

# Water as a key to socio-economic development and poverty eradication in North-West Province, as projected for the entire South Africa

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## Abstract

President Thabo Mbeki stated in his inaugural speech of 27 April 2004 that in our land of gold and diamonds the one which is born poor must not die poor by decree. The purpose of our lives is not just the accumulation of wealth. He made us aware of our higher purpose of life. The challenge of this paper is to propose possible solutions for eradication of that poverty in an institutional, systematic and sustainable manner through a basic/essential commodity of life: "WATER". With the following Founding Principle: "To find a practical institutional arrangement to address the provision of adequate, affordable, and reliable supply of water to be made available for water services, particularly for poor rural and peri-urban settlements, as well as water for local economic development (LED) of the previously disadvantaged rural areas of South Africa (possibly through cross-subsidisation, loans and leveraging funding for water services infrastructure in rural areas)"

"...viewing mankind as one entity" we must "subordinate every particular interest, be it personal, regional or national, to the over-riding interests of the generality of mankind, knowing full well that in a world of interdependent peoples and nations the advantage of the part is best to be reached by the advantage of the whole, and that no lasting result can be achieved by any of the component parts if the general interests of the entity itself are neglected ..." (Shoghi Effendi, The Promised Day is Come, p.vi)

## Introduction, description of the challenge

Historically the Department of Water Affairs and Forestry (DWA), as a national body, had been the Water Services Authority until November 1997. Water boards (19 of them, and not covering the entire South Africa) and a few large cities fulfilled the role of the Water Services Provider for a major part of the previously advantaged population and major industries of South Africa. The water services in the rural areas (majority poor "black" communities) were largely underdeveloped or ignored. The National Government developed a policy framework, in 18 September 2000, to kick start a process of bringing about Free Basic Services to the POOR families, which included 6 000 ℓ of free basic water to every poor family per month. The newly formed municipal councils, just elected in 5 December 2000, were charged with the implementation of the policy. A task team was developed by the Provincial Department of Developmental Local Government, North West Province, to facilitate the development of a systematic strategy of the process of delivery of basic services, including water, under chairmanship of MEC D. Africa.

The challenges in order of the priority were the following:

- Provision of Basic Water Services to the poor families in a sustainable manner
- Provision of water as a stimulus for the Local Economic Development and Poverty Eradication
- Development of a Bankable/Sustainable provincial water and sanitation development plan which addresses the infrastructure backlog

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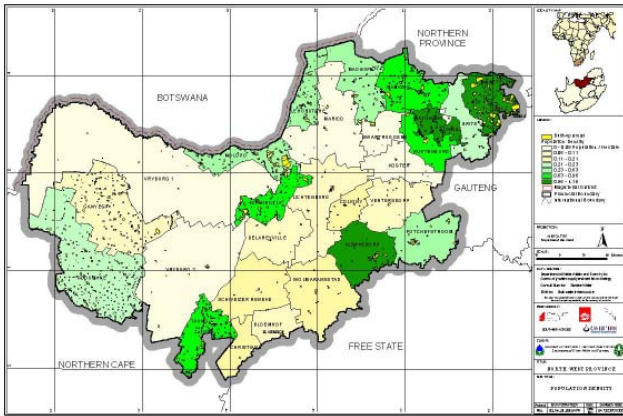
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- Development of an institutional arrangement, which will facilitate implementation of plans and is acceptable to all stakeholders.

## Major findings

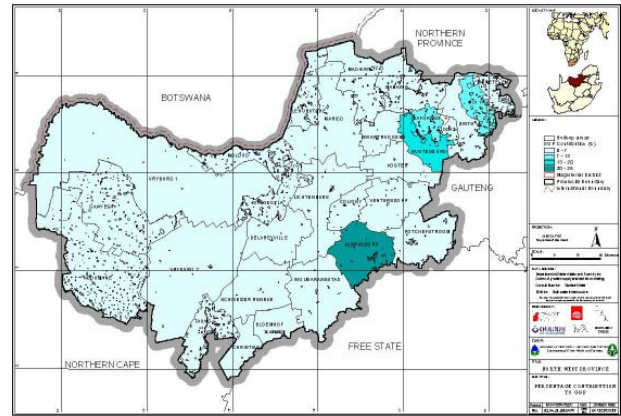
The process started with gathering of information, which was presentable in GIS maps. It was noted that the present infrastructure was serving a previously advantaged minority in the major cities. The unemployment was higher in the West of the Province while the population density was lower therefore the cost per capita in the development of infrastructure was higher. The existing bulk infrastructure was also less in the West of the province. It was however noted that the GGP and economic activity was sufficiently high enough in the East and South East of the province, which is mainly gold and platinum mining, to allow cross subsidisation. It was noted that five Water Boards operate within the province in a fragmented manner. The water boards operate on the water catchment basin basis. No serious thought had been given by the water boards in having a board to manage more than one water management areas (Rationalisation/amalgamation of water boards). It was noted that Catchment Management Agencies (CMA) are being formed in terms of the Water Services Act, it is also established that 11 out of 19 water management areas in South Africa are in need of water transfers, which meant that the old logic of establishing one water board per water management area was not holding any water any more (so to say). The areas of service of the individual local and district municipalities were too small to enhance the economy of scale for an efficient water management institution (21 Local Municipality, 4 District Municipality).

