

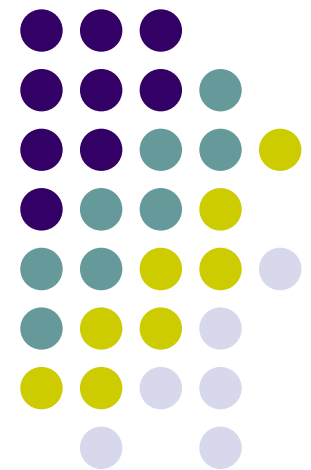
REDRESSING INEQUITIES THROUGH IRRIGATED AGRICULTURE IN SOUTH AFRICA



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INTRODUCTION



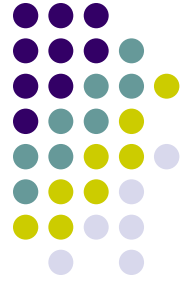
The dryland and stock farming area in South Africa is constituted as:

- 82Mha is private land; and
- 16Mha is communal land

The area under irrigation in South Africa is estimated to be:

- 50 000ha of food plots
 - 50 000ha of smallholder irrigation; and
 - 1 300 000 to 1 400 000ha of commercial irrigation.
- Irrigation involves 40 000 to 45 000 commercial farmers the majority of whom are white males and 200 000 to 250 000 traditional subsistence farmers, the majority of whom are black women.
 - Employment is approximately 120 000 permanent workers and an unknown number of seasonal workers.
 - Agricultural irrigation represents close to 60% of the total water requirements in the country while contributing less than 1,5 percent of each of the GDP and of total employment.
 - A quarter of agriculture's contribution to GDP comes from irrigation.
 - There are approximately 320 smallholder irrigation schemes in the former homeland areas.

INTRODUCTION



During the apartheid era, black farming was overwhelmingly confined to the homeland areas and with very few exceptions, to small communal plots.

Since 1994, it has been government policy to transform the agricultural sector in order to redress black farmers for the disadvantages they suffered under the apartheid system and to promote the Constitutional principles of equity and justice.

THE HISTORY



Smallholder irrigation schemes have gone through four eras which are aligned with the political history of South Africa*. The eras are briefly:

1. The peasant and mission diversion scheme era that started in the 19th century and was associated with mission activity and the emergence of African peasantry;
2. The smallholder canal scheme era lasting from 1930 until about 1960 that was primarily aimed at providing African families residing in the “Bantu Areas” with a full livelihood. Schemes were characterised by:
 - diversion structures sometimes with storage and canals to the field edge;
 - Small plot sizes
 - Authoritarian and paternalistic management; and
 - The powers to dispossess underperforming farmers.

* Bruwer J and van Heerden P. *Spotlights on irrigation development in RSA: the past, present and future*. In: Southern African irrigation symposium, Durban, 4-6 June 1995. WRC Report No. TT 71/95. Proceedings. Water Research Commission, Pretoria. 3-10.

Backeberg GR and Groenewald JA. *Lessons from the economic of irrigation development for smallholder settlement in South Africa*. Agrekon 34 (3)167-171. (1995).

Tlou T, Mosaka D, Perret S, Mullins D and Williams CJ. Investigation of different farm tenure systems and support structure for establishing small-scale irrigation farmers in long-term viable conditions. Water Research Commission Report No 1353/1/06. 2006.

THE HISTORY (2)



3. The independent homeland era lasted from about 1970 until 1990. It was characterised by modernisation, functional diversification and centralisation of scheme management. Schemes were complex and costly to operate and were consequently managed by parastatals. They created a high level of dependence in the farmers so that when the parastatals were dismantled after 1994, partial or total collapse of production followed almost immediately; and
4. The irrigation management transfer (IMT) and revitalisation era commenced in 1990. Initially the poverty focus of the Reconstruction and Development Programme guided scheme management and development. Later, with the Growth, Employment and Redistribution Programme, existing irrigation schemes were identified as important resources for economic development, but they first required revitalisation. Concurrently, government adopted a strategy of irrigation management transfer that refers to the transfer of the responsibility of managing, operating and maintaining irrigation schemes from the state to farmers.

