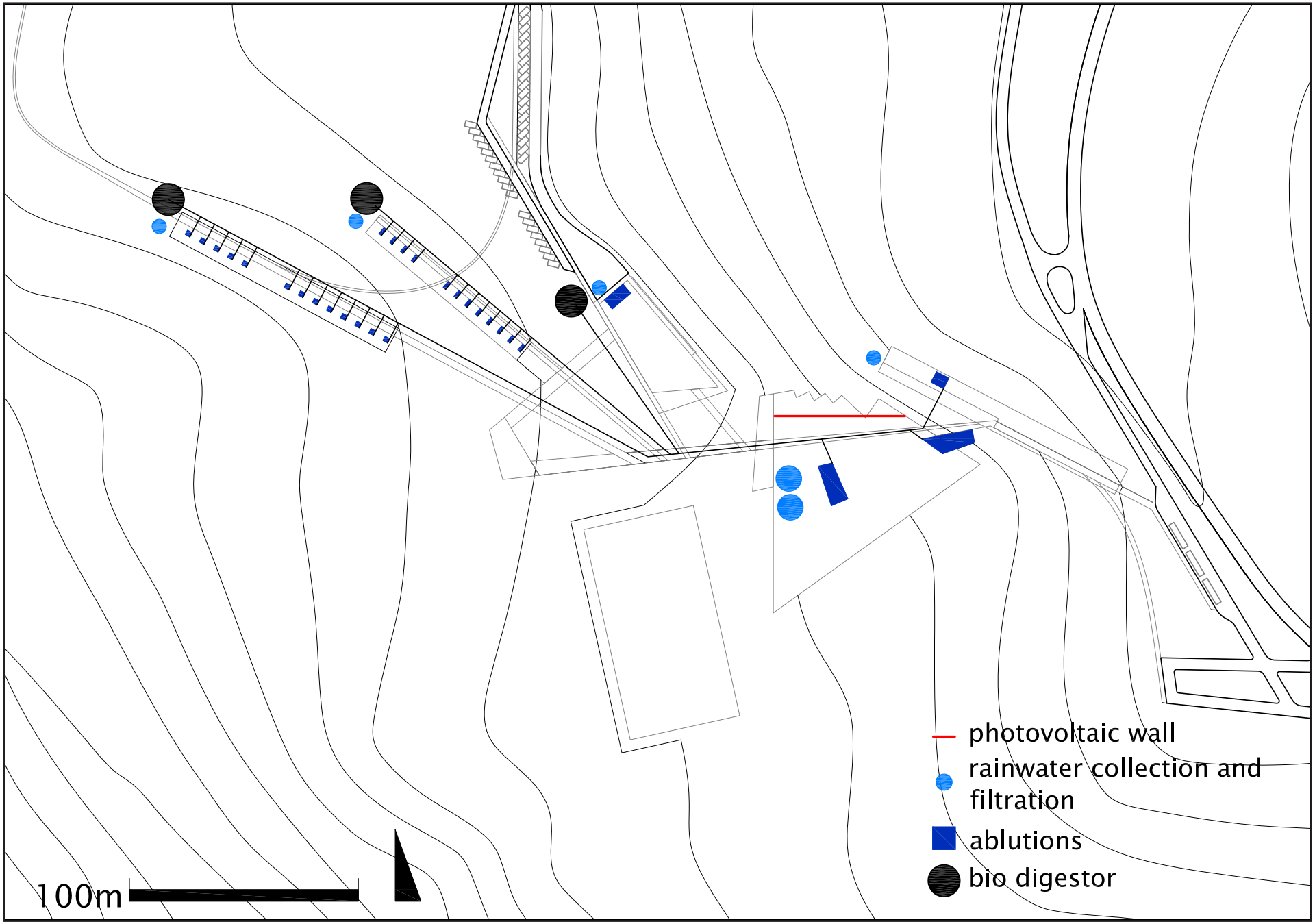
Every major programmatic function is housed in its own structure along the path, recalling building tradition in the area, explored on a much larger scale. Buildings are constructed to acknowledge the contours, and with enough distance between them to ensure that view is not obstructed. The space between buildings remains permeable, such that cattle can continue to graze and move across the Site, as they always have: the university is knitted into the landscape.



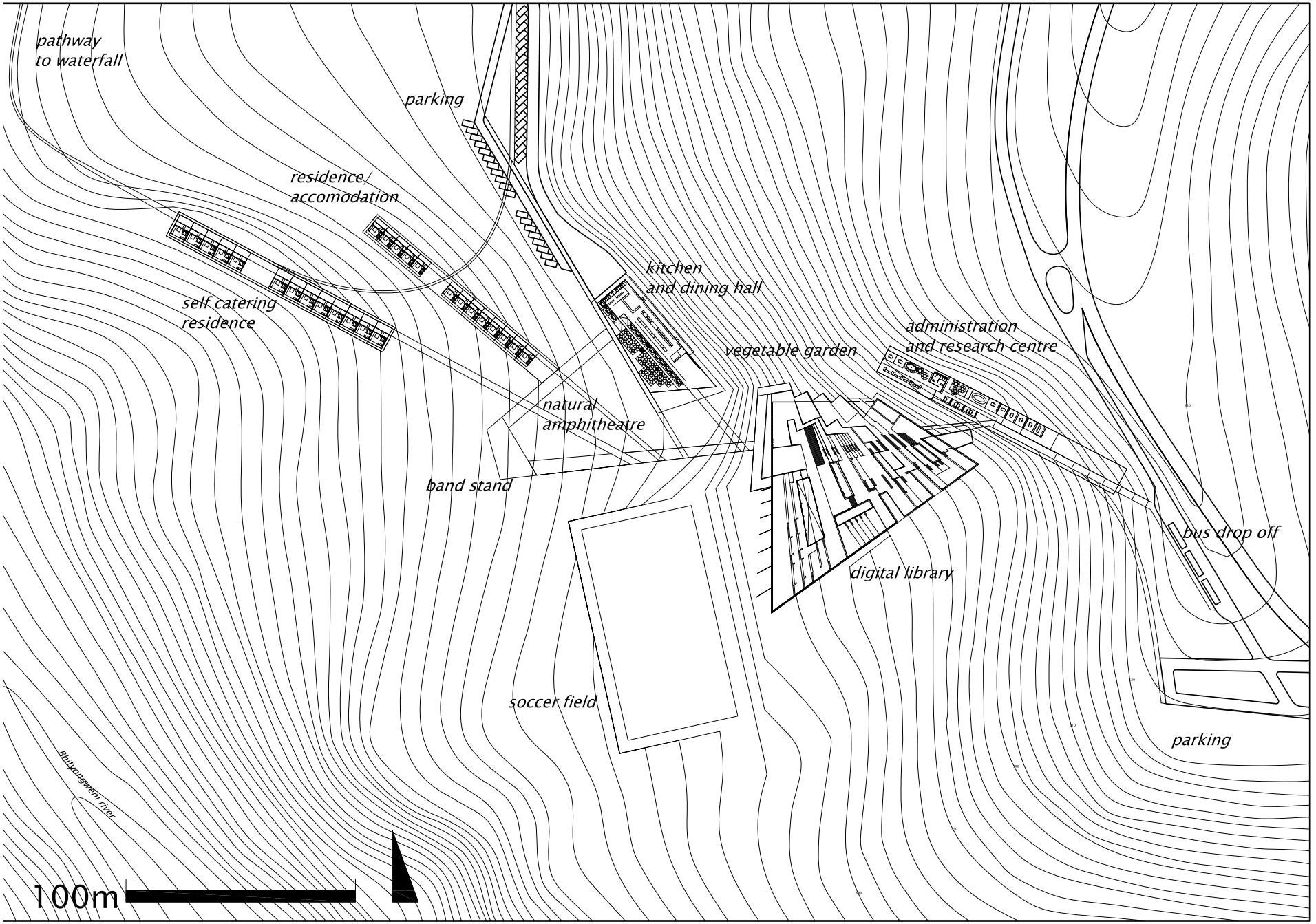

parking
residence/
accomodation
kitchen
and dining hall
self catering
residence
administration
and research centre
natural
amphitheatre
band stand
bus drop off
digital library
soccer field
parking
100m

Independence strategies

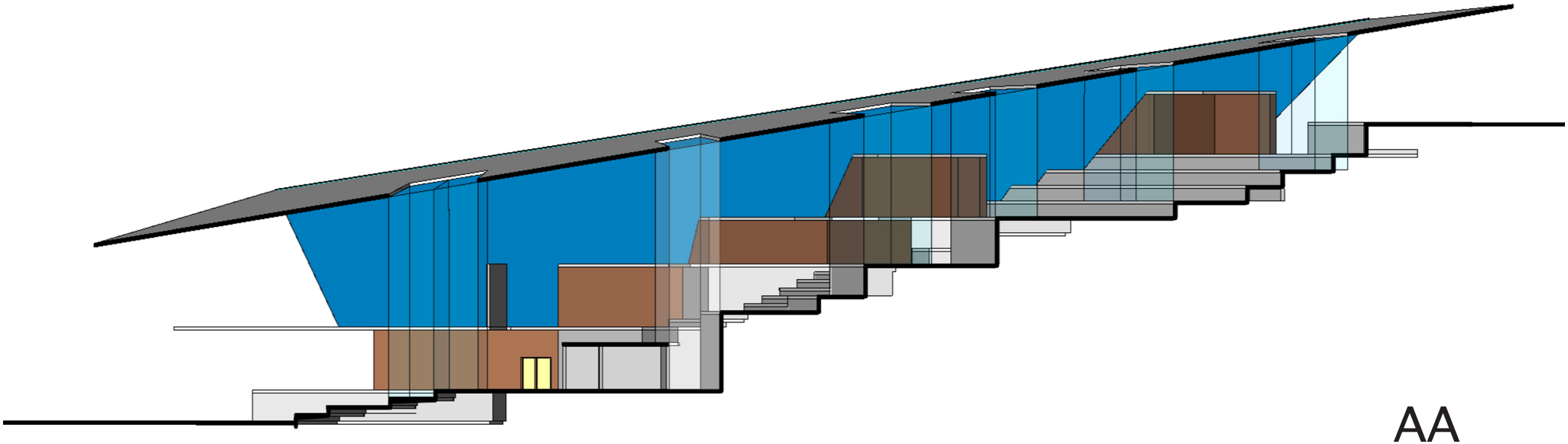
In order to counter poor service provision in the area and achieve a degree of autonomy, and to serve as an example for surrounding communities, the University will take on a number of independence strategies: rainwater will be collected from roof surfaces; ablutions will direct waste to bio digesters, which will produce bio gas for heating water and cooking. A feature ‘wall’ in the digital library, constructed of glass with photovoltaic cells, will shade the public walkway and generate power for the digital library. Cellular ICT technologies will be explored and favoured over traditional landlines, and roads on site will be constructed with ecobond polymer and soil on site, setting a precedent for road construction in the surrounding areas.


photovoltaic wall
rainwater collection and filtration
ablutions
bio digestor
100m

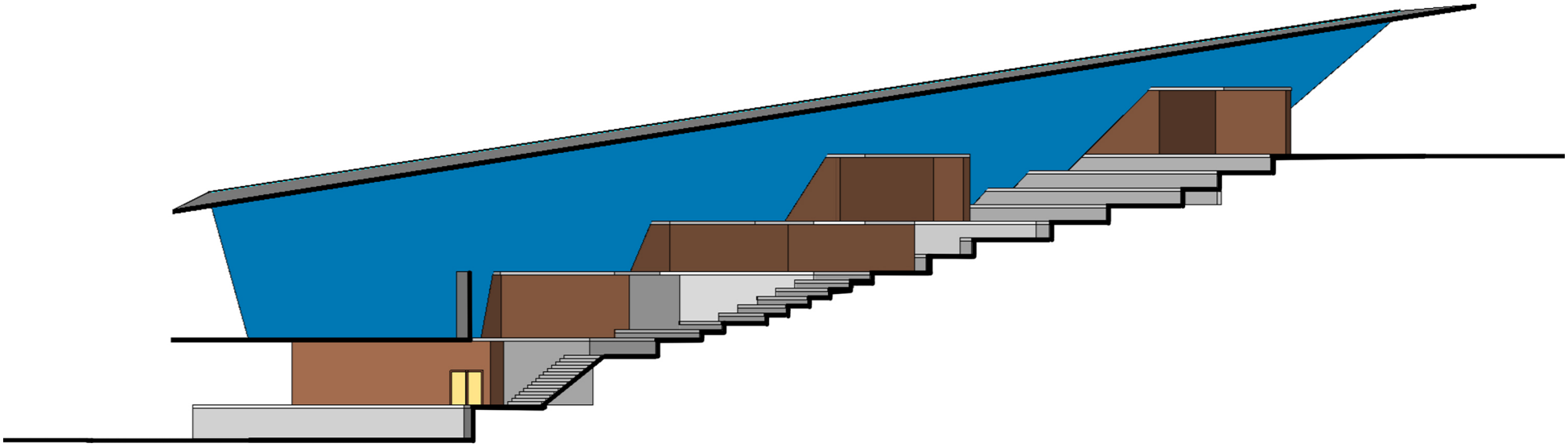
Diagrammatic Layout of Spaces


pathway
to waterfall
parking
residence/
accomodation
self catering
residence
kitchen
and dining hall
vegetable garden
administration
and research centre
natural
amphitheatre
band stand
bus drop off
digital library
soccer field
parking
Bbituppagweni river
100m