It was noted that 600 000 Kℓ/d of bulk water was consumed in the province (500 000 kℓ/d in the East and only 100 000 kℓ/d in the West of the province). The local economy of the West of the province was under developed due to the lack of infrastructure including water infrastructure. More than 80% of bulk water



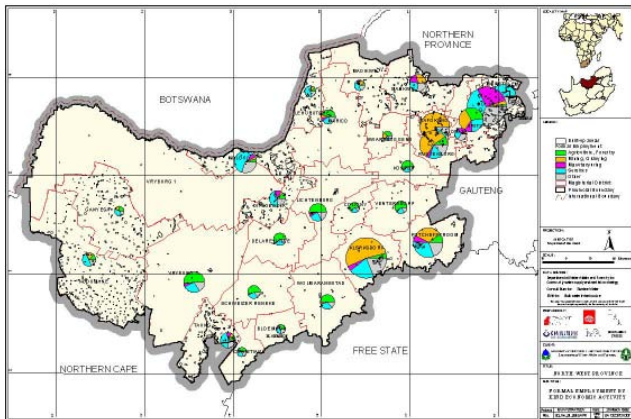
**Population density**

The lighter the shade, the lower the population density, then the higher the cost of infrastructure per person



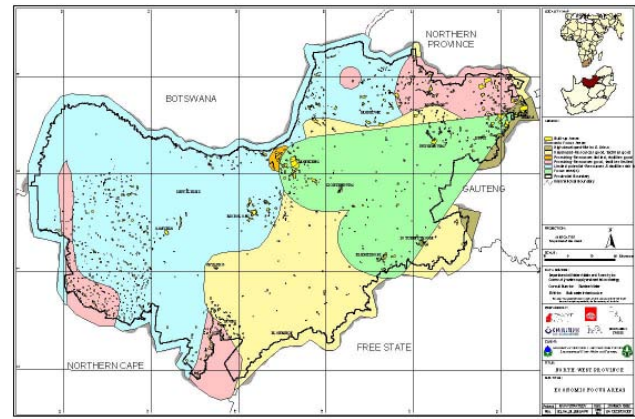
**% contribution to GVA**

The darker the shade the more contribution to GVA, or more economically active



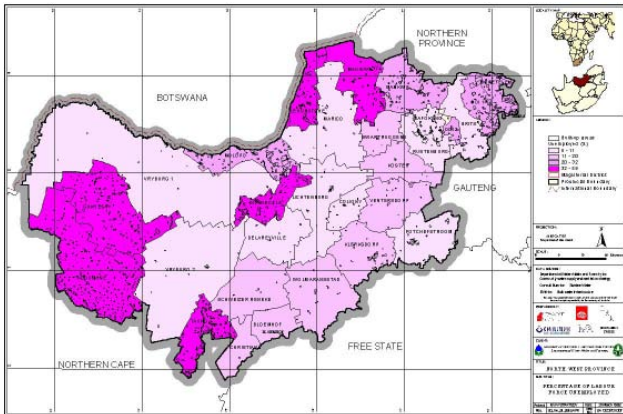
**Formal employment**

The larger the circle the more employment created by the size of economic activity, per type of activity