THE REFORM POLICIES



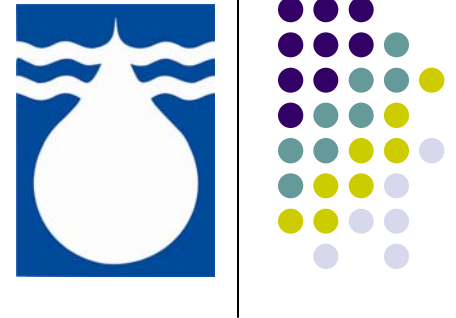
- **The White Paper on Land Reform (1995)**
- **The White Paper on Agriculture (1995)**
- **The Broadening Access to Agriculture Thrust (BATAT)(1995),**
- **The Strategic Plan for South African Agriculture (2001)**
- **The vision of the Integrated Sustainable Rural Development Strategy (ISRDS) later revised to Integrated Sustainable Rural Development Programme (ISRDP)(2001)**
- **The Land Redistribution for Agricultural Development sub-programme (LRAD)(2001)**
- **The Comprehensive Agricultural Support Programme (CASP)(2004)**
- **The National LandCare Programme**
- **AgriBEE (2005)**

The Vision

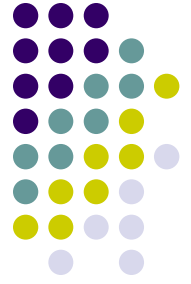


- In 2002, **guidelines for agricultural water use** were published. A two-fold, stepped objective was identified for the revitalisation of the agricultural water use sector:
 - improved food security through own production (“food first”); and
 - mainstreaming historically disadvantaged farmers in the local, national and international economy through active support for business and market development.
- The Minister of Water Affairs and Forestry, launched the Water Allocation Reform Strategy. The Minister said
“We will continue to strive to help our people along the journey from being small subsistence water users to, if they so wish, large commercial, productive and competitive users not just in South Africa but internationally”.

THE OBJECTIVES

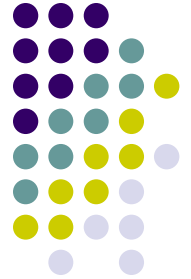


- This study is a preliminary investigation of specific cases where DWAF set aside water for emerging farmers but the water is not used.
- The work is done in support of the WAR.
- 5 cases were studied from anecdotal evidence and interviews.
- The purpose is to interrogate why was there no uptake and how can this inform the WAR strategy.



CASE STUDIES

1. Mhlatuze Catchment



- The 1974 White Paper that prepared the way for the implementation of the then proposed Phobane Lake set aside 2000 ha (out of a scheduled 13 706ha) for what was then termed the “Bantu Reservations”.
- As such, approximately 14.6% of the irrigation water to be supplied from Goedertrouw Dam was to be used for what was seen to be small-scale farmers.
- Currently half of this allocation has been developed (937ha)
- There are 5 irrigation schemes listed in order of distance from the dam;
 - Nkwaleni Scheme (closest to the dam)
 - Umfuli
 - Heatonville
 - Inkasa Irrigators
 - UVS/Lower Mthlatuze Scheme (furthest from the dam)

Of these, the Inkasa Irrigation Scheme is the only scheme that is predominately made up of small-scale irrigators from previously disadvantaged communities.

INKASA SCHEME



Some reasons for the failure;

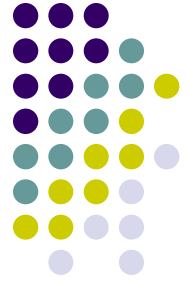
- Financing;
- Interest rates;
- Sugar Price;
- Market outlet;
- Mono crop development; etc

DETAIL OF THE INKASA IRRIGATION SCHEMES						
Name of Scheme	Size (ha)	No of Growers	Average size of Plot	Date Completed	No of other jobs created	Cost of Development
Biyela	502	285	1.75ha	1991	280	R5.1m
KwaDlana	111	30	3.7ha	1991	63	R1.4m
Mzimela	324	300	1.08ha	1995	160	R5.2m