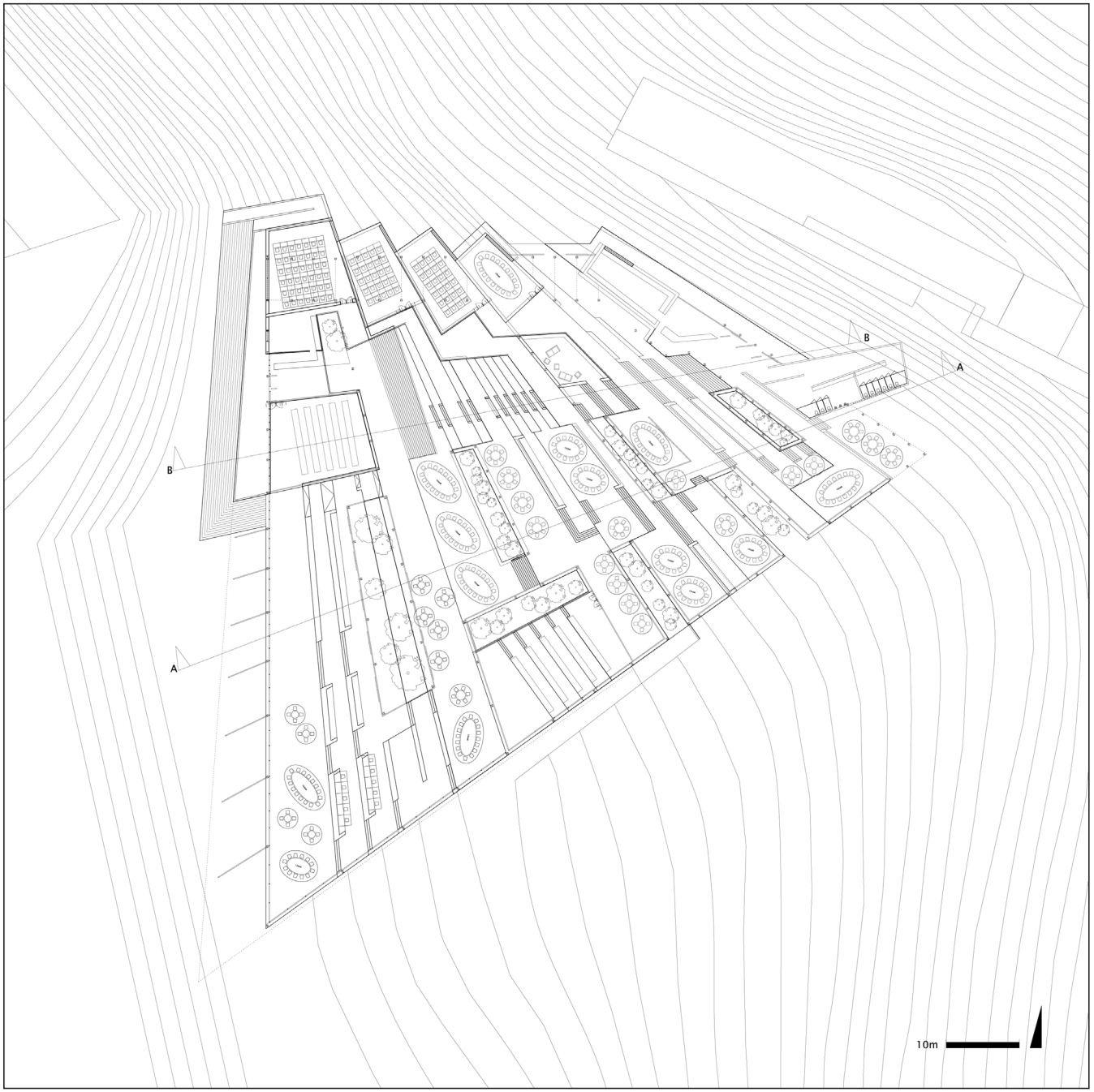
Sections



AA

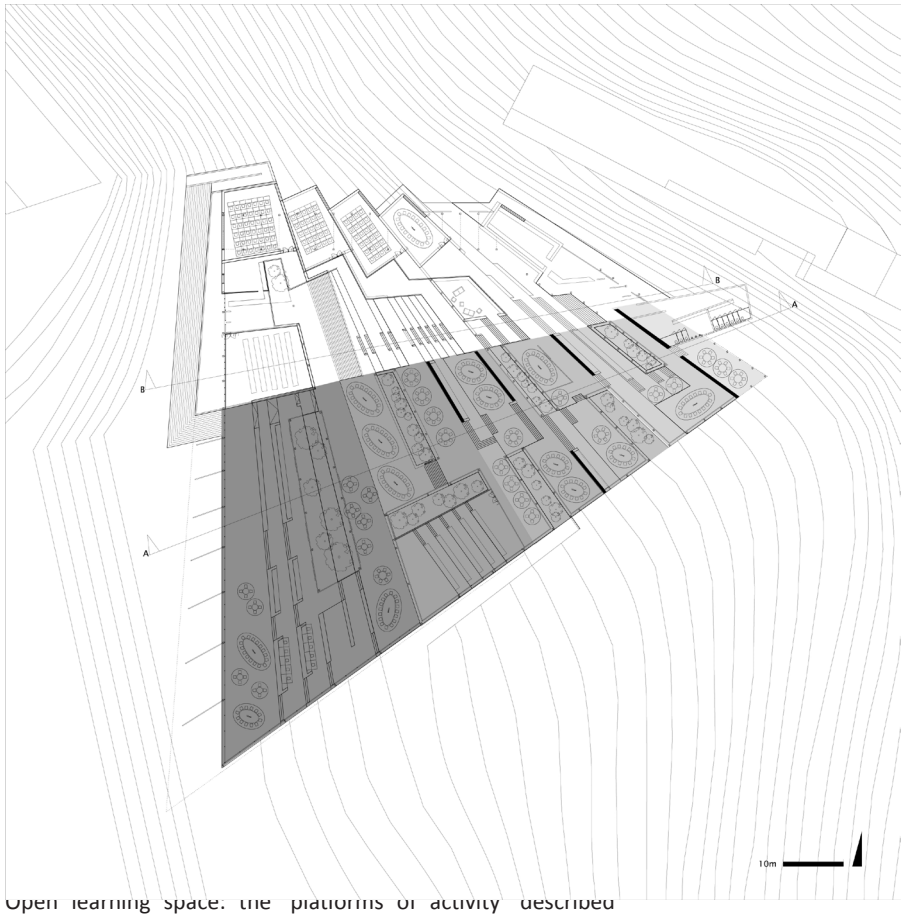


BB


B
A
B
A
10m



The public walkway described earlier runs through the digital library space, narrowing to make way for a student lounge, and its steps widening to become public seating for a ‘silent theatre’ - documentaries will be projected on a screen attached to the computer training platform, the audio available through headphones that plug into the seating.



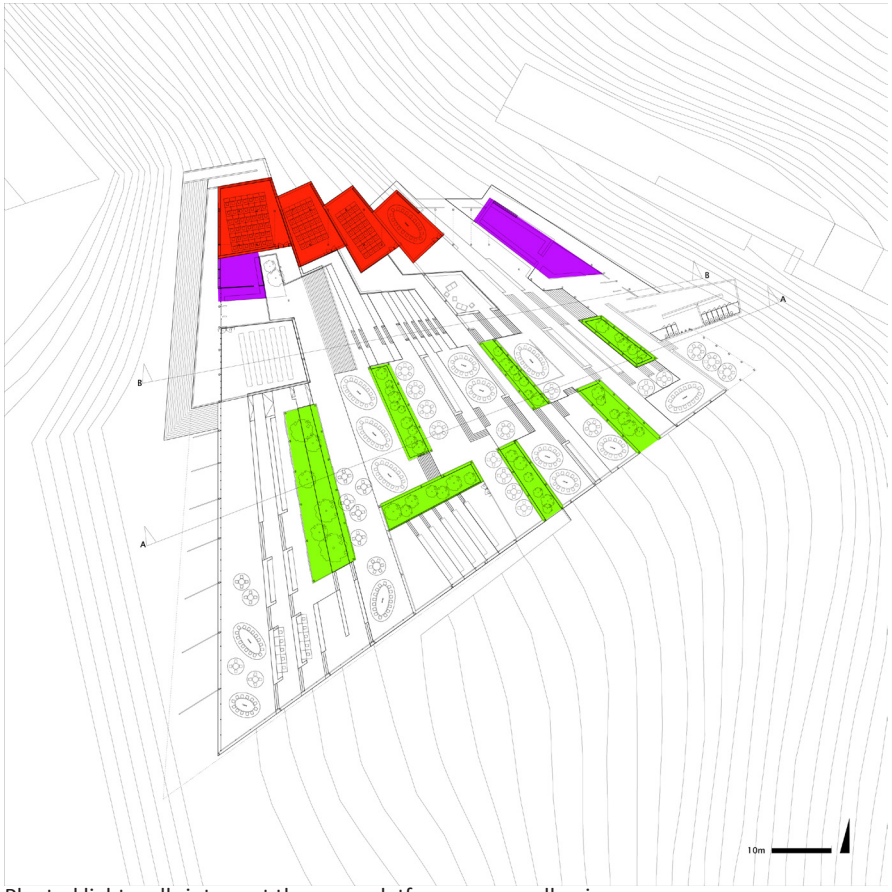
Open learning space: the platforms of activity described earlier, is divided into 6 major platforms: these correspond with the 5 UNISA faculties, with an additional public platform on the lower level. The whole space is navigable: the walkway provides quick access to platforms, while a meandering route allows one to wonder down the hillside. the platforms arent rigidly defined, but divided themselves, and students will not be restricted to studying on their appropriate platform: only their lockers will be positioned there.



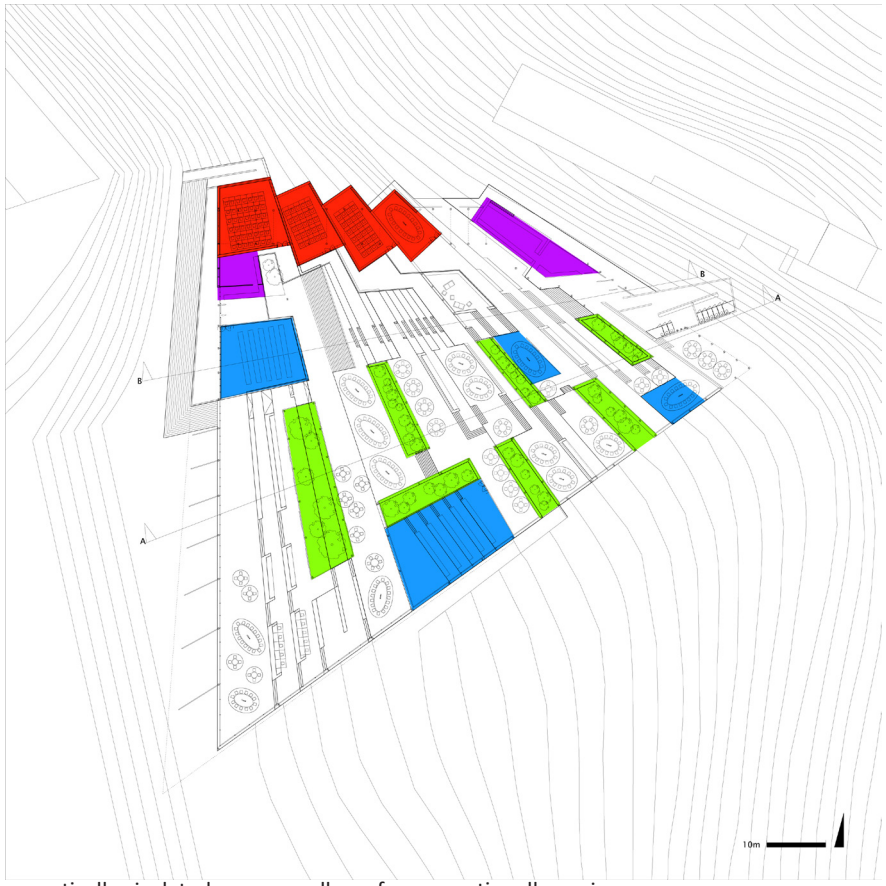
Tutorial Rooms, constructed with rammed earth, line the north of the digital library, recalling the way that people build in the area. these will serve ABET, FET and UNISA tutorials, according to a schedule



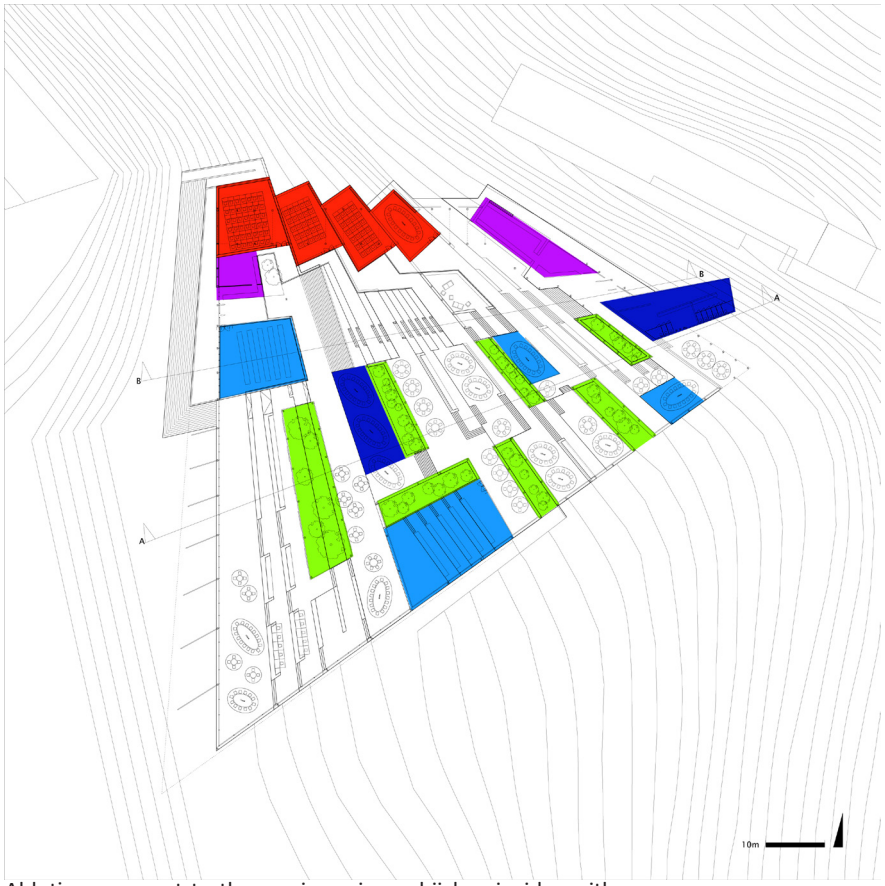
Offices are located at the top and bottom entrance of the digital library, controlling access



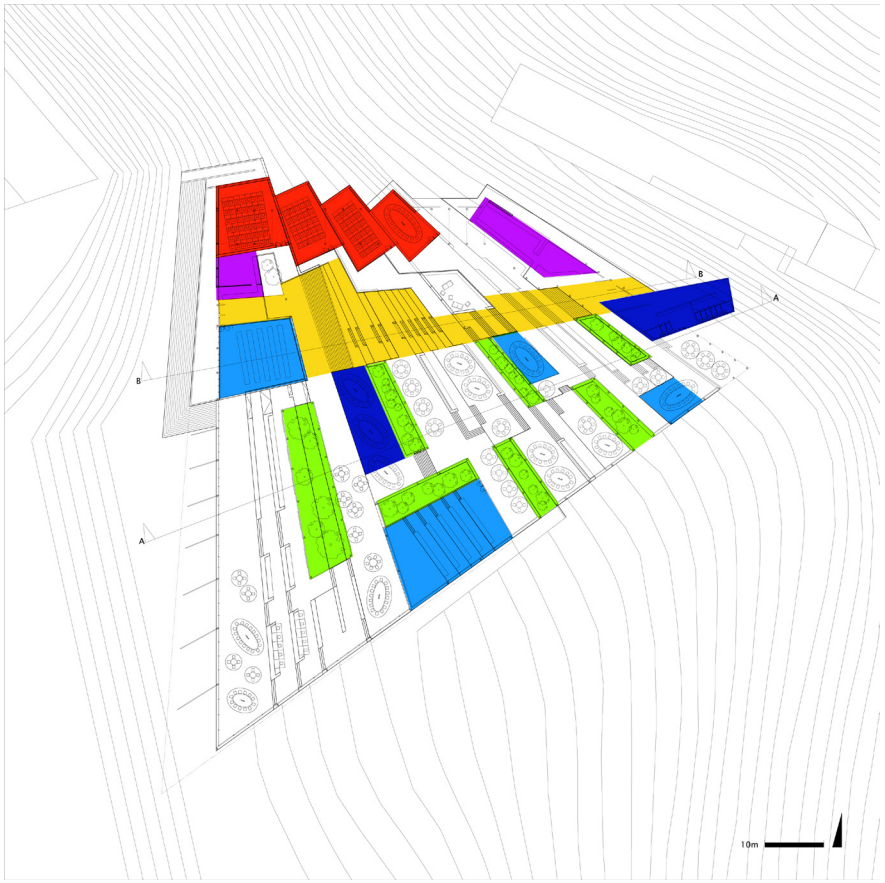
Planted light wells intersect the open platform spaces, allowing for privacy and bringing light into the deep space, as well as providing an accessible green social space, sheltered from the cold South Westerly.



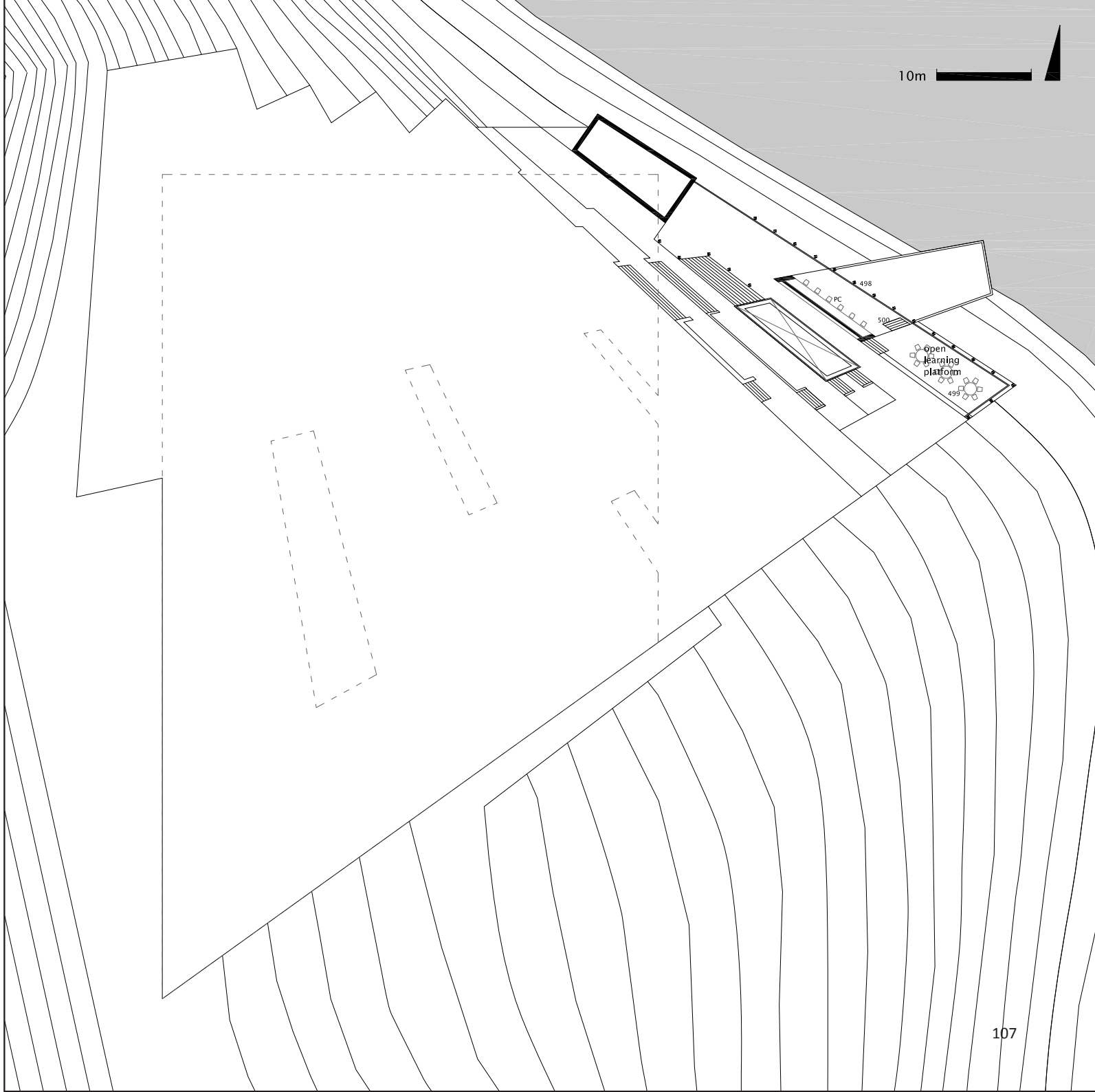
acoustically isolated spaces allow for exceptionally noisy groupwork activities, or may cater for activities that require silence, such as studying.