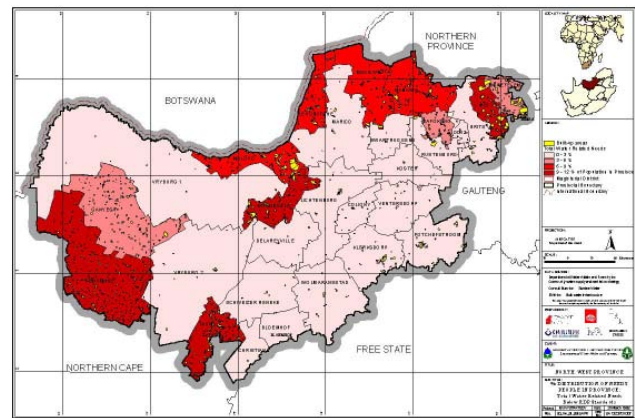
**Economic focus area**

The heart of the economic activity of North West is in East and South-East, we need to stretch the economic heart to the rest of the area by institutional arrangement and creation of infrastructure for Local Economic Development



**% labour force unemployed**

The darker the shade the more unemployment



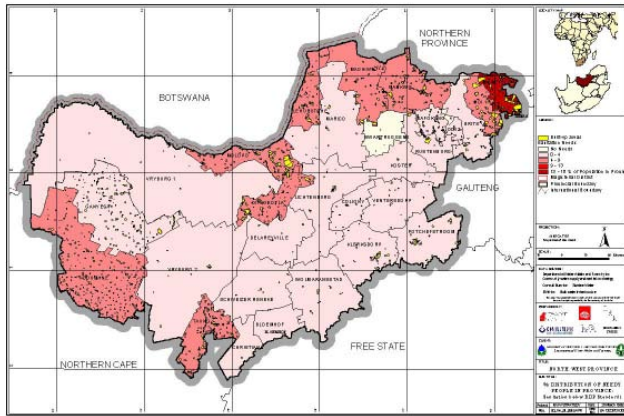
**Water infrastructure needs**

The darker the shade the more backlog in water related infrastructure

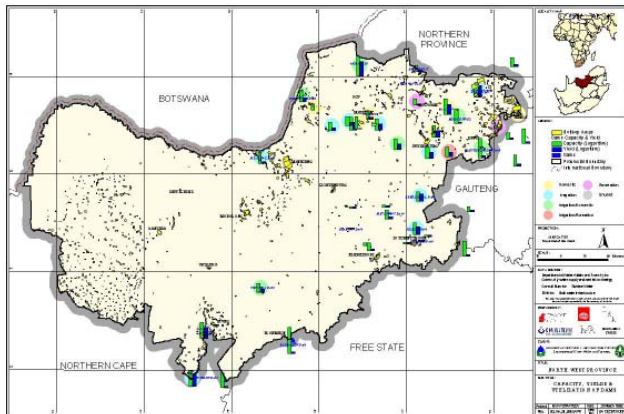
infrastructure was located in the East and South East of the province.

The value of the water infrastructure backlog was 1.2 billion Rand and the sanitation backlog was 1.3 billion Rand (1999 Rand values). The National Grants towards the 2.5 billion Rand backlog was only 50 million Rand per year. The total annual grant funding allocated to the infrastructure backlog from 1999 to present date

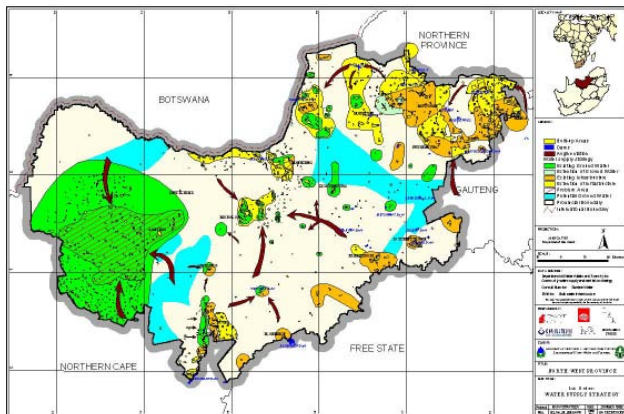
through grant funding in the North West Province (to Municipalities and Water Boards) has been less than the escalation value of the backlog itself, which means that as much as the numbers in Rand terms appear to be large and unprecedented, it is still not addressing the real issue adequately.