- Department of Water Affairs and Forestry. *Mhlathuze Socio-economic overview*. In “*Water and Forestry Support Programme: Water Resource Management Component: Outline the Current Water Use Situation in the Mhlathuze Catchment (Output 1)*”. WFSP/WRM/CON2003; Output 1. 10 January 2004.
- The above report concludes that access was not the limiting factor in using water as a vehicle for poverty alleviation in the catchment.
- An amount of some 13million m³ was still available from the allocation for small-scale irrigation development.
- Rather, it appeared as if structural conditions restricted the further development of the sector.
- In the main, these problems were related to unfavourable market conditions although issues specific to development of small-scale irrigation within the context of traditional tenure also played a role.

BLYDE 800



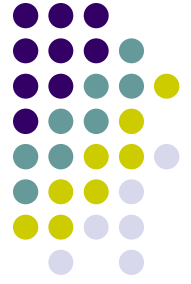
- Until the 1990's, irrigation water had been distributed in the district via a 107 km long earthen canal system.
- The canals were old and water distribution had become inefficient.
- A pipeline was built with the support of DWAF on condition to that a portion (two-thirds of the 15%) of water originally allocated as “drive water” for the canal should be used for the empowerment of emerging farmers and their integration with existing commercial irrigators in the BRID. This water, which equals 7 920 000 m³ per annum, translates into an irrigable area of 798 ha, the so-called Blyde 800.

BLYDE 800



- In 2001, the DWAF within the context of the then current planning in the Phalaborwa Spatial Development Initiative, considered several models for implementing the Blyde 800 project.
- The factors of production are a unique combination of capital, water, land, skills and market access.
- The state, in order to achieve its objectives, had available the Blyde 800 water and through various mechanisms could make capital available. It would not itself be able to mobilise the other essential factors. These could only be obtained through partnership with existing farming operations.
- It found that a public competitive bidding process for the water use licences that were to be issued in terms of the National Water Act of 1998 would be the most appropriate way forward.
- A request for proposals document was drafted. This effectively required joint ventures between emerging farmers and existing irrigators.
- For a number of reasons, the implementation of the project could not be initiated at the time.

BLYDE 800



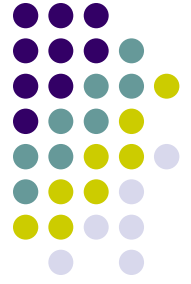
- Towards the end of 2004, the Department of Water Affairs and Forestry considered it appropriate to re-examine the project to determine whether the circumstances then permitted the Blyde 800 project to be implemented via a public request for proposals.
- The LBRWUA and the Limpopo provincial government lent their tacit support. DWAF appointed the Development Bank of Southern Africa as its transaction advisors.
- The stakeholders were consulted and the request for proposals document was re-drafted.

BLYDE 800



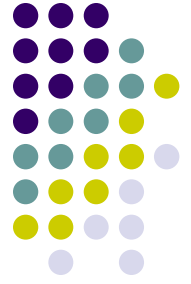
- In the meantime an extensive land claim had been gazetted in the Hoedspruit area that included all of the land commanded by the Lower Blyde River Water User Association pipeline.
- In early 2004, the land claim process got underway.
- In December 2005, the DBSA, as transaction advisors, found that the land claim had introduced many uncertainties to the market.
- It recommended that it was then inopportune to proceed with the envisaged public request for proposals.
- DWAF decided to await the outcome of the land claim process before proceeding with the Blyde 800 project.

BLYDE 800



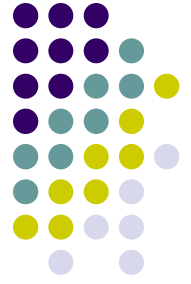
- By 2007, the land claim process had resulted in the restitution of several irrigation farms.
- One the successful claimants informed this study that their focus had been on the claims process and that they had not had the capacity to also address the Blyde 800 allocation.
- Some of the claimant groups have opted to enter into joint ventures with the previous owners.
- These arrangements are now settling down and recently attention has been given to making application for part of the Blyde 800 allocation.