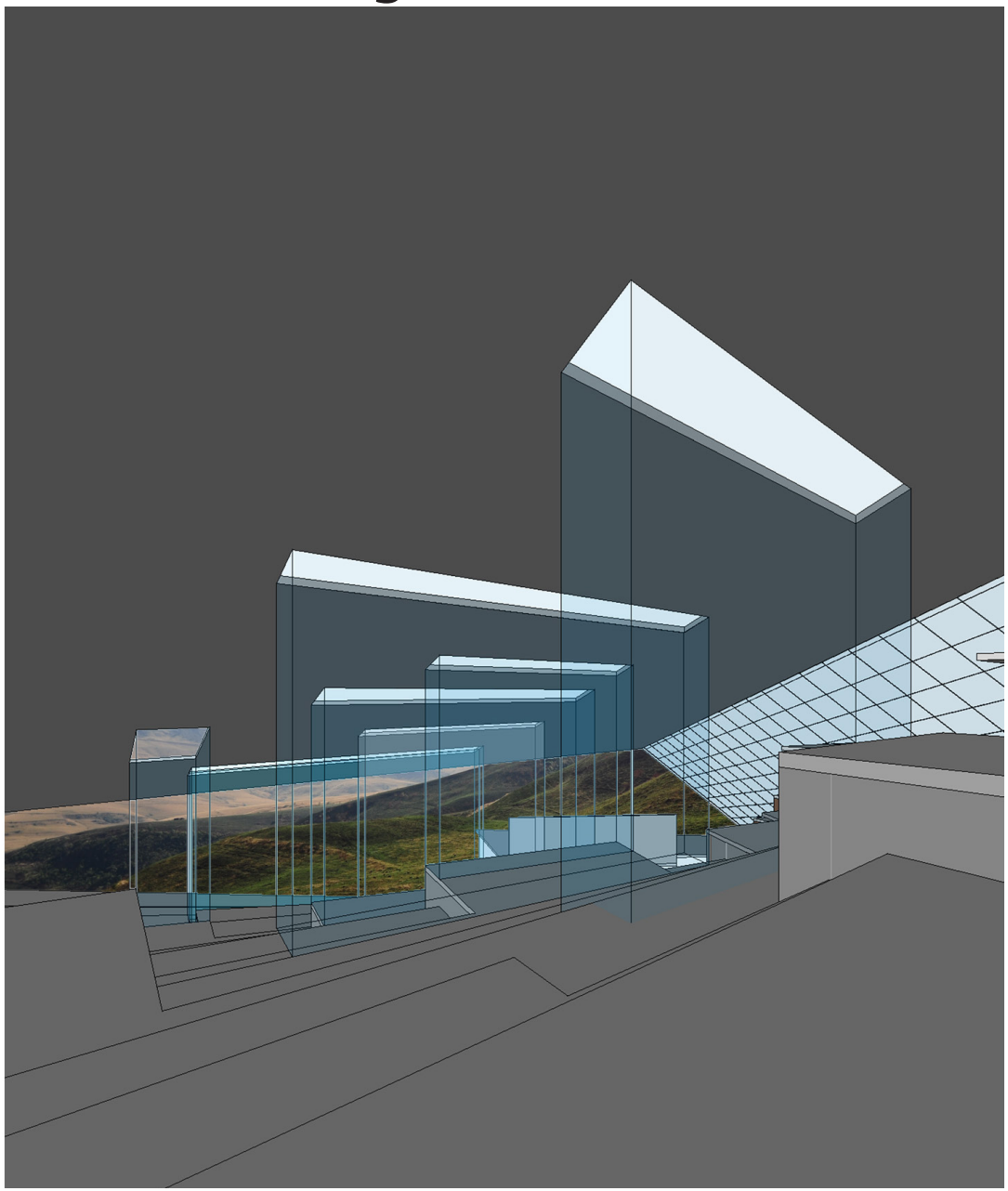
Ablutions connect to the service spine, whiich coincides with the ‘university path’.



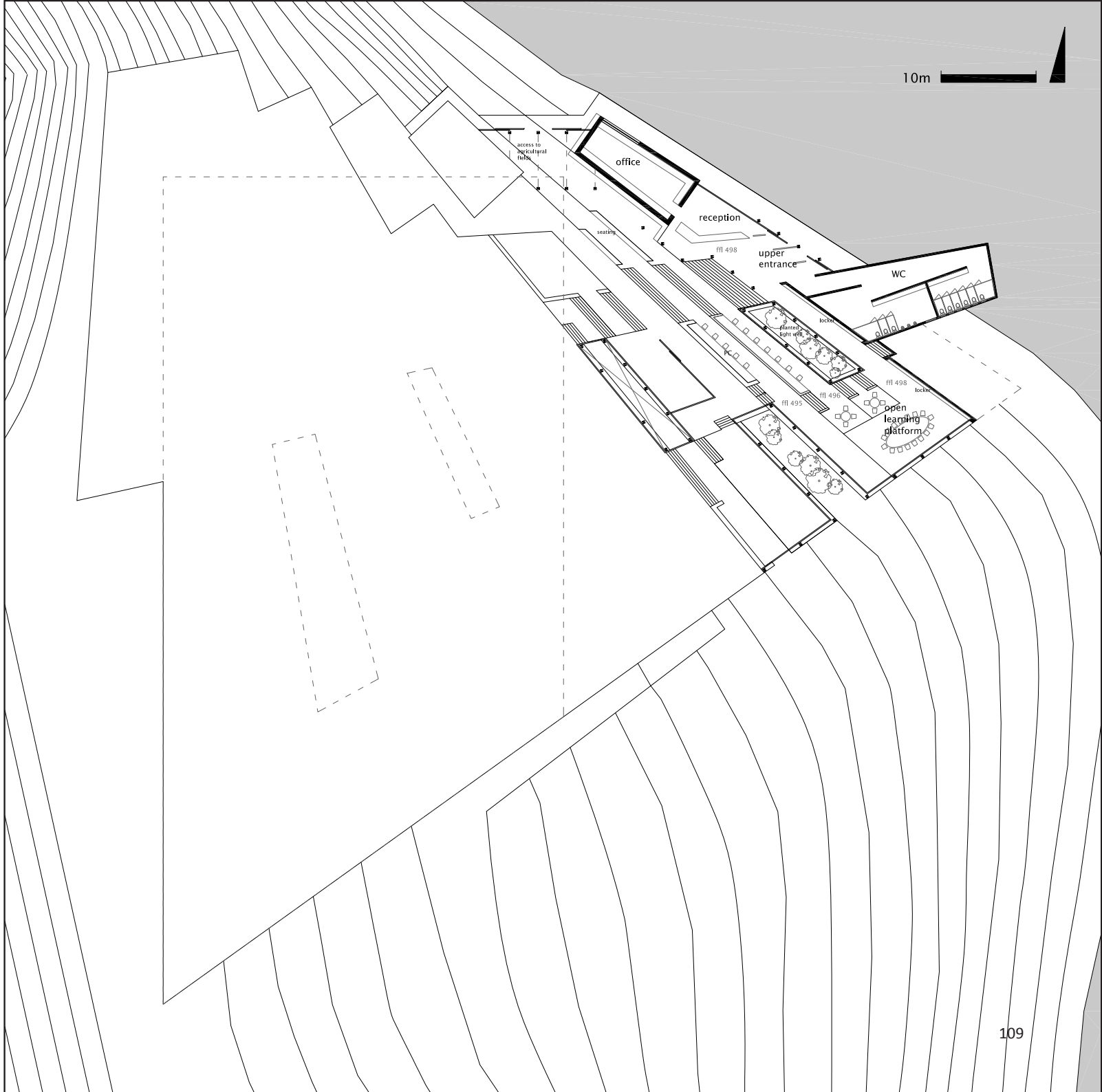
Platform 6: Law


10m
498
PC
500
Open
learning
platform
499

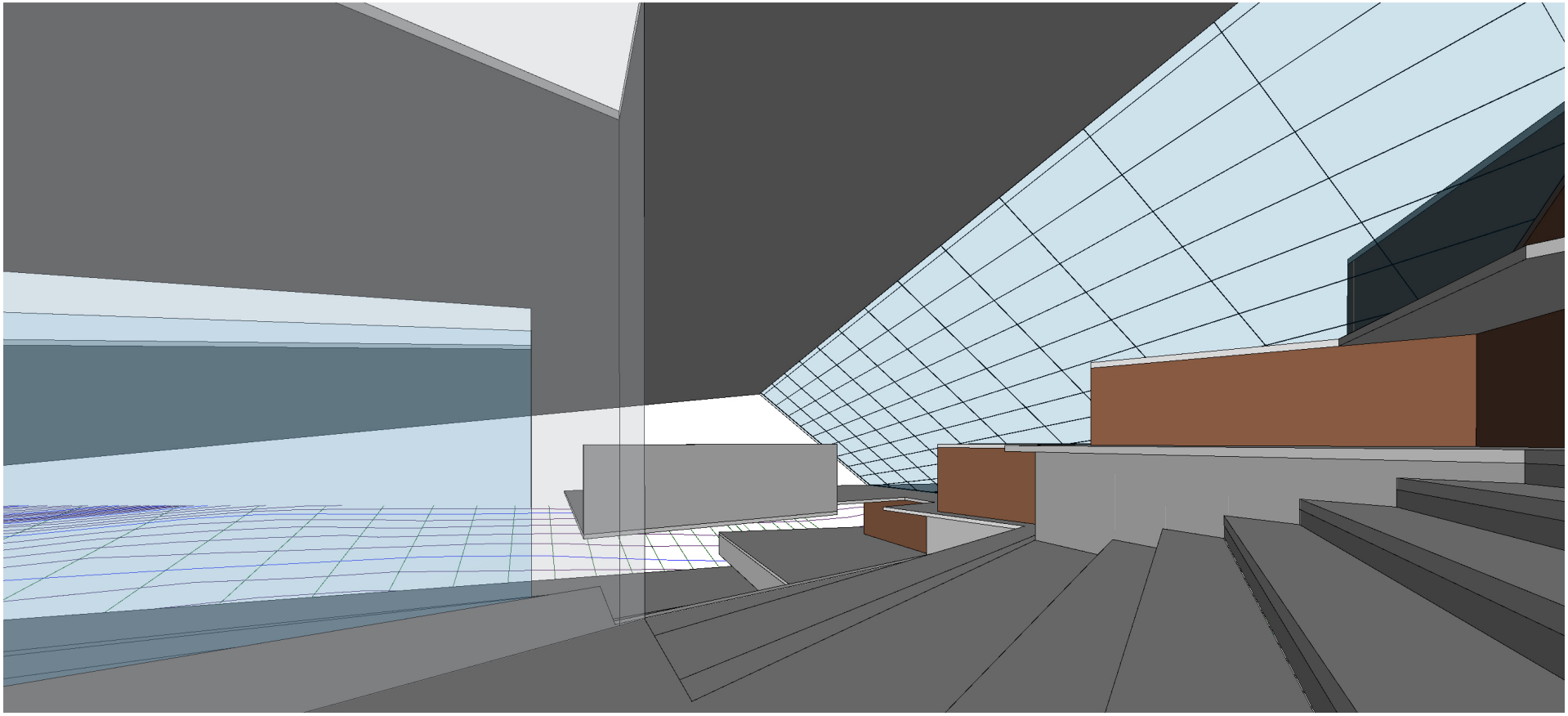
Platform 5: Agriculture

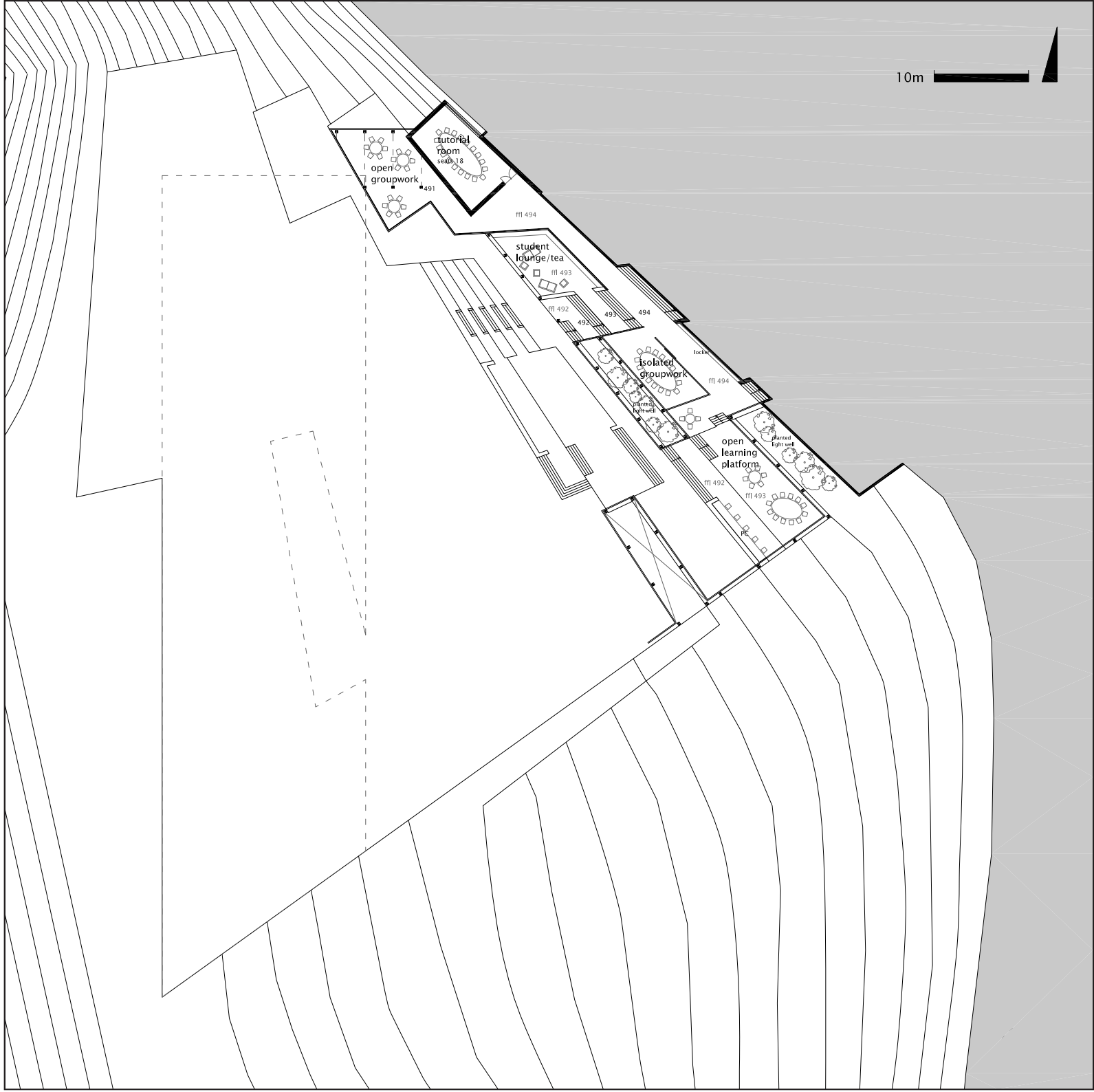


This platform connects to the university vegetable garden to the North.