**Sanitation infrastructure needs**  
The darker the shade the more sanitation backlog below RDP standards



**Capacity utilisation of dams, also location of existing dams as infrastructure**



**1<sup>st</sup> order strategy for water infrastructure requirements**

## Discussion of results and findings

The findings clearly indicated that water and sanitation infrastructure development was not possible with the National Grants at the level of 50 million Rand (and present R150 million) per year. However, there was sufficient economic activity in the province to finance the balance of the backlog of the infrastructure at the provincial level with  $\pm 20\%$  tariff increase in the bulk water over a

3-5 year period (which is currently used by the more affluent and well to do mines and industries, 42%).

However, the findings indicated that if the local or district municipalities were to become their own water services providers, some of the municipalities in the West would not be able to develop a bankable project to finance the backlog alone.

## Conclusions and achievements

It was concluded that a Provincial Water and Sanitation Utility (PWSU), as a Regional Utility, would present an institutional structure which would be able to access commercial finance, by bankable projects, to develop the infrastructure backlog in the entire region. The PWSU would utilise the asset base and consumer base in the east of the province to generate income for loan repayments to develop the infrastructure in the west (O & M costs to be carried locally).

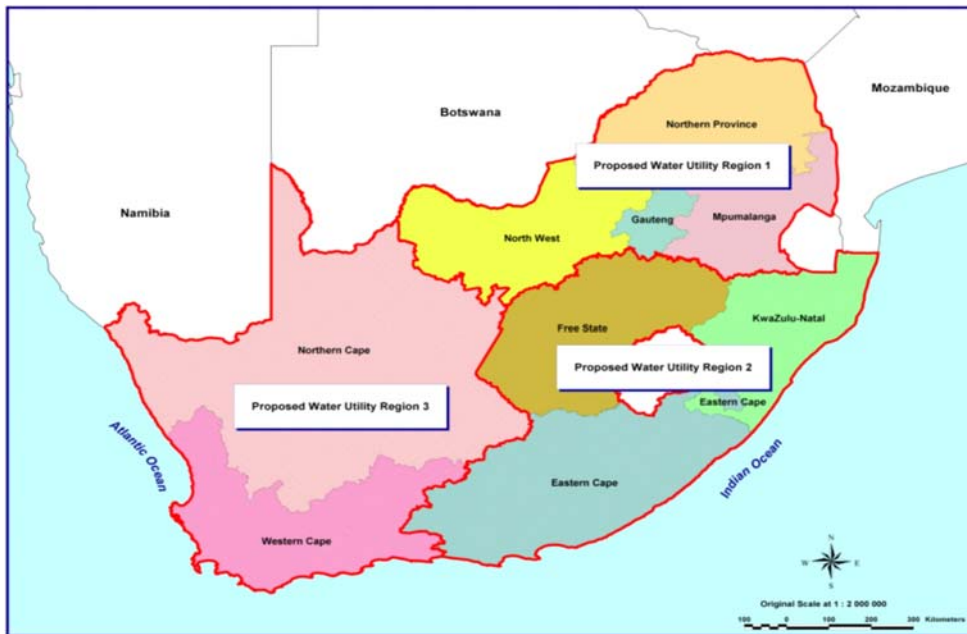
The concept was presented to the Rand Merchant bank, which welcomed it and gave a green light to up to 300 Million Rand finance for water backlogs (May 2001). The Minister of DWAF has pledged his support for the process (11 September 2001), and initiated a national institutional transformation process. Water Boards and SALGA have agreed in principle to rationalise and transform the water sector. The views, on the final product, and implementation approaches, are still to be converged, in line with the founding principle.

A new White Paper/Strategy, was published in 2003 to promote regional Water Utilities throughout South Africa.

## Discussion and key message of paper

Conventional and standard old world order institutional arrangements are not always the optimum solution to the local water management problems everywhere. Innovative local solutions must be considered.

- Social engineering and solutions to the practical human needs should not limit itself to confinements of nature. Water management areas are a good tool for control within the management area, while regional solutions are practical for infrastructure development.
- Former President Nelson Mandela stated in his inaugural speech of 10 May 1994 “Our daily deeds as ordinary South Africans must produce an actual South African reality that will reinforce humanity’s belief in justice, strengthen its confidence in the nobility of the human soul and sustain all our hopes for a glorious life for all.” President Thabo Mbeki stated in his inaugural speech of 27 April 2004 “It was a place that decreed that some were born into poverty and would die poor, their lives, in the land of gold and diamonds, cut short by the viral ravages of deprivation. It was a place where others always knew that the accident of their birth entitled them to wealth. Accordingly, these put aside all humane values, worshipping a world whose only worth was the accumulation of wealth.” The above two statements indicate that we as South Africans need to strive to enrich each other’s lives, consider “spiritual solutions to the economic problems”, by a measure of cross subsidisation, from well to do individuals, industries and mines to the ones previously disadvantaged, in order to establish equity and maintain stability. “The welfare of the part means the welfare of the whole, and the distress of the part brings distress to the whole”.
- The existence of European Union, African Union ... are indicative of humanity becoming more united and integrated in solving its regional needs.