THE ORANGE RIVER



- The allocation for black farmers in the Free State arose originally from the Orange River Re-planning Study that determined that water for 12 000 ha of irrigation was available for allocation from the Orange River.
- This relates to three water management areas, namely, Upper Orange River, Lower Orange River and Fish-Tsitsikamma.
- The DWAF decided that each WMA would receive 4000 ha and that the Upper Orange WMA allocation would be shared between Free State and Eastern Cape, with 3000 ha to Free State and 1000ha to Eastern Cape.

THE LOWER ORANGE



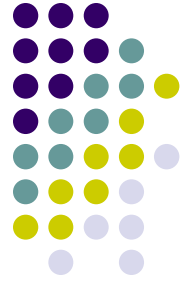
- The DWAF decided that the Lower Orange River Water Management Area would receive 4000 ha.
- The water is not allocated to any particular scheme, area or location.
- The opportunity to use any part of the allocation at a particular location is limited by its physical proximity to the river or the existing distribution infrastructure.

THE LOWER ORANGE



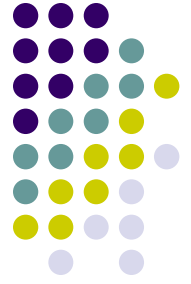
- There have been long discussions around the development models that should be applied and the approach is ultra-cautious.
- Initially the CCAW had not functioned effectively.
- The tempo has however picked up over the last two years as government capacity has improved.
- DWAF and the Department of Agriculture had an outreach programme that publicized the availability through a number of channels.
- Applications now exceed availability and there is confidence that the 4000 ha will be licensed in due course.
- Licenses have been issued for two schemes totalling 300ha and a scheme of 800 ha has been recommended by CCAW.

DEDUCTIONS



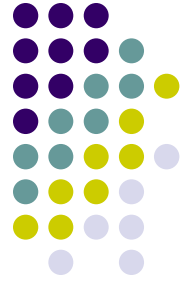
- The trajectory of development of black irrigation farmers continues to follow the model established in the apartheid era of establishing communal schemes with many smallholders.
- While some adjustments have been made, the determining elements remain, being mainly small plots, communal land, and the absence of institutional development.
- This model is not sustainable without continuing and extensive financial and institutional support.
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- While the model may serve social objectives, the prospects of creating independent commercially orientated irrigation farmers able to take up additional water allocations is limited.

CHALLENGES



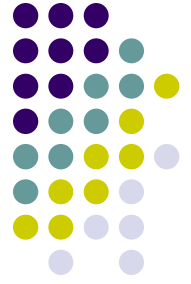
- To ensure that the allocated waters are used successfully by small scale irrigators, DWAF has very little control if any.
- The Dept of Agriculture can provide the required support through;
 - Organising the farmers
 - Infrastructure rehabilitation
 - Extension services
 - Subsidies
 - etc

OPPORTUNITIES



1. WAR to focus on commercially based emerging farming through,
 1. Defining the criteria for such allocations and communicate them widely to canvass demand.
 2. Promote access to water through a comprehensive package together with Agric, Land, etc.
 3. Channels of facilitation can be the CCAW initially where water is under utilised.
 4. Where there is mismatch between demand and supply locations, other measures such as compulsory licensing can be used.
 5. Based on pending land restitution running cases, targets can be set.
2. Small scale irrigation will require responsiveness to the Revitalisation initiatives by Agriculture. In this DWAF can promote the use of WUA as vehicles for organising small emerging farmers, so that DWAF can continue monitoring and assisting in enhancing the demands for future growth and hence equity.

CONCLUSIONS



1. In the agricultural water use reforms, Dept of Agriculture is the lead agency. For WAR to be successful ie clear demonstration that water is equitably distributed in RSA;
 - It needs to be linked to land reforms.
 - Identify other productive water uses together with relevant role players
2. There is a need to look at the benefits accrued from water use rather than from the water itself.