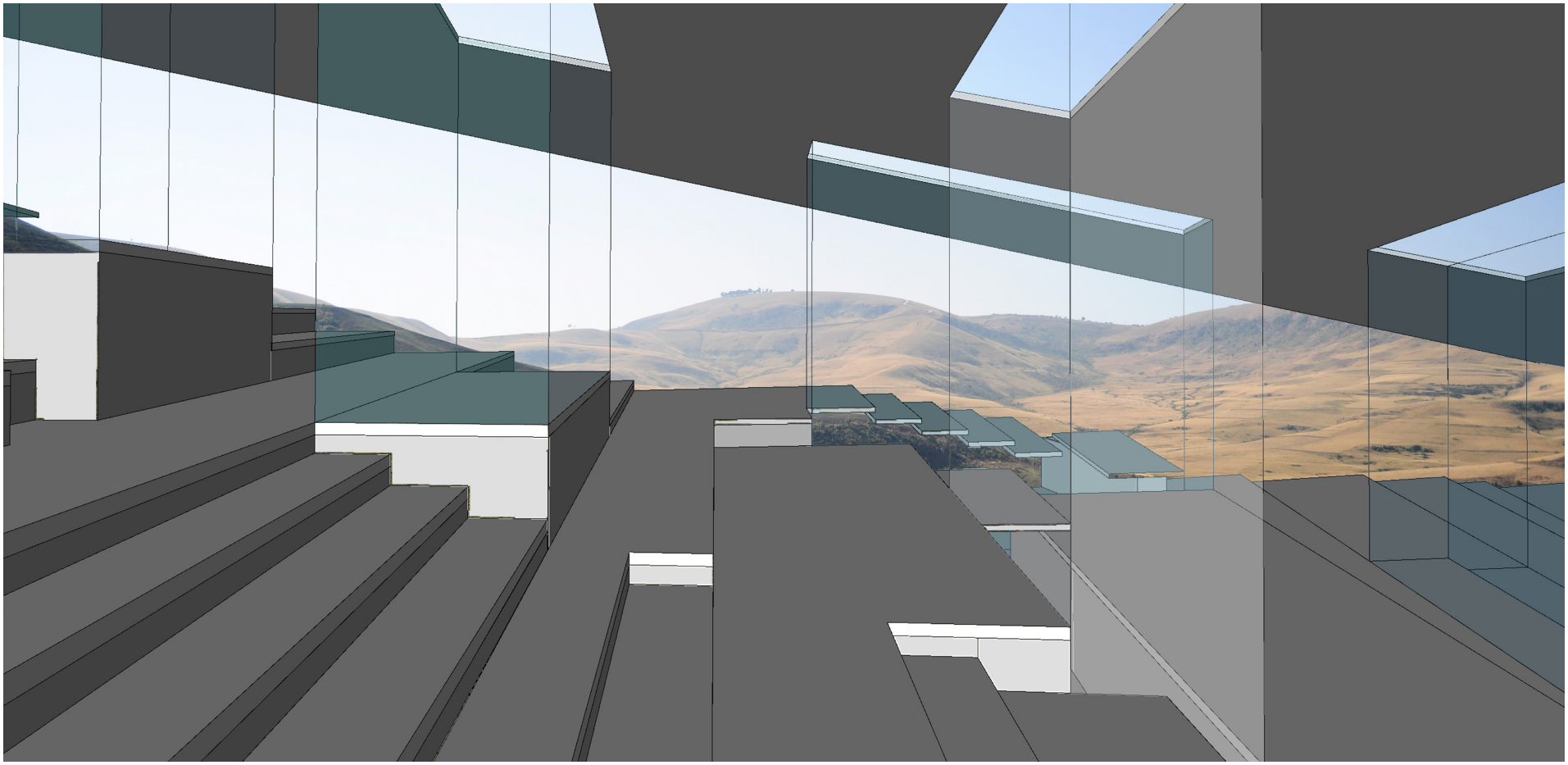

10m
access to agricultural fields
office
reception
seating
ffl 498
upper entrance
WC
lockers
planted light well
PC
ffl 498
lockers
ffl 496
ffl 495
open learning platform

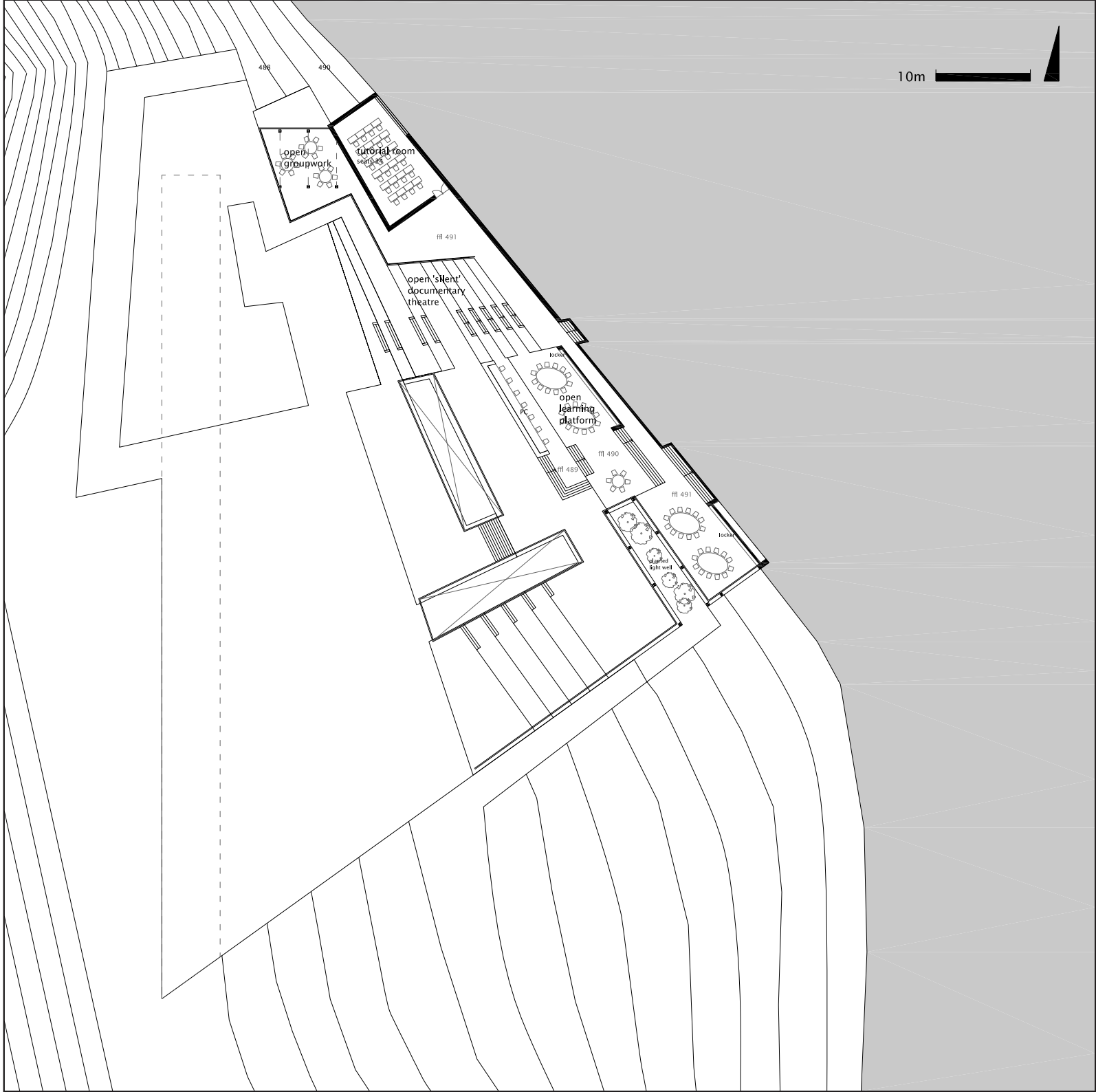
Platform 4: Science, Engineering and Technology



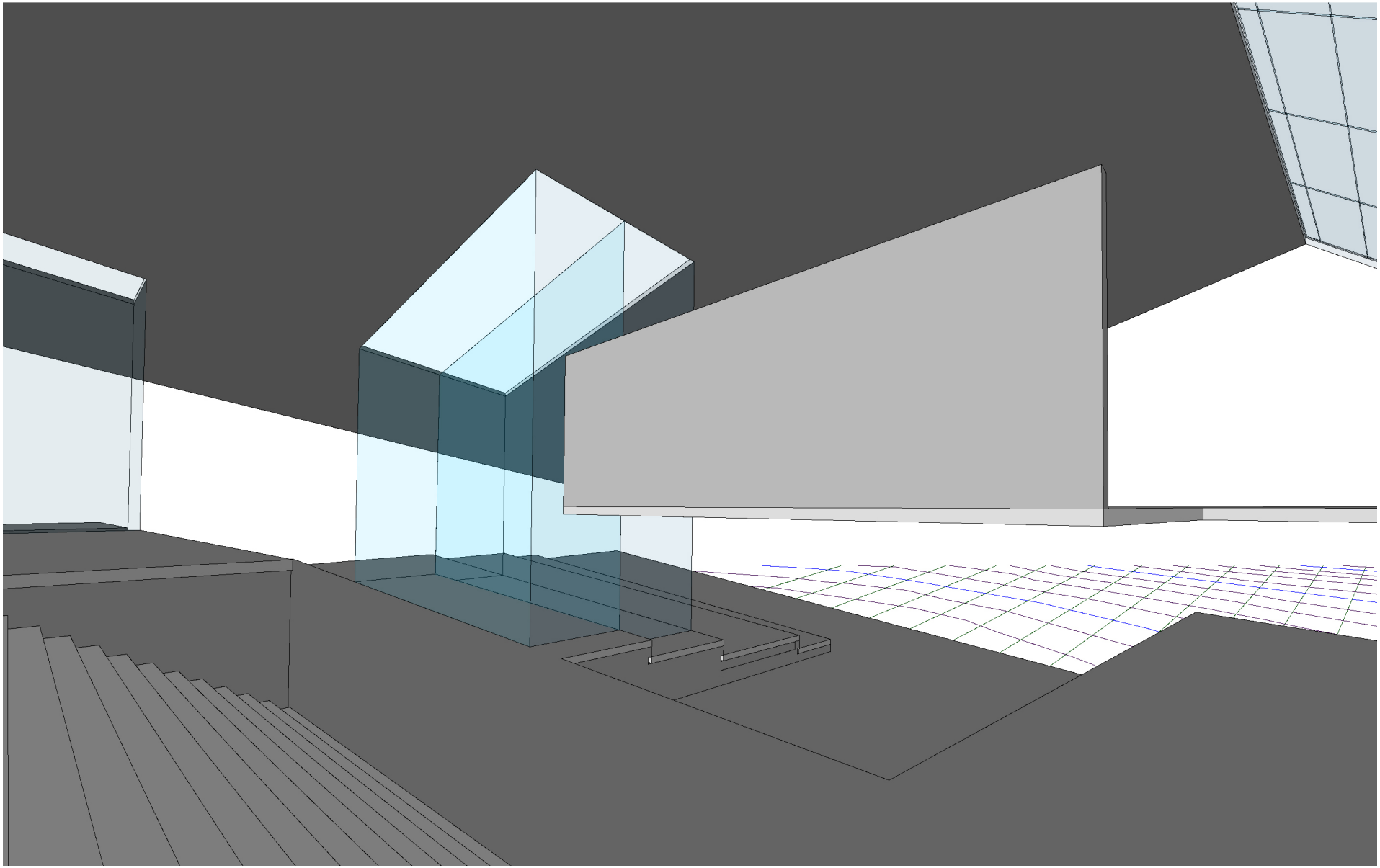

10m
tutorial room
seats 18
open groupwork
491
ffl 494
student lounge/tea
ffl 493
ffl 492
493
494
492
isolated groupwork
locker
ffl 494
planted light well
open learning platform
planted light well
ffl 492
ffl 493
PC

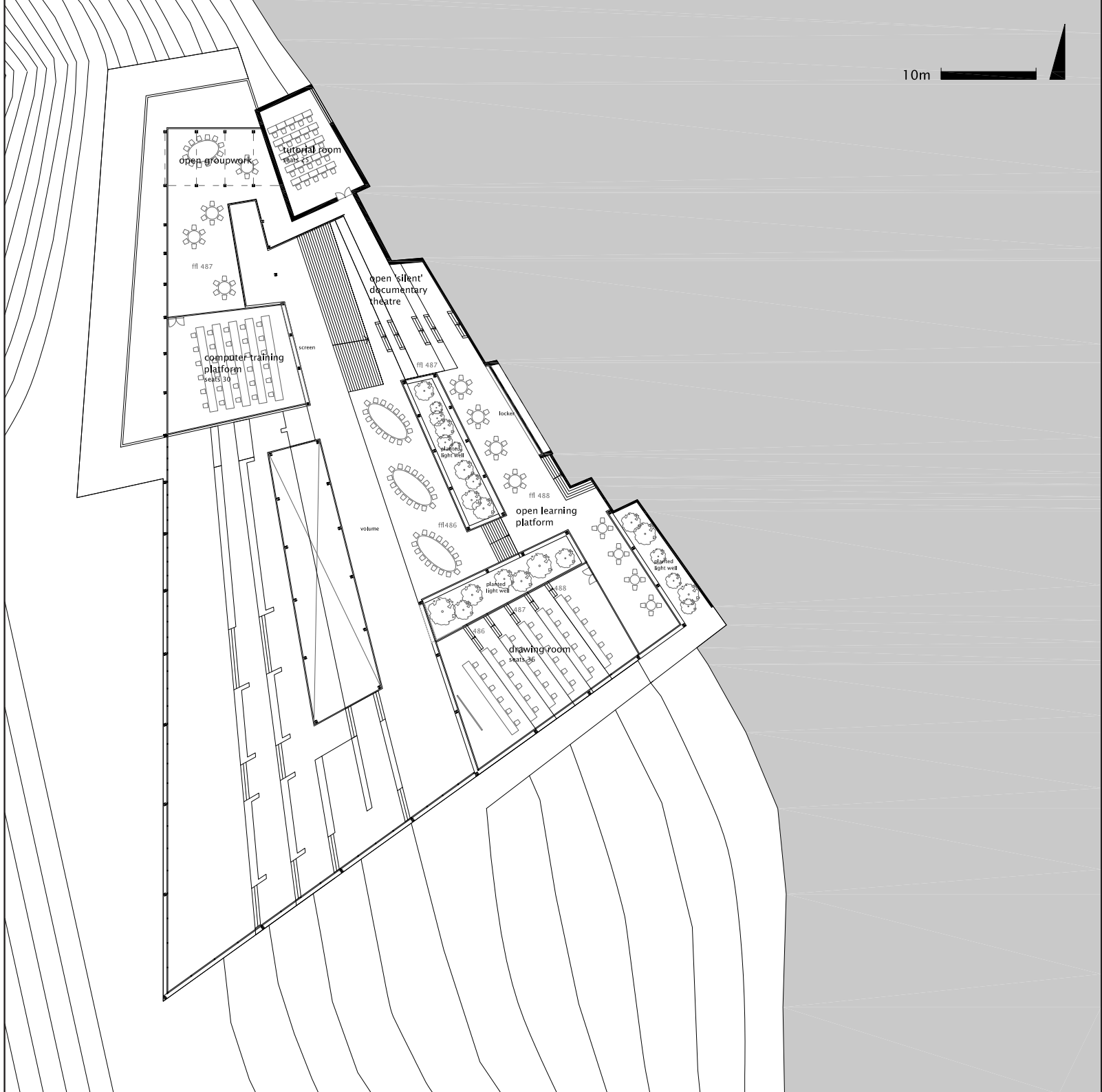
Platform 3: Economics



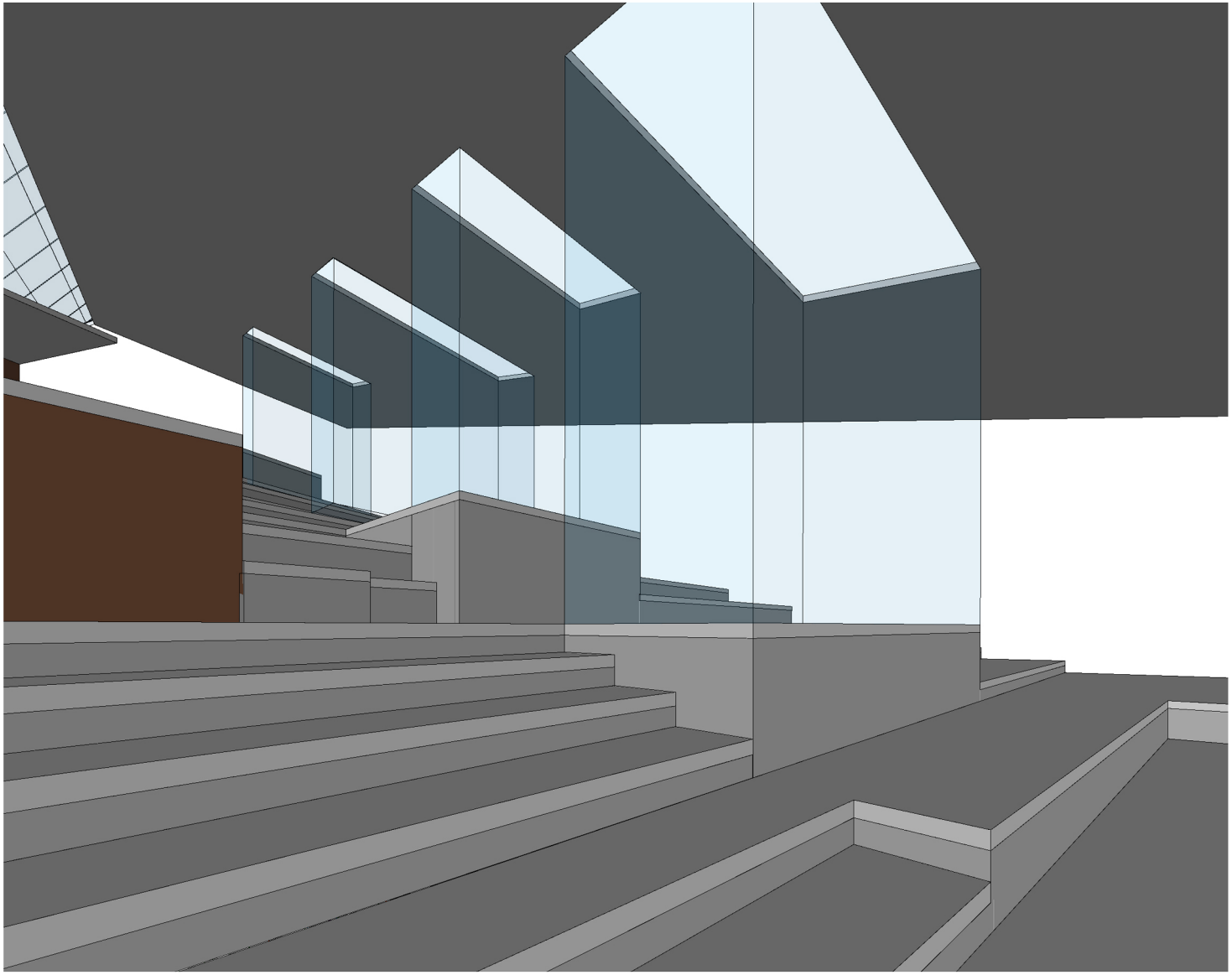

10m
488
490
open groupwork
tutorial room
seats 23
ffl 491
open 'silent' documentary theatre
locker
open learning platform
ffl 490
ffl 489
ffl 491
locker
planted light well