*A Possible model of 3 Regional Utilities  
The welfare of the part means the welfare of the whole, and the distress of the part brings distress to the whole*

- It is recognised that municipalities are water services authorities, and individual authorities are independent entities. Due to the positive effects of economies of scales and the reality that centers of major economic activities in South Africa are large but just a few (i.e. Jhb-Pta, Durban-Pmb, Cape Town, ...only) and the balance of semi-rural/peri-urban municipalities account for over 18 million without adequate sanitation (DWAF, B. Schriener, paper WISA conf. 2-6 May 2004). Therefore, centers of economic activities are proposed to be combined with equally matching areas with water and sanitation infrastructure backlog in order to cross subsidise and develop a bankable project to raise finance for infrastructure. It is proposed that municipalities (authorities) may consent to create a regional utility as a state owned enterprise/Section 21 company/MJMSD or water board as a regional utility (water board appear to be a resourceful nucleus for this utility by their experience), with area of service as described above, and a mutually agreed governing structure for the benefit of the region.
- There is a school of thought that creation of regional utilities should be first made for areas of greatest needs (or maximum backlog, front runner approach). This approach (which is shared by the more affluent individuals/institutions), even though sounds good, appear to be inadequate in the view of the authors since the solution to the infrastructure backlog of that region lies within an affluent area and industries outside of the said area. It is suggested that a national survey of the available information to be urgently performed to identify the magnitude of the backlogs and areas of economic activities in order to make a first round assessment of the boundaries of the proposed regional water and sanitation utilities in an equitable and financially sustainable format and size. The numbers of such utilities would be a function of a balance between excessive centralisation and enhancing economies of scales (i.e. could be 3.5 or 9 as provincial utilities) as long as the entire country is catered for its present and future local economic development.

- The GINI index (a measure of % of wealth controlled by % of population, the higher the index the less equity in the society) for South Africa in 1994 was 0.59 (Dr A Turton), and 0.58 - 0.63 currently (UNDP reports). Which indicates that regardless of the rapid and unprecedented progress and overall speed of service delivery, the % of wealth at disposal of the disadvantaged population has degenerated. This signals a warning that the development of infrastructure for the poor in order to stimulate local economic development is more urgent. There is a need to think laterally and endeavor other approaches (such as this) to build momentum in raising finance and put infrastructure in place in order to prevent further imbalance in wealth distribution which erodes the

social stability, as experienced in most developing south american countries. Experience indicates that when a society shows symptoms of social instability, investors stay away from it. There are moments in the history which are significant, the moment for raising capital and invest in infrastructure for south africa is now. We need to create the regional water and sanitation utilities in order to create a conducive environment and a bankable case for investment into South Africa.

- Human resources is the engine of service delivery followed by capital finance as its fuel, courage to create the environment (Water Services institutional transformation) at this moment is the ignition key. The authors propose that a bold step is needed to move the process forward to make history for the next generations. We will adjust the course as this vehicle of service delivery is moving depending to local dynamics (no car would change direction, no matter how much you steer the steering wheel unless the car is moving!!).
- “There is no time to lose, there is no room left for vacillation, multitudes hunger for the Bread of Life ...”
- In the words of Dr. J. Afroukhteh “before experiencing the life of a chick we must fulfill the promise of an eagle” if we are to face and survive the global challenges ahead of us.
- South Africa has been the innovator of many practical global and regional solutions in the recent years. It is hoped by the authors that a further DWAF Ministerial support and presentation to Cabinet of this approach would possibly set the trend and model for elimination of poverty in the developing countries with the following Founding Principle: “To find a practical institutional arrangement to address the provision of adequate, affordable, and reliable supply of water to be made available for water services, particularly for poor rural and peri-urban settlements, as well as water for local economic development (LED) of the previously disadvantaged rural areas of South Africa (possibly through cross-subsidisation, loans and leveraging funding for WS infrastructure in rural areas)”