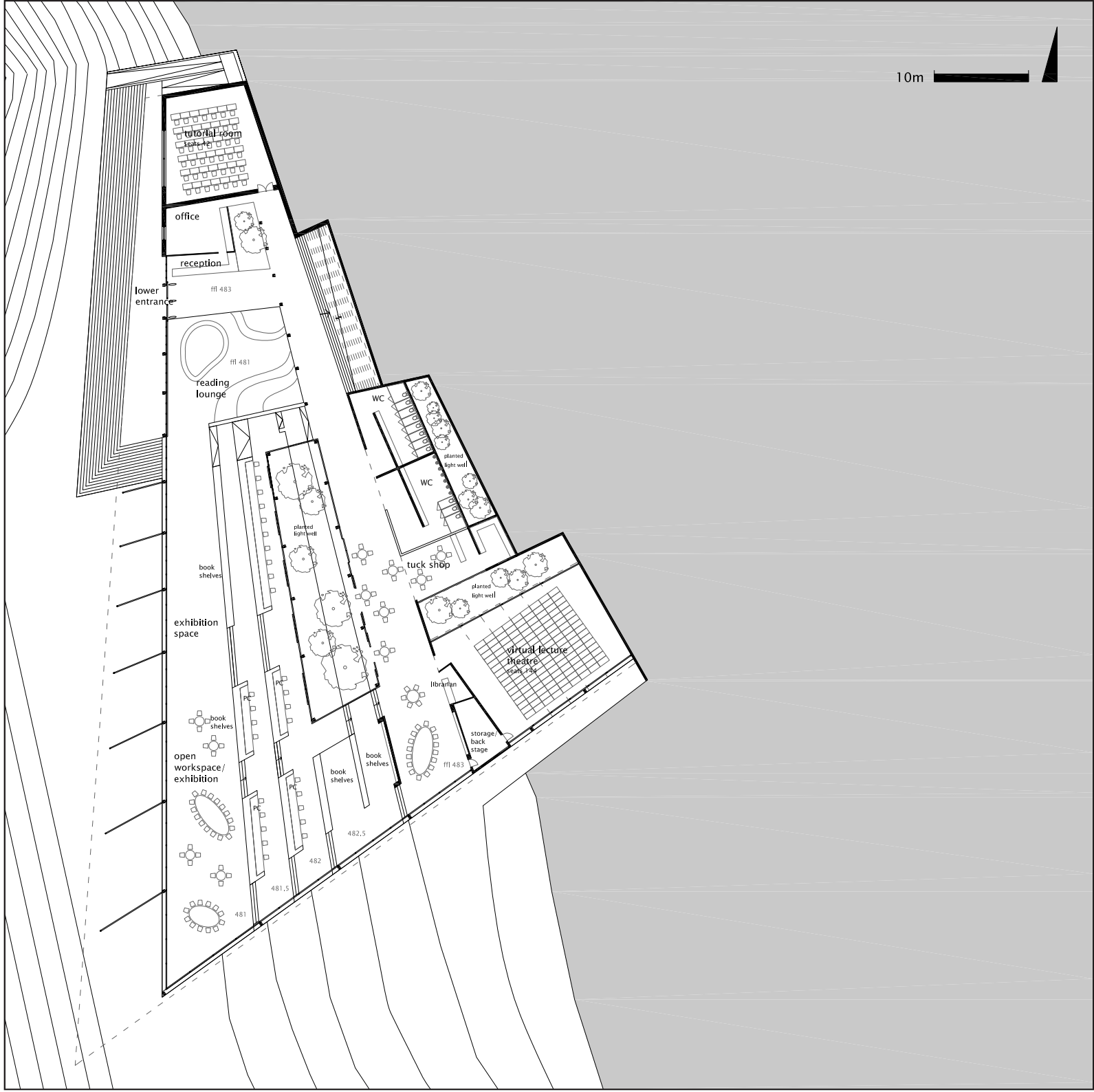
Platform 2: Humanities



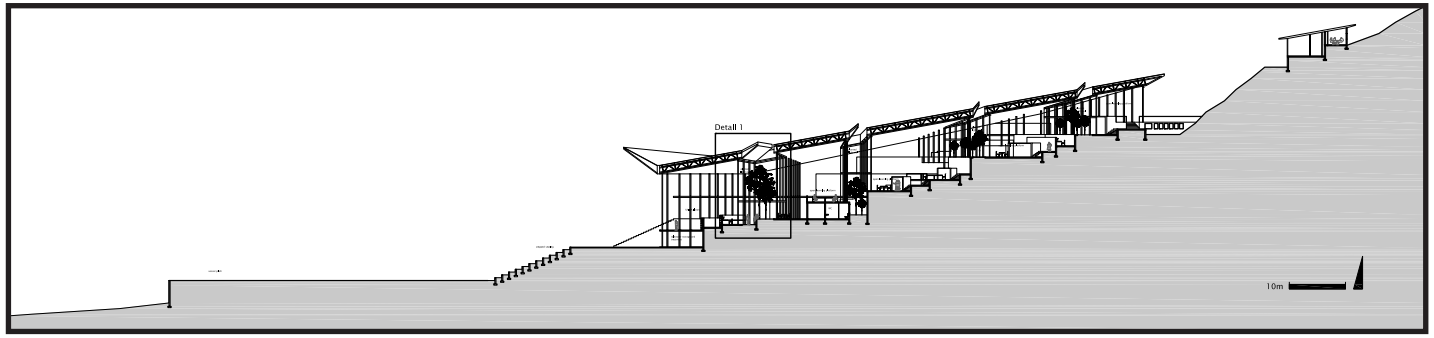

10m
open groupwork
tutorial room
seats 25
ffl 487
open 'silent'
documentary
theatre
computer training
platform
seats 30
screen
ffl 487
locker
planted
light well
ffl 488
open learning
platform
ffl486
volume
planted
light well
488
487
486
drawing room
seats 36

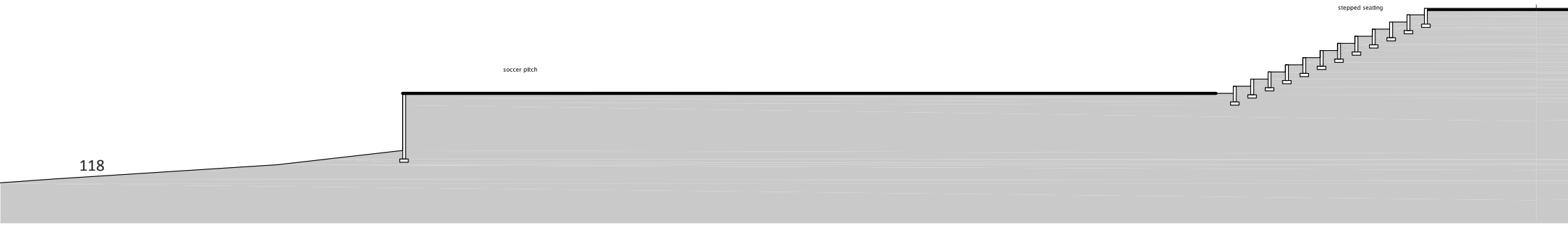
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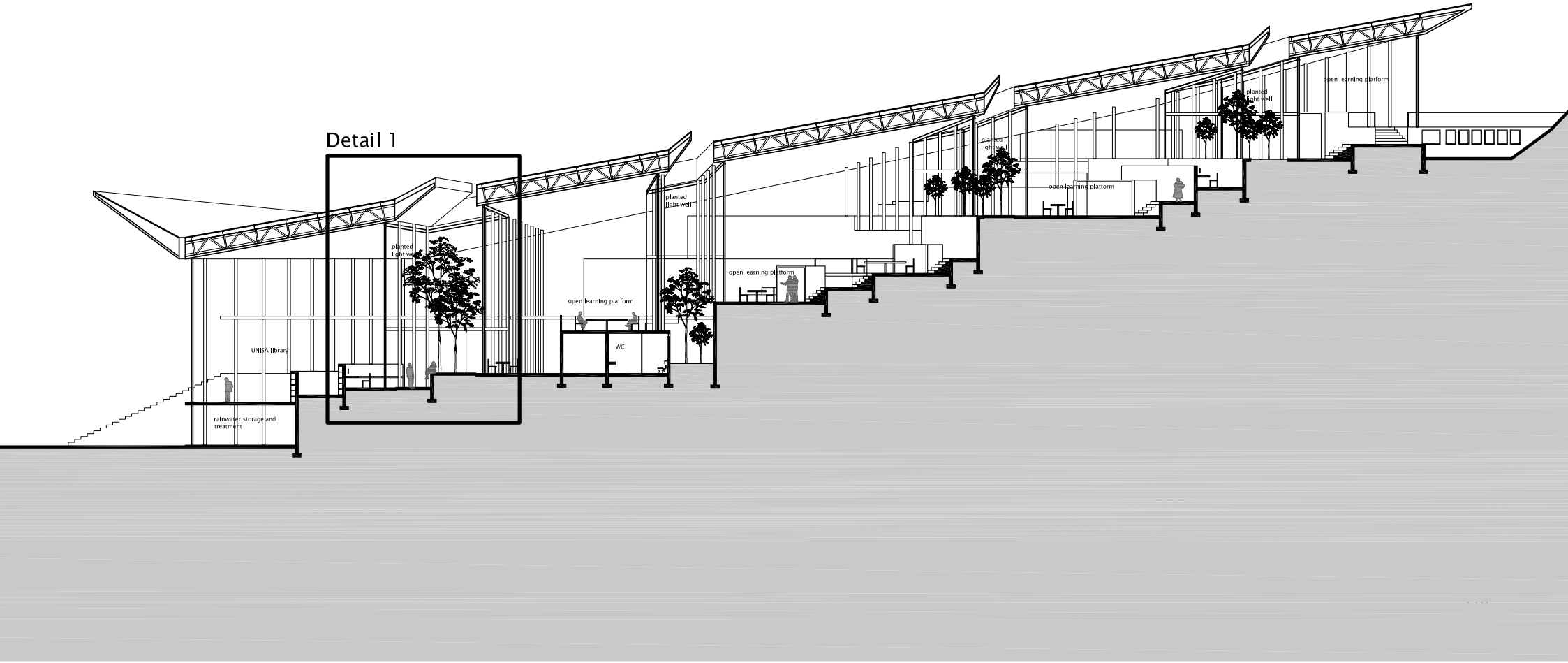


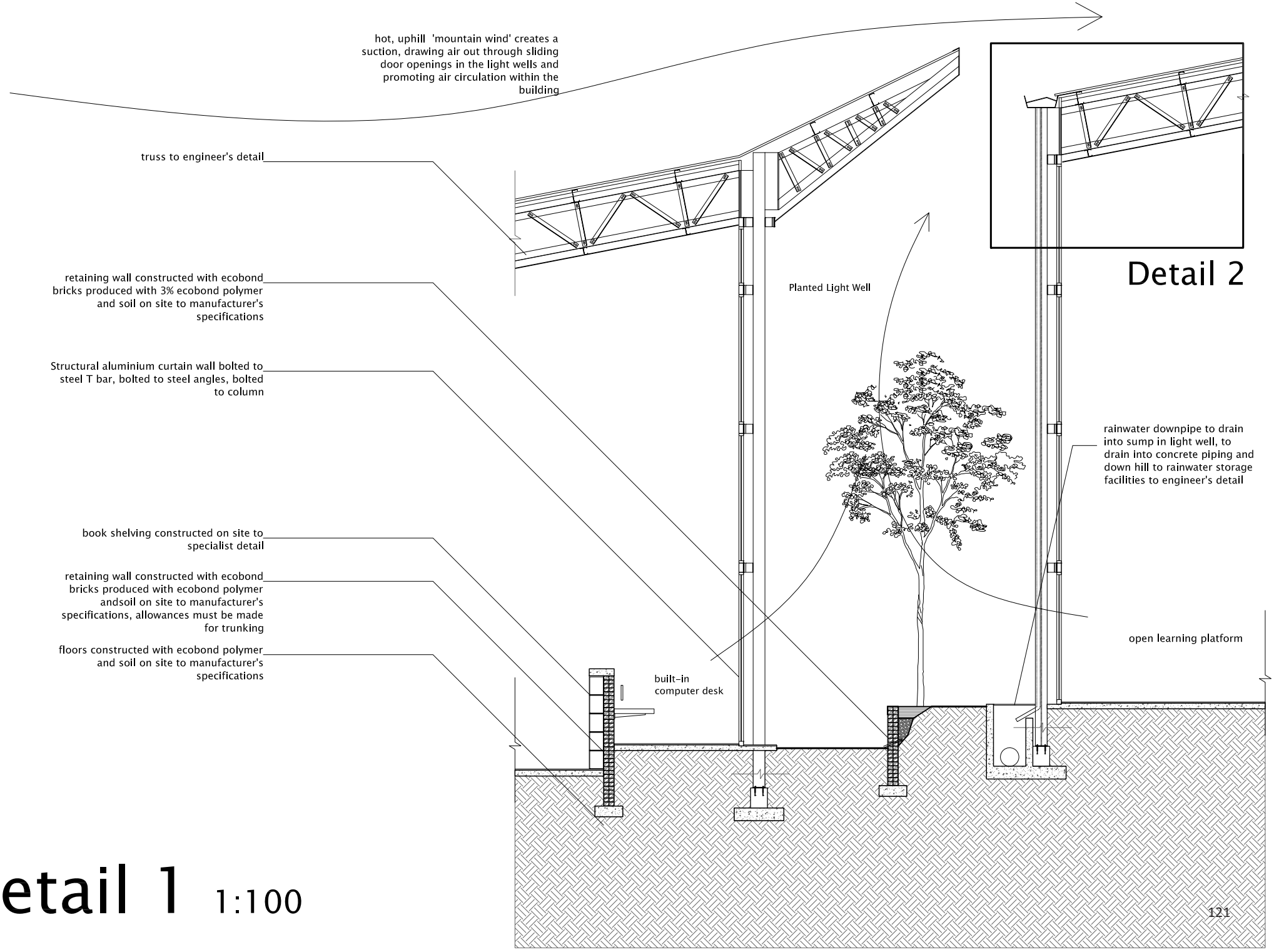

10m
tutorial room
seats 12
office
reception
lower entrance
ffl 483
ffl 481
reading lounge
WC
WC
planted light well
planted light well
planted light well
book shelves
tuck shop
exhibition space
virtual lecture theatre
seats 144
librarian
storage/ back stage
PC
PC
PC
PC
book shelves
book shelves
book shelves
open workspace/ exhibition
ffl 483
482,5
482
481,5
481

Section AA

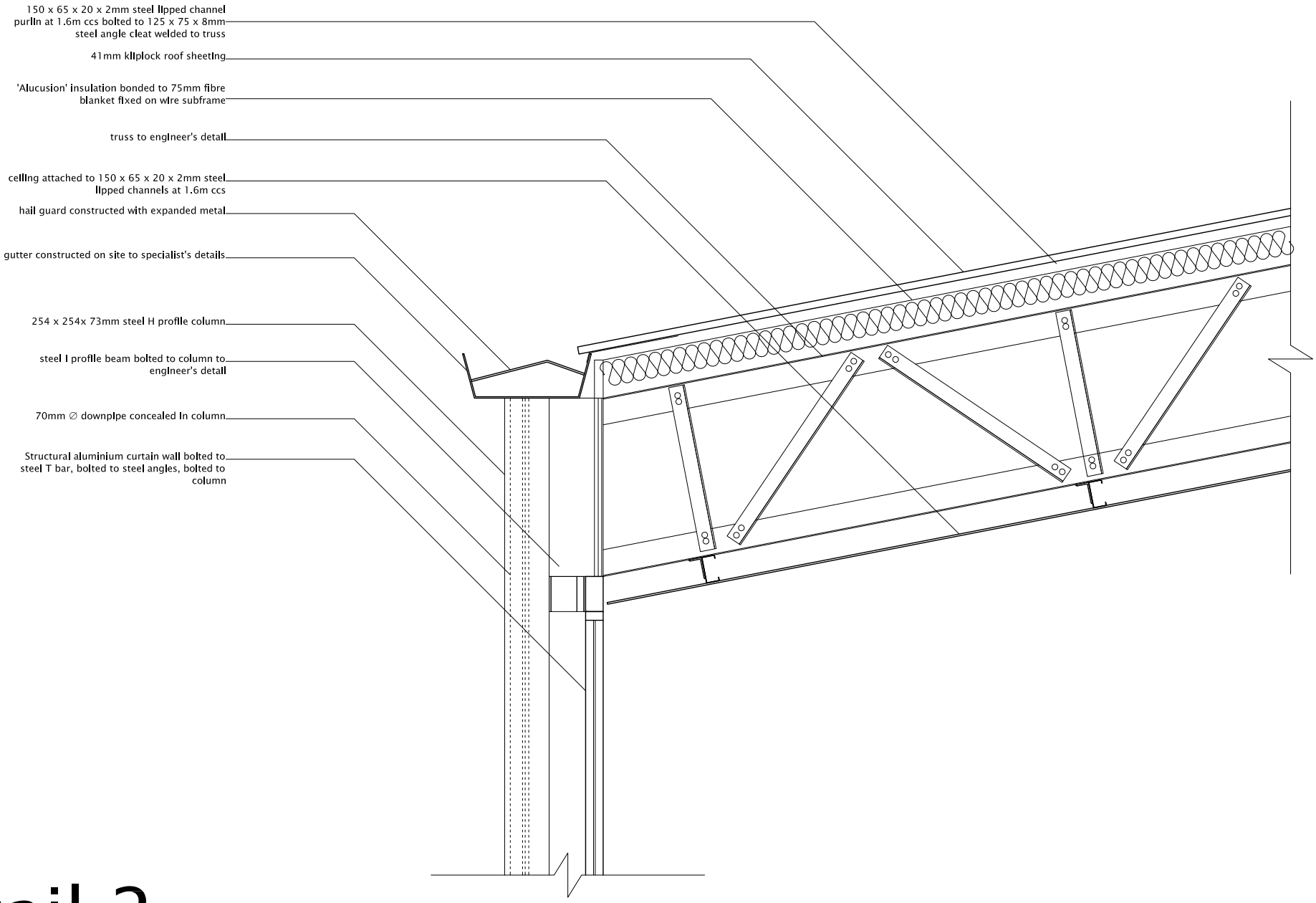





Detail 1
planted light well
planted light well
planted light well
planted light well
open learning platform
open learning platform
open learning platform
open learning platform
WC
UNISA library
rainwater storage and treatment



Detail 1 1:100


150 x 65 x 20 x 2mm steel lipped channel purlin at 1.6m ccs bolted to 125 x 75 x 8mm steel angle cleat welded to truss
41mm kliplock roof sheeting
'Alucusion' insulation bonded to 75mm fibre blanket fixed on wire subframe
truss to engineer's detail
ceiling attached to 150 x 65 x 20 x 2mm steel lipped channels at 1.6m ccs
hail guard constructed with expanded metal
gutter constructed on site to specialist's details
254 x 254x 73mm steel H profile column
steel I profile beam bolted to column to engineer's detail
70mm ∅ downpipe concealed in column
Structural aluminium curtain wall bolted to steel T bar, bolted to steel angles, bolted to column

Detail 2 1:30

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4. Appendices

Contents

Appendix A: The Rise and Fall of Development Theory

Appendix B: South Africa's Higher Education Landscape

Appendix C: Statutory Bodies in South African Education

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Appendix A: The Rise and Fall of Development Theory

(Unless otherwise stated, data in this appendix has been mostly extracted from 'The Rise and Fall of Development Theory' (Leys, 1996))

In his paper of 1997, 'The Politics of Development and Conservation: Legacies of Colonialism', Arun Agrowal asserts that,

"Development has been the watchword of the economic policies of most nations in the postwar period. It has successfully, and ubiquitously, colonized the imagination of intellectuals interested in human welfare...There is nothing in modern mentality comparable to it as a force guiding thought and behaviour."

Development, today, would seem to be largely concerned with the improvement of the quality of life of people in underdeveloped regions, as is evident in initiatives such as the Millennium Development Goals (MDGs) and the Education for all campaign, to be discussed later in this document. However, Development has always had a darker, competitive side fuelled by the economic interests of those with power and often tainted with a exploitation or, at the very least, a lack of concern for the people and the land in an underdeveloped region. As Agrowal points out, the notion of development has begun to increasingly come under fire in the last two decades, as most theories have been devised for the Third World from a Eurocentric (and, at times, patronizing and colonial) perspective, and have failed to acknowledge the complexities of the contexts in which they have been applied, leading to their failure. Conversely, a number of theories devised in reaction to the prior have also failed due to lack of practicality, criticising theories of the past and analysing underdeveloped situations without the goal of realising an actual path towards development. A new theory that is universal, relevant, realistic and that acknowledges the perspectives of those outside of the hegemonic power structure - the objects of development - is urgently required.

This section takes its name from the 1996 work of Colin Leys, 'The Rise and Fall of Development Theory' which serves as a 'stock taking' of the numerous theories on development that have been generated and implemented since the 1950s, analysing and criticizing the now outdated theories that can no longer hold for a world constantly changing in terms of national and global economics as well as social and political agendas and situations being played out. Here, I will present an overview of the evolution of development theory over the years, in order to place the Rural University project in a global theoretical and economic context, and then conclude with the implications for contemporary South African rural development.

1.1. Colonial Perspectives on Development

In 1931 former governor general of French Indo-China, Albert Saurrat, commented on the colonial situation:

"While in a narrow corner of the world nature has concentrated in Europe the powers of invention, the means of progress, and the dynamic of scientific advancement, the greatest accumulation of natural wealth is locked up in territories occupied by backward races who, not knowing how to profit by it themselves, are even less capable of releasing it to the greater circular current that nourishes the ever growing needs of humanity"

His comment does not stand isolated, but illustrates a general theme in writings of the time exposing the patronizing, self serving rationalization of the Western powers cloaked in the garb of a concern for progress and the greater good of humanity. Although an official theory on development would only emerge after World War II, development was, none the less, a popular topic of discussion during the colonial period between the 15th and 20th century, and a general trend in principals can be traced. Agrowal (1997) points out three notions prevalent in the colonial mindset: firstly, it was believed that tropical colonies of the West possessed the raw materials and natural resources necessary for progress, development and enlightenment of humanity; secondly, that the peoples inhabiting these areas were incapable of recognising the value of such resources and putting them to good use and, thirdly, that it was the duty of the Western nations, who considered themselves superior to the 'backward races' of the colonies, to provide the necessary techniques and institutions to unleash progress in these underdeveloped regions. And should this 'noble' venture require that the Western powers take control of the resources in question, and happen to benefit from them, this should not be cause for hesitation.

The elements of racism, arrogance and exploitation disguised with good intention associated with such a mindset are obvious, and we can be pleased to have put such a time in history behind us. However, as Agrowal (1997) points out, these colonial thoughts on development have not completely left us, and are still identifiable, if more subtle, in the theory that began to emerge following the period of decolonisation. However, such patronizing gestures can be recognised as but one of the many criticisms of development theories over the years.

1.2 The Emergence of Development Theory

Although Leys (1996) notes the key aspects of development theory present in the work of Marx and Hegel, Development Theory as most have come to know it can be said to have emerged officially after the Second World War. Leys (1996, p 7) feels that,

"It is not a great oversimplification to say that 'development theory' was originally just theory about the best way for colonial, and then ex-colonial, states to accelerate national growth in this international environment (governed by the Bretton Woods trading Regime.)The goal of development was growth, the agent of development was the state, and the means of development were these macroeconomic policy instruments."

Development theory emerged in order to deal with the issue of how the economies of European powers, especially Britain, France and Portugal (colonies that made up only 28% of the world's population), might be, "transformed and made more productive as decolonization approached" (p5). Having lost control of their colonies in the face of mounting hostility from the peoples they oppressed, colonial powers strove to enforce new policies to ensure that they maintained economic domination by enforcing laws for global trade that continued to exploit the post colonies.

The new theory that informed this was heavily orientated toward practical application, and thus avoided any philosophical considerations, as well as reflective self criticism (p5). Unlike the early theorists of rising capitalism, the Western theorists of development were not concerned with locating their theory in a broader conception of history (p6). All focus was on quick implementation. Consequently, most 'development studies' conducted up until the mid 1960's, were done so as if they had no historical or philosophical roots or presuppositions.

The theories, strongly influenced by the ideas of Keynes, the Marshal plan and general post war practices, were of a 'positivist orthodoxy', assuming that, "economic problems would yield to the actions of benevolent states endowed with sufficient supplies of capital and armed with good economic analysis" (p8). The first development plans, conceived of by economists, were written for, "both newly independent countries and the not yet independent colonies of Africa, based on the idea of raising rural productivity and transferring underutilized labour out of agriculture into industry." (p8)

The implementations of such theories in the Third World, theories with little sense of their historical or cultural contexts, and with interests lying in Western economic growth, had, unsurprisingly, modest results. The states in question were unresponsive to the 'positivist orthodoxy'. Critics on the 'left' began to question the rationale behind development theory (p7). Contention arose between those trying to maintain the traditional dogmas of early development theory, and those moving towards a more global, historically orientated theory aligned with that of Marx and Hegel. Most critics, however, continued to subscribe to a short term, practical, state orientated concept of development (often influenced by cold war partisanship) (p7).

1.3 Modernization Theory

In response to the question as to why developing states failed to respond to a rigid, positivist and ahistorical development theory, modernization theory was conceived. It was constructed by American sociologists and political scientists involved in research programmes established by the United States government in an effort to improve its capacity to act as a super power (p9). However, these experts were excluded from the process of policy-forming in the United States Agency for International Development (USAID) and the World Bank – two of the most important aid agencies in the world, and the theory can be seen as a critique on some of these policies (from which modernization theory was excluded), as well as on post war development theory; exposing the failings of the plans of development economists who monopolized these organisations.

The theory centered on the idea that development is achieved through a transition from 'traditional' to 'modern' forms of social organisation, a process which the industrialized west had already completed (p9). Practically, modernization theory amounted to the diffusion of modern values through education and technology transfer to the 'elites' of the periphery.

Theorists generally believed that modernization would bring with it democracy and economic growth, and were often concerned with the combat of communism. The failings of modernization theory are attributed to its close relationship with the United States, and this political preoccupation with the eradication of communism , leading to a 'silencing' of notions regarding the social character of development. The shortcomings of the theory were first attacked in the area where they were most apparent – Latin America (which had been independent for over a century, but was yet to enjoy the fruits of its independence that modernization theory had promised) by German-American Andre Gander Frank, employing the logic of 'dependency theory'.

1.4 Dependency Theory

Dependency theory took hold in the 1970's, as a topic of great interest in intellectual circles, especially amongst students in Europe and Third World countries, and thus appears as the first instance where the objects of development have had the opportunity to contribute to the subject. Academic drive lead the 'development community' to take on some of the principles of dependency theory in application, notably those of 'redistribution with growth', and the meeting of 'basic needs' (p12/13).

According to Leys,

Dependency theory inverted many of the assumptions of modernization theory. It saw metropolitan policy as maleficent, not beneficent; inflows of foreign investment were seen as giving rise to much greater interest and profit outflows; 'modernizing elites' were really compradores, or lumpen-bourgeoisies, serving their own and foreign interests, not those of the people; world trade perpetuated structures of underdevelopment, rather than acting as a solvent for them. Capitalist development ('development' now had a label, at least for 'left' dependency theorists) offered nothing to the periphery; the solution lay in reducing links to the metropoles and bringing about 'autocentric' national economic growth." (p12)

Development theory was exposed as a policy that simply ensured that those with power (the main centres, as well as the elites of previously colonized regions) maintained that power, and that underdeveloped regions would be kept in a state of subordination, at the whim of those dominating world trade. Dependency theory sought to investigate this.

Contentions existed between dependency theorists, but they had in common that, "Their critique of official development thinking rested fundamentally on a pulling away from the short term, ahistorical an uncritical perspectives of Western-produced, state orientated development discourse, towards the perspectives of a 'universal history' (p13). However, the theory proved unsuccessful, and failure of the theory can be attributed to ambiguities in its logic: dependency theorists tended to assume the availability of an alternative, more effective development path that aligned with their views. Such alternatives didn't

really exist. In addition to this (despite the fact that dependency theory was broadly accepted in sub-Saharan Africa by Africanists and most African Social Scientists), besides the Republic of South Africa, no countries had reached a level of development enabling the establishment of either a local 'national' capitalist class or a local labour movement. Even if a plausible alternative path for national development was identified, there was generally no modern social movement present that could lead the nation through it. Dependency thinking was thus never adopted explicitly in the formation of development policy in Africa (p14).

1.5 The Classical Marxist contribution to development theory

The ambiguity of dependency theory came under criticism in the works of classical Marxist thinkers of the left. For example,

"…in 1975 Geoffrey Kay showed that dependencistas who accused the metropoles of exploiting the periphery rarely had a very clear idea of what they meant by this" (p15)

Kay felt that the term 'exploitation' was often used loosely by dependency theorists, and, to explore Marx's notion of exploitation revealed that what was hindering development was not exploitation (the appropriation by the owners of capital of the surplus value produced by the workers), bat rather a lack thereof. (The greater the surplus, the higher the rate of exploitation – this did not refer to the inhumane exploitation of the workers, who might actually be paid very well, as in the case of the highly paid workers of the United States automobile industry).

Despite the objectivity of their stance, and its acknowledgement of a broader historical context, problems emerged with Marxist approaches to the topic. They implied that capitalist development on the periphery was necessary before socialism could take hold, in some cases implying that capitalist development might soon develop the whole world, which most considered highly unlikely. The theorists were also attacked for being 'Eurocentric', applying notions such as that of a working class in a Third world context, where such a social class didn't exist, and neglecting to consider the implications of ethnicity (p16). The theories were long term, and seemed to depend on the rise of capitalism in the Third World such that the people could struggle against it. No immediate line of action to improve the situation was apparent.

1.6 A Neo-liberal Position on Development

At the end of the 1970s, a neo-liberal revolution occurred in the metropoles that filtered into development theory (p18). It offered a more plausible political stance on development, given the reality of global economics at the time. The neo-liberals did not think it likely that socialism could succeed capitalism, and were only interested in accelerating its advance in Third World countries (p17).

The main argument of the neo-liberals centred on the idea that inflated public sectors hindered development, and that,

"Governments were part of the problem, not part of the solution; they were inefficient and often corrupt and hence parasitic, not stimulators of growth. The solution was to privatize the public sector, reduce the scale and scope of government spending and give up all policies, from exchange rate controls to subsidies and redistributive taxation, that altered any prices that would otherwise be set by the impersonal forces of the market."

According to John Toyye, the success of the neo-liberal argument lay in the readiness to openly criticize Third World governments, an act which would have jeopardized relationships between these governments and members of the 'development community' in the past, and which was thus avoided. Neo-liberals pointed out that these governments were never exclusively dedicated to promoting the development goals to which they were committed (although dependency theorists had noted this before) (p18).

Although these observations were justified, they did not sufficiently serve to justify the neo-liberal's claims concerning the benefits that would result from an unrestricted trade. According to Leys, the illustration of the shortcomings of previous schools of thought on development was not the key to the success of neo-liberal theory;

"What made possible the triumph of neo-liberalism in mainstream development thinking was material, not ideal: the radical change in both the structure of the world economy and the management of the world economy that had begun in the 1960s, and which finally seemed to offer the possibility of creating for the first time in history a truly unified global capitalist economy – and one regulated, if at all, only by institutions reflecting the interests of transnational capital."(p19)

Social-democratic parties and labour movements had no choice but to succumb to the new capitalist system, despite resistance, and the development community followed suite.

1.7 Theoretical Response to a changing Global Economy

By the end of the 1980s, the international economic situation had changed fundamentally, and development policies that had seemed logical between 1945 and the late 1960s no longer held. World Trade, as a share of world output, had increased from 7% gross domestic product (GDP) in 1945 to 15% in 1988, and foreign investment had risen to account for a substantial amount of total investment in most major economies. Bank and non-bank financial institutions began to not only finance world trade, but to deal in currency exchanges and currency and commodity futures such that the governments of even large economies had little influence over the value of their currency through intervention in the currency markets. The control of capital movements through deliberate policy decision had all but been abandoned, and many countries found themselves in considerable debt: responding to intensified competition with other industrialized countries, the USA began to borrow abroad, becoming the world's largest debtor nation, and was eventually forced to give up its commitment to meet its dollar obligations in gold in 1971. In 1973, the Bretton Woods system of fixed exchange rates was completely abandoned, opening up new opportunities for international currency speculation and leading to a period of extreme economic instability. Led by the UK and the USA, the governments of industrialized countries abandoned

Keynesian economic policy, either by choice, or, as was the case with France, because they had no option but to align with international practices in order to survive in a global market. Deregulation and privatization led to high interest rates and, despite any attempts to restore economic growth rates, the average rate of growth in industrialized countries fell dramatically, with developing countries inevitably following suite.

Developing countries in Asia, Africa and Latin America found themselves the most vulnerable they had been since they were first colonized, with their economies the least well placed to thrive in a global market. The overall share of the Third World in world trade fell substantially as the export of primary commodities (other than oil) became less significant in the world market. With stagnating economies and per capita incomes declining, developing countries responded by borrowing from abroad until their inability to service debts led them to seek aid from the International Monetary Fund (IMF). The IMF and World Bank then set conditions for further their further support that reduced government intervention in their economies which ultimately did little to improve the situation, while the debt-service burden on 'low income countries' continued to rise (p22).

The international economic landscape was changing and, as Leys (1996, p23) suggests,

"The era of national economies and national economic strategies is past – for the time being at least. With capital free to move where it wishes, no state (and least of all a small poor one) can pursue any economic policy that the owners of capital seriously dislike. Economic planning, welfare systems and fiscal and monetary policies all become subject to control, in effect, by the capital markets, signalled, in the case of the Third World countries, by the conditions attached to IMF and World Bank lending."

All governments, of countries both industrialized and developing, are now at the mercy of temperamental capital markets, and Third world countries have been left the worst off as structural adjustment policies that should have reformed inefficient agencies only served to emasculate them, and governments have been rendered incapable of managing domestic economies in order to accelerate growth, and 'catch up' to the First World. As Leys notes, " It is hardly too much to say that by the end of the 1980s the only development policy that was officially approved was not to have one – to leave it to the market to allocate resources, not the state" (p24). And, in the absence of any policy, many have accepted that much of the Third World is more likely to regress than advance in the unregulated system that forms the current global economy, as not every country has the capacity to compete in the market, leading to decline and collapse into anarchy and civil war, as has been the case with Uganda, Mozambique, Somalia, Angola, Liberia and Rwanda.

While development theory was born out of the unique economic climate of the 1950s and 1960s, it could not survive outside of it, in the throws of unregulated capitalism, and was ultimately faced with the end of its own raison d'etre. By the end of the 1980s, the full significance of this began to be acknowledged in the theoretical literature, and although drastic changes in the policies of the World Bank and other development agencies in the years preceding provided an early forecast: early visions of 'catching up' had been abandoned in favour of redistribution with growth (which did not suit the more privileged faction – the 'peripheral elites' – of the underdeveloped world) and, ultimately, the far more modest goal of meeting basic needs became the major focus (p26). In the 1990s, however, five main lines of theoretical response to the situation emerged:

Development Studies

One response that could be termed 'development studies', identifies the problem with development theory as that of theory itself, seeking to overcome a theoretical 'impasse', reductionism and generality prevalent in older policies, with a goal of achieving a new theory that, based on extensive fieldwork and research, is sensitive to the great diversity of situations in the Third World and avoids the reduction of complex, locally specific gender and other relations to Marxist based relations of class. Such a theory would also strive to be practically relevant, focusing on the concerns of those involved with development work. This new theory foregrounds issues of women, religion, ethnicity, local level activity and culture, which were previously only secondary concerns. The success of this kind of theory lies in its grounding in micro- and meso- levels of activity, the acknowledgement of a variety of factors influencing development, and the setting of high standards in the research of such factors. However, its shortcomings lie in the fact that the rigorous study of local situations will not necessarily spontaneously manifest a successful universal theory – development studies fail to acknowledge the political interests associated with development policy, and the motivation behind development initiatives and, through a criticism and avoidance of the grand theoretical 'meta-narrative', the theory neglects to consider the macro-situation and the powers that surround development theory.

Eclecticism in the Development Community

Secondly, Leys (p29) identifies a typical kind of eclecticism in the development community, exemplified by theorists such as John Toye. Toye criticizes both a neoliberal approach to development, as well as the dogmatic theories to which neo-liberalism responded, placing himself on a sensible, reasonable middle ground between the two, from which he criticizes global modernization, and advocates managed capitalism and the adoption of a view on development through the eyes of the poor. However, he fails to justify such notions, which he almost seems to bring down to common sense, and which Leys suggests might could be described as little more than traditional notions of Western charity. Toye seems to make bold criticisms, and almost romantic suggestions, with little rigorous justification.

Dependency in the 1990s

Thirdly, a new take on dependency theory was adopted in the 1990s. While the early premise of dependency theory was to explain underdevelopment on the periphery as the self perpetuating effect of metropolitan capital, development in countries such as China and India shows that such dependence can be overcome. Increasing interdependence amongst industrialized countries also shows that dependence is relative. However, the core idea of dependency theory which centered on the dependence of small, ex-colonial economies on the powerful economic interests and states dominating world trade is still valid today, and thus a contemporary approach to dependency theory has been adopted. A notable theorist on the subject is Andre Gunder Frank who, in his autobiography, critiques his own work, saying that, ultimately, he felt that dependency theory was devoid of any convincing alternative idea of development, and that the whole concept of national development (the key concept in development theory) was no longer tenable in the emerging global market: third world development within such a system was impossible (as debt servicing meant that third world countries can never really 'catch up') and, ultimately, the only worthwhile object of study is 'world development', where the agents bringing about development are particular groups or classes with goals based on the effects of world development on

the geographical region in which they live – a kind of development that can be traced throughout history. In such a system, regions and peoples temporarily assume leading and hegemonic central/core positions of social and technological development, and power shifts, accompanied by times of crisis marked with intense competition for leadership. Frank points out that this central core has shifted around the globe, from Asia, passing through China, Mongolia, India, Mesepotamia and Egypt, on to Western Europe and then across the Atlantic to North America, and is currently shifting towards Japan. Thus, Frank suggests an approach to development from a holistic, world view, acknowledging the core of hegemonic power and its relationship with the periphery, and pointing out that the pursuit of national development and the eradication of dependence is a senseless task if one does not consider the prior. Other contemporary dependency theorists investigate the factors that have enabled countries that have achieved substantial development, in order to come up with criteria for development in other countries. Ultimately, the notion of dependency still holds, but dependency theory of the 1990s differs from the earlier theory in that emphasis is placed on the task of devising a development path, which early dependency theories were unable to envisage.

New Institutionalism

The fourth line of thought that Leys Identifies is 'new institutionalism', which is concerned with rational choice: the central idea is that an efficient economy can be built on a set of institutions that permit individuals to benefit personally from activities that will also serve the (material) interests of society as a whole. However, such a theory tends towards reductionism, making generalizations that cannot hold in every case. It also tends to overlook the importance of ideology and external factors that influence collective action and institutional motives, thus failing to acknowledge the complexities surrounding the success of certain institutional activities. The theory contains some valid points, but, ultimately it does not have the potential to evolve into a complex general contemporary theory on development.

A Post-Structuralist Approach

Finally, the fifth theoretical approach of the 1990s that Leys identifies is one that abandons the construction of a theory for application altogether, and that prefers to observe a situation rather than move to change it. Jean-Francois Bayart is a notable theorist in this vein, who has undertaken the investigation of the 'historicity' of Africa – taking on a post-structuralist stance, he asserts that the African masses are not passive victims of external forces but that they make their own history. However, the history he describes seems quite negative with little hope for improvement, and his stance seems somewhat confused, which Leys attributes to the fact that this kind of theory avoids a practical purpose, and lacks a clear concept of its audience, simply seeking to describe a situation without any motivation to act upon it, which Leys considers its downfall.

1.8 Call for a New Theory

Having explored a number of theories which, as he notes, tend often to be subjective and partial, Leys concludes that development theory needs to be revived as a field of enquiry, investigating the contemporary dynamics of the current capitalist world order, with, 'imperative policy implications for the survival of civilized life, and not just in the ex-colonial countries.' Development theory is necessary and, although the construction of such a theory that is relevant on a global scale might be a daunting task, it is necessary, and achievable (such a theory could be comparable to the large scale theories of Hegel and Marx). Of key concern are the questions: for whom, for what goals and by what means can a useful theory on development be devised? How can a universal theory have practical value for an individual project of development? Leys suggests that a broader, abstract theory be devised that can be interpreted and adjusted to form theories at lower levels of abstraction to be used for development within states, for organizational groups within states and for a variety of non-state agents. Such a theory must acknowledge the scope of the task of development, and the capacities of the actors for whom the theory is written, especially in particularly underdeveloped countries with little hope for improvement.

Ley's proposed theory seems to move away from positivist orthodoxy and unrealistic goals, seeking a move toward improvement with a theory that is integrated, relevant, practical and always conscious of the difficulties involved. It also seems that, in order to devise a successful theory, it is important to first investigate the local situation carefully, acknowledging the rich variety of factors that have implications on development, and then to consider the situation in a global context. Key to the success of a theory put into practice is the acknowledgement of all the role players in development: the policy makers and their intentions, the actors carrying out development, and the objects of development who have rarely, in the past, had much opportunity to give their input.

1.9 Implications for Contemporary South African Rural Development

As an arguably Third World country in sub-Saharan Africa, and a former colony of Britain, South Africa has most definitely experienced the effects of the various development theories implemented over the years, whether directly, as they filtered through government policy, or indirectly, in a world where no country can afford to operate in isolation any longer. Thus, it would be of great benefit of the development community of South Africa (including those involved in rural development) to be conscious of the downfalls of these theories, such that new, successful policies might be devised.

The failures of theories of the past seem to be threefold: often, theories have been written from the perspective of the First World, the central core of hegemonic power, and have been written such that the First World would benefit, resulting in a perpetual state of underdevelopment: someone would always have to lose. Other theories have failed due to a degree of irrelevance and a lack of consideration of the complex historical and cultural context in which development takes place. Others that have responded to this, and through rigorous study, have adequately analysed situations of underdevelopment, have failed to produce a practical, realistic development path for the regions they study.

This historical overview of development theory has a number of implications for the South African development community. Firstly, it illustrates the fact that, although development policies often seems to be generated with humane intentions, throughout history, development policy has generally had strong underlying economic motive, which has all too often lain with the core powers of the First World, such that the Third World rarely benefits from development initiatives. One must be critical of policy, and acknowledge the economic aspects of development, as well as its beneficiaries. In addition to this,

a point has been made that an economy dependent on the export of primary commodities will not have good standing in the current global markets: the development of primary sector economic activity (which includes agriculture, fishing, and forestry which are often identified as potential activities for economic upliftment in rural areas) should be approached with caution, as such development is unlikely to improve a country's international economic standing, and thus is unlikely to increase the GDP and income per capita, which has been the bane of many Third World countries. Tertiary economic activity is most likely a far safer area for investment on these terms.

It is also important to note that most of the theories described, save for dependency theory, seem to have been written from a First World perspective, which has often lead to their downfall. The more successful theories have been the more integrated ones that are more careful to acknowledge the broader cultural and historical contexts of development. However, Leys never mentions any theory on development born of the third world – policy written on development by the objects of development. It is the intention of the Rural University project to not only open up the world for rural people, but to give rural people an academic voice, and the opportunity to contribute to the theories that affect their way of life, from their unique perspective.

2. Contemporary Global Policy on Rural Development

The current global development community is made up of a number of key role players who have devised numerous initiatives to be undertaken on an international level in an effort to address poverty, inequity and their associated problems, which seem to prevail in the more rural regions of the world. The World Bank is an institution providing financial and technical assistance to developing countries, with a, 'mission to fight poverty with passion and professionalism for lasting results and to help people help themselves and their environment' (The World Bank, 2010), striving towards a vision of inclusive and sustainable globalization. Made up of two development institutions, the International Bank of Reconstruction and Development (IBRD) and the International Development Association (IDA), the World Bank provides low-interest loans, interest free credits and grants to developing countries for a number of purposes including investment in education, health, infrastructure, agriculture and environmental and natural resource management. The United Nations (UN) is another key role player at the forefront of development initiatives, devising policies and goals to which a number of countries are committed, including South Africa. The Millenium Development Goals and Education For All goals have evolved from two prominent initiatives, and South Africa is committed to achieving both sets of goals.

2.1 The Millennium Development Goals

In 2001, recognizing the need to assist impoverished nations more aggressively, the 192 member states of the United Nations (including South Africa) established a set of targets that they agreed to achieve by 2015 – the six Millennium Development Goals (MDGs), which aim to eradicate extreme poverty and hunger; achieve universal primary education; promote gender equality and empower women; reduce child mortality; improve maternal health; combat HIV/AIDS, malaria and other diseases; ensure environmental sustainability; and develop a global partnership for development.

The intentions of the goals, derived from international development targets established at the Millennium Summit of 2000 in New York, are to spur development in the world's most impoverished countries through the improvement of social and economic conditions.

2.2 Education for All

In a similar vein, at a World Education Forum held in Dakar in 2000, 1100 participants committed to the goal of achieving 'Education for All' (EFA), which is concerned with 6 goals relating to children, young people and adults, also to be achieved by 2015. (UNESCO, 2010). The goals are to: expand early childhood care and education; provide free and compulsory education of good quality; expand adult literacy; eliminate gender disparities; and enhance educational quality.

Although the MDGs and EFA goals are concerned with the whole world's population, a vast majority of that population lives in rural areas. Many of the world's 852 million chronically undernourished people live in rural areas, as do most of the 860 million illiterate adults (many of whom are female), and the 130 million children (mainly girls) who do not attend school. Thus, 'In order to achieve the MDGs, a special effort must be made towards promoting rural development and fostering better living conditions for the rural poor.' (UNESCO-IIEP 2006, p. 12)

2.3. Rural Development for Humanity

Despite the fact that much development policy has been fuelled by economic motives in the past, institutions such as UNESCO (rather than the World Bank, which Colin Leys (1996) does not hesitate to criticise) are devising initiatives that seem to be concerned with the development of rural areas in order to improve the inhabitants' quality of life and provide for their basic needs and rights, without any obvious economic incentive. This seems to align with Andre Gunder Frank's notions on world development (rather than national development), as discussed in 'dependency theory in the 1990s' in the previous section, pursuing global progress rather than development achieved through competition. South Africa is part of a global movement in rural development for the improvement of quality of life, and is committed to achieving its goals.

Appendix B: South Africa's Higher Education Landscape

The National plan has called for the restructuring and reconfiguration of the institutional landscape, creating new institutional and organizational forms to address racial fragmentation within the system as well as administrative, human and financial capacity constraints. HE provision has thus been consolidated through the reduction of the number of institutions, but not the number of delivery sites on a regional basis. Thus, a number of institutions have been amalgamated, resulting in the 25 institutions making up the current higher education landscape in South Africa

Gauteng
University of the Witwatersrand
University of Johannesburg (from the merger of Rand Afrikaans University, which incorporated the Soweto and East Rand campuses of Vista University with Technikon Witwatersrand)
Tshwane University of Technology (from the merger of Pretoria, North West and Northern Gauteng technikons)
University of Pretoria (incorporating the Mamelodi campus of Vista University)
Vaal University of Technology

Eastern Cape
Rhodes University
University of Fort Hare which incorporated the East London Campus of Rhodes University
Walter Sisulu University from the merger of the University of Transkei, Border Technikon and Eastern Cape Technikon
Nelson Mandela Metropolitan University from the merger of the University of Port Elizabeth, which incorporated the Port Elizabeth Campus of Vista University with Port Elizabeth Technikon

Western Cape
University of Cape Town
University of the Western Cape (Incorporating the dental faculty of Stellenbosch University)
Cape Peninsula University of Technology from the merger of the Cape and Peninsula technikons
Stellenbosch University

Kwa Zulu Natal
Durban Institute of Technology from the merger of Natal Technikon and Technikon ML Sultan
University of Kwa-Zulu Natal (from the merger of the University of Natal and the University of Durban-Westville
Mangosuthu Technikon
University of Zululand

Free State
University of the Free State (incorporating the Qwa Qwa campus of the University of the North and the Bloemfontin Campus of Vista
Central University of Technology formerly Technikon Free State

Limpopo
University of Limpopo from the merger of the Medical University of South Africa and the University of the North
University of Venda

Mpumalanga
Mpumalanga Institute of Higher Education, which was launched in October 2006

Northern Cape
Northern Cape Institute of Higher Education

Northwest
Northwest University (from the merger of the univeritie of Potchefstroom, and Vista Sebokeng campus with North West)

South Africa
University of South Africa (UNISA) (after the merger of Unisa, which incorporated the Vista University Distance Education Campus with Technikon SA)

Appendix C: Statutory Bodies in South African Education

The following data has been extracted fro the online article 'About SA – Education' by the Government of South Africa (GoSA) (2004).

Statutory bodies are of relevance to this project are:

Umalusi
The Umalusi Council for Quality Assurance in General and Further Education and Training was established in terms of the General and Further Education and Training Quality Assurance Act 58 of 2001. The council is responsible for: ensuring continuous quality improvements in the delivery and outcomes of the GET and FET training sectors by monitoring standards and qualifications; accrediting and monitoring private providers; assuring the quality of learner assessments at exit points; the issuing of certificates and the promotion of quality amongst providers of education, training and assessment. In 2008/9, Umalusi was responsible for improving and extending a system for the evaluation and accreditation of adult education centres, independent schools, private FET providers and assessment bodies. In addition, the council conducted research on a number of topics on the standard of curricula within the GET and FET bands.

The South African Qualifications Authority (SAQA)
The SAQA is a statutory body consisting of 29 members appointed by the ministers of labour and education. Through the National Qualification Framework (NQF), the SAQA ensures that South African qualifications are of high quality, and are internationally comparable. The SAQA is responsible for developing and implementing the NQF through the formulation and publication of policies and criteria required in the registration of bodies that are responsible for establishing education and training standards or qualifications,. It is also responsible for ensuring that such bodies are accredited and registered, and for registering national standards and qualifications on the NQF.

Closely related to the SAQA are the NQF, the SAQA's Centre for the Evaluation of Educational Qualifications, and the National Learner's Records Database:

The NQF consists of a set of principles and guidelines on which records of learner achievement are registered, focusing on outcomes rather than input. It enables national recognition of acquired skills and knowledge, thus ensuring an integrated education system and promoting life long learning. The SAQA's Centre for the Evaluation of Educational Qualifications is responsible for determining the equivalence between South African and International qualifications. The National Learner's Records Database (NLRD) is the key national source of information on human resource development (HRD) in South African education (in terms of education, training and labour market supply), and acts as the management information system for the NQF. Information on learner achievements and accredited providers, which are uploaded from Education and Training Quality-Assurance bodies (ETQAs); as well as the full contents of all qualifications and unit standards on the NQF, is included in the NLRD, which is the first system in the world to contain all these elements in one relational database.

The Council on Higher Education (CHE)
The CHE was established in terms of the HE Act 101 of 1997, and is responsible for: advising the minister of education on all policy matters relating to HE; managing quality assurance in HE and training and accrediting private providers and programmes for quality assurance; monitoring and evaluating the achievement of policy goals, which involves the publishing of an annual report on the state of HE in South Africa for submission to parliament; the convening of an annual summit of HE stakeholders; the setting of standards in HE; and the improvement and promotion of access for students to HE.
The National Board for Further Education and Training (NBFET)
The NBFET was launched in June 1999 in terms of the National Education Policy Act of 1996, and is responsible for advising the minister of education on matters relating to the transformation of FET, focusing on: policies and goals; norms and standards, especially those regarding funding; terms, purposes and conditions associated with earmarked funds, and reports compiled by provincial advisory bodies on FET.

The National Student Financial Aid Scheme (NSFAS)
The NSFAS is responsible for: allocating loans and bursaries to eligible students in HE; developing criteria and conditions for the granting of such loans; financial matters such as the raising of funds, and advising the minister of education on these matters. The NSFAS also manages 3 bursary schemes: The Funza Lushaka bursary scheme for teacher training; bursaries for FET college students, and bursaries for the training of social workers. In line with government's efforts to double the output of universities in priority sectors, the Department of education is aligning the NSFAS with subsidy funding with scarce skills. In support, government committed R439 million over the 2007-2009 period for the improvement of teaching and learning infrastructure.

Appendix D: Sangoni Survey Results

The Following results were attained through a survey conducted with the matric class of Sangoni Secondary School, near Lusikisiki in the Eastern Cape, on 27 July 2010, as arranged by the principal, Mrs Mbabane.

Two survey questionnaires, composed by the author, were handed out to the class of 55. The two questionnaires are included in this appendix. The results have been tabulated, and conclusions drawn. (Unfortunately, I did not have enough copies of the final version of the questionnaire on me at the time of the survey: a portion of the class filled out an older version, which included vital questions but lacked questions such as those relating to cell phones. This has resulted in a few blank spaces in the table of results.)

Conclusions drawn are identified in section
‘3.2.4 Demand for a University’, earlier in this document.

Rural University: Questionnaire

Hi, my name's Carrie-Anne Richardson. I'm a master's architecture student at Wits University, and I'm researching the idea of a rural university in this area. I would really appreciate if you could help me by filling out this quick questionnaire. Please don't feel that you have to answer every question: only those that you are comfortable with answering.

1. Name & Surname Age

2. What do you like about living in this area?

3. What do you dislike about living in this area?

4. Do you want to move to the city? If so, why, and which city?

5. What kind of house do you live in?

6. Do you have access to electricity, water, and toilet facilities?

7. What school did you attend, and what is your level of education? (e.g. grade 9, matric, higher qualification?)

8. Would you like to study further? If so, what would you like to study?

9. If there was a 'university' or some kind of centre for higher education in this area that taught what you'd like to study, would you attend? What would it be like? What would it look like? (Please draw a picture if you like on the back of this sheet).

Rural University: Questionnaire

Hi, my name's Carrie-Anne Richardson. I'm a master's architecture student at Wits University, and I'm researching the idea of a rural university in this area. I would really appreciate if you could help me by filling out this quick questionnaire. Please don't feel that you have to answer every question: only those that you are comfortable with answering.

1. Name & Surname Age

2. Where do you live? What do you like/dislike about living in this area?

3. Does the government supply electricity, water, telephone and toilet facilities where you live?

4. Do you have a cell phone? If so, are you with Vodacom, MTN or Cell C?

5. What subjects do you take at school?

6. Would you like to study next year? If so, what would you like to study, and where would you like to study? (e.g. which city/university/technikon)?

7. If you don't plan to study next year, why not? What will you do instead?

8. If there was a 'university' or some kind of centre for higher education in this area that taught what you'd like to study, would you attend? What would it be like? What would it look like? (Please draw a picture if you like on the back of this sheet).

Name	Survey No.	Age	Which of the following services are provided in the area where the srudent lives?				What does student like about where they live?	What does student dislike about where they live?
			Electricity	Water	Telephone	Sanitation	quote	quote
Tuliswa Limaphi	1	18	yes	yes	no	yes	It has a hotel and beautiful forsest	
Nosndi Innocentia Macabela	6	18	yes	no	no	yes	It's the place I borned in	Because it does not have enough materials for us to have more information
Bushula Luwezile	7	19	yes	no	no	yes		
Khatywan Sifiso	9	19	yes	yes	yes	yes		
Faku Zizipho	10	16	yes	yes	yes	yes		no university to supply more information
Ngceni Amahale	11	17	yes	yes	yes	yes	It has a hotel for the visitors like Wit's visitors	it does not have a university
Mnidiyata Thantaswa	12	17	yes	yes	yes	yes		Schools have no protection and dislike most is crime and drugs
Cingo Nontyatyamabo	13	17	yes	yes	no	yes		too far from school
Mafanya Anoyolo	14	18	yes	yes	no	yes	the way it looks and the development	crime and people who don’t stand up for themselves
Phumza Mnana	15	21	yes	yes	no	yes		criminals in the area
Mgwanye Nontombi	22	21	yes	no	no	yes		no taps and suffering in terms of water
Nowew Nomfusi	23	19	yes	no	no	yes		lack of infrastructure, poor service delivery
Aphiwe Nongauza	24	18	yes	no	no	yes		few learning equipment and no high school

what area of study would the student like to enter into next year?	where would student like to study this subject?	**Would student attend a "Rural University"?**	Why?	How would the rural university look like?	Does student use a cellphone?	if so, with which service provider is the student connected?	
				quote			
Business Management	Joburg University	yes	It would be fantastic	It would look great and enthusiasm	yes	MTN	
music and communications	University	yes	I know that education is the only goal which I have to achieve in Life	it must be like Joburg, in the city	yes	MTN	
human resources	Walter Sisulu University	yes			yes	MTN	
chemistry	Unisa	yes			yes	MTN	
electrical engineering	Wits	yes	will not cost a lot and would enjoy it so much		yes	MTN	
nursing	University of Durban	yes		beautiful like other universities	yes	MTN	
	Wits	yes	I don’t have enough money to travel to other places		yes	MTN	
human resource management	Port Elizabeth University or Joburg University	yes	near to home		yes	MTN	
marketer	Wits	yes			yes	MTN	
Business Management	University	yes			no		
social work	wits	yes	to be a social worker		no		
general economiscs and statistics	Gauteng	yes			yes	MTN	
economics	Port Elizabeth NMMU	yes			no	MTN	

Name	Survey No.	Age	Which of the following services are provided in the area where the srudent lives?				What does student like about where they live?	What does student dislike about where they live?
			Electricity	Water	Telephone	Sanitation	quote	quote
Bandile Mvalelwa	25	20	yes	no	no	yes		dislike to stay away in urban areas and schools
Ntsumte Anathi	26	19	yes	yes	yes	yes		lack of service delivery
Zikhona Kajana	27	17	yes	yes	yes	yes		lack of service delivery
Abongile Ngxaline	28	18	yes	no	no	no	low crime rate	lack of information like how to apply to University..and also lack of opportunities in everything, there is no universtiy
Lwazi Simayile	21	18	yes	no	no	yes	the mountains, rivers and worth land around us	unequal poser int this area, like domestic violence, sexual abuse
Nkosinathi Somogcoho	20	21	yes	no	no	no	nature conservation	there is no any institutuion/technikon. Lack infrastructure and there is no job opportunities
Diko Anele	19	18	yes	no	no	no	the humanity of people and participation of people in the community	lack of opportunities for studying in better schools because of the money that costs
Siyanda Notyesi	18		yes	no	no	no	I am in families country and the is a lot of traditional things like music that I like	it because, there are few chances of being good with English language
Mteleza Afrika	17	17	no	no	no	no	it is safe	the youth are involved in drugs and alcohol, smokint dagga and so on

what area of study would the student like to enter into next year?	where would student like to study this subject?	**Would student attend a "Rural University"?**	Why?	How would the rural university look like?	Does student use a cellphone?	if so, with which service provider is the student connected?	
				quote			
	Fort hare	yes			yes	MTN	
economics	NMMU	yes			yes	MTN	
HR management	UKZN	yes	economist		yes	MTN	
Bcom Economics		yes					
chartered accountant							
traffic coursa		yes	to study traffic course				
animal protection and information technoloty		yes		like George Campus of PE			
agricultural management		yes	it will match my studies				
medicine	Faculty of Health Science	yes		something that every would like			

Name	Survey No.	Age	Which of the following services are provided in the area where the srudent lives?				What does student like about where they live?	What does student dislike about where they live?
			Electricity	Water	Telephone	Sanitation	quote	quote
Luvo Tyalolipheli	16	20	yes	no	no	no	I am familiar with this are, I know everything about it	I our are we have a little infor. About things. We are not developing when it comes to services and promotion of skills and talents
Mthuma Simomalo	8		yes	no	no	no	there is free education and school or transport	there is a loss of information
Duduzile Noziba	2	18	yes	yes	yes	yes	safety and security	insufficience of water
Ndkubonga Manqabashe	3	19	yes	no	no	no	there is free education	there are no facilities like water and toilets
Zimasa Vellem	4	18	yes	no	no	no	I recieive love from my family and feel safe when I with them	high rate of crime
Bandile Mtshulam	5	20	yes	no	no	yes	It is that all people I know understands me are here and there is no high crime	it that my area is not well developed and most of things are to get
Thulisile Mabuna	29	19	yes	yes	yes	yes	green vegetation and cultural things	
Nyenyiso Afica	30	18	yes	yes	yes	yes	athere is a learning centre for disability people	
Nolwazi Mbomu	37	20	no	no	no	yes		
Mabena Aviwe	40	19	yes	no	no	no		we only have electricity which government supply us with, there is no development at all

what area of study would the student like to enter into next year?	where would student like to study this subject?	**Would student attend a "Rural University"?**	Why?	How would the rural university look like?	Does student use a cellphone?	if so, with which service provider is the student connected?	
				quote			
engineering		yes	I want is to study and further my education not minding where I study				
environmental health		yes					
environmental health		yes					
social worker		yes	yes it would be like an honour to me				
psychology - clinical		yes					
social worker		yes					
nursing		yes	I would like to study many things like knowing what is happening around the country and do nursing		yes	MTN	
human resource management	Wester Cape Phlementsuta University				yes	MTN	
teaching	at University	yes	I would like this picture		yes	MTN	
teaching	Umthath WSU				yes	MTN	

Name	Survey No.	Age	Which of the following services are provided in the area where the srudent lives?				What does student like about where they live?	What does student dislike about where they live?
			Electricity	Water	Telephone	Sanitation	quote	quote
Onwezwa Ganyaza	41	18	yes	yes	yes	yes	I like to study my books because my area have no noise	I dislike to bull other peoples because there are a lot of people who are bulling others
Galada Khuthala	44	22	yes	yes	yes	yes		
Maggi Silindile	45	18	y	no	no	no		
Bomkazi Mmolitshane	43	17	no	no	no	no	I like to cope with the other people	poor standard of living because there is no job opportunities, Universities
Asiphe Nqubula	42	19	yes	no	no	yes	I like this are because I was born here, and I like being close to my family	I dislike living in this area because there is a poor living conditions
Asanda Phuthuzo	39	20	yes	no	no	no	is where I was born and grow up till now	lack of opportunites and information
Vumefile Zotha	38	17	no	no	no	yes	I like this area because the traditions, culture are still working and they work together, like when someone have no food his/her neghbour can share food with him/her	There is no security, electricity and water, we are still using rivers. Schools are far from our homes.
Noluridi Molenyetshwa	36	20	no	no	no	no	because there are many activities like agriculture	less of jobs poor schools and others
Sbongiseni Mbendana	35		yes	no	no	no	there is more land for agriculture	we stay far from school we goes kilometres to
Sithembele Damane	34	22	no	no	no	no	because our parents give me information about how to manager my likde to chose my carreer	environmental factor like weather condition

what area of study would the student like to enter into next year?	where would student like to study this subject?	**Would student attend a "Rural University"?**	Why?	How would the rural university look like?	Does student use a cellphone?	if so, with which service provider is the student connected?	
				quote			
nursing and medicine					no		
economics	NMMU Easter Cape				yes	MTN	
economics	WSU				yes	MTN	
journalism, social worker							
faculty of education							
nursing							
law because I intend to ba a advocator							
about learning more and success							
	Walter Sisulu						

Name	Survey No.	Age	Which of the following services are provided in the area where the srudent lives?				What does student like about where they live?	What does student dislike about where they live?
			Electricity	Water	Telephone	Sanitation	quote	quote
Monketa Nobubele Abegail	33	20	no	no	no	no	nothing	lack of opportunities for studying in better schools because of the money that costs
Mahanjana Abongile	32		yes	no	no	yes	I like to live with my family	
Noziba Nosiphiwe	31	17	yes	yes	yes	yes	it is safe	there are few facilities in rural areal like electricity, water , etc
Ninela Phiwokuhle	46	20	yes	yes	no	yes		technology is not advanced here
Maviyo Anele	47	20	yes	no	no	yes	no any crime and even any such a bad event usualy happen in other particulor areas	because I am far away from school and town
Thokozile Dumisa	48	18	yes	no	no	no	there are relatives and free school equipments and I'm living at my home without any payments	not enough information and school materials like computer
Nompumezo Nqubula	49	20	no	no	no	yes	it is that my family is around here	is that the infrastructure is poor
Koninga Bubele	50	22	yes	no	no	no	nothing	lack of practical machines for information
Nosele Nelisa	51		no	no	no	no	more relationship in our homes	no enough knowledge about things in life
Dyasi Amanda	52	17	yes	no	no	no	the only thing I like is my school because of my educators	crime, less information centres
Somalolo Mafwande	53	17	yes	no	no	no	there is no violence	lot of unemployment

what area of study would the student like to enter into next year?	where would student like to study this subject?	**Would student attend a "Rural University"?**	Why?	How would the rural university look like?	Does student use a cellphone?	if so, with which service provider is the student connected?	
				quote			
policeman							
social worker							
social work and information technology							
Public management	Gauteng province	no	I am not sure about attending it because I do not like to stay in one place, I love travelling.				
human resource manager		no					
medicine or Bachelor of Medical Clinical Practice		no	want to attend in an urban area				
journalism		no					
social worker		no					
mechanical engineering		no					
quantity surveying		no	I would not attend because I would like to move out of Lusikisiki maybe next year for better education				
medicine or B com		no					

Name	Survey No.	Age	Which of the following services are provided in the area where the srudent lives?				What does student like about where they live?	What does student dislike about where they live?
			Electricity	Water	Telephone	Sanitation	quote	quote
Mndela Nangamso	54	18	yes	no	no	yes	being close to my family	poor education
Bushula Ayanda	55	22	yes	no	no	no	nothing	poor education, poor development, lack job opportunity and many more

what area of study would the student like to enter into next year?	where would student like to study this subject?	**Would student attend a "Rural University"?**	Why?	How would the rural university look like?	Does student use a cellphone?	if so, with which service provider is the student connected?	
				quote			
media communication and culture		no	because I want to learn more and to find more opportunities, experiencing new life in Johannesburg				
climatology and meteorology		no	it is possibly to achieve my goal Johannesburg City				