Physics and Chemistry of the Earth 92 (2016) 92-98

Contents lists available at ScienceDirect

Physics and Chemistry of the Earth

journal homepage: www.elsevier.com/locate/pce

Joint venture schemes in Limpopo Province and their outcomes on smallholder farmers livelihoods



Everisto Mapedza^{a,*}, Barbara van Koppen^a, Pinimidzai Sithole^b, Magalie Bourblanc^{c, d}

^a International Water Management Institute (IWMI), Southern Africa Office, Pretoria, South Africa

^b Pegasys Strategy and Development, Pretoria, South Africa

^c CIRAD Joint Research Unit G-EAU, Montpellier, France

^d GovInn/CEEPA, University of Pretoria, South Africa

ARTICLE INFO

Article history: Received 28 March 2015 Received in revised form 3 October 2015 Accepted 19 October 2015 Available online 11 November 2015

Keywords: Smallholder Joint venture Irrigation Livelihoods Gender

ABSTRACT

Joint Venture schemes based on the floppy irrigation technology are being promoted in the post-Apartheid South Africa's Limpopo Province. Access to land and water resources in South Africa are largely viewed as a mechanism for re-dressing the Apartheid injustices. This research was part of a broader applied research to help inform irrigation practise in the Limpopo Province. The research used literature review, key informant interviews and a questionnaire survey. The overall research question sought to understand how the Joint Venture Schemes had benefited the smallholder farmers. This paper argues that the joint venture partnership created a new injustice. Firstly, the Joint Venture Scheme design is fundamentally a bad idea which disempower farmers not only to water access but also land as well. The choice of the 'efficient' floppy irrigation technology was made by the state and entailed that land had to be managed as a single unit. In order to make more effective use of this highly sophisticated new technology, the smallholder farmers also needed to go into a joint venture partnership with a white commercial farmer. By virtue of signing the Joint Venture agreement the farmers were also forfeiting their land and water rights to be used for crop production. The smallholder farmers lost access to their water and land resources and were largely relegated to sharing profits - when they exist - with hardly any skills development despite what was initially envisaged in the Joint Venture partnership. Secondly, the implementation of the JVS has been skewed from the start which explains the bad results. This paper further shows how the negative outcomes affected women in particular. As the smallholder farmers argue the technological options chosen by the state have excluded both male and female farmers from accessing and utilising their land and water resources in order to improve their livelihoods; it has entrenched the role of the state and the private interests at the expense of the smallholder male and female farmers in whose name the irrigation funding was justified. The paper concludes by offering recommendations on how joint venture schemes can be genuinely participatory and meaningfully address the rural livelihoods.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

The distribution of land and water resources is a key indicator for the distribution of wealth and poverty, certainly in South Africa where the post-1994 government is trying to implement reforms. Land Reform envisaged a redistribution of 30 percent of land to Historically Disadvantaged Individuals (HDI) to redress the unequal distribution of land, in which only 13 percent was allocated to the former Bantustans. The Water Allocation Reform since 2008 aims at ensuring that 60 percent of water resources is re-allocated, from a Gini coefficient on the distribution of water use of 0.99 (Cullis and Van Koppen, 2008). However, in spite of the close connections between land and water, these two reforms have largely been implemented in parallel. While the land reform and its disappointing results have received much attention, less is known about the implementation of the water reform and its relation with land reform. As this paper argues, land reform in smallholder irrigation schemes driven by considerations of 'efficient water use' through joint ventures has led to farmers losing both their earlier weak land

* Corresponding author. E-mail addresses: E.Mapedza@cgiar.org, mapedza@yahoo.co.uk (E. Mapedza). and water rights even further. This research hopes to contribute to a better understanding on the outcomes of a Joint Venture Approach within the Limpopo Province of South Africa.

Agriculture plays a key role for rural communities in sub-Saharan Africa. In South Africa, according to the National Development Plan (2011) agriculture is contributing towards economic growth and improved livelihoods for the poor (RSA, 2011). Whilst the South African economy is largely industry based with agriculture contributing 3% of its Gross Domestic Product, some rural livelihoods are highly dependent on agriculture especially in the communal lands which are former Bantustans. Water is central to South Africa's increased agricultural productivity. The importance of irrigation as contributing to food security has been highlighted (Van Averbeke et al., 2011). However, the country is reaching its physical water scarcity so competition between agriculture and urban industrial uses is increasing. Most of its available water resources have been exploited, taking into account the water requirements for ecosystem services as well. Molden et al. (2007) distinguish physical from economic water scarcity. Economic water scarcity is when the physical water resources are available but the limited financial resources make it impossible to exploit the available water resources as is the case in a number of the sub-Saharan African countries. Physical water scarcity is when a country is running out of the physical water resources for use as opposed to the financial resources for accessing the physical water resources. South Africa is ranked as the 30th driest country in the world (DWA, 2013).

In an effort to make the most of the limited water resources, efficient irrigation technologies are being proposed as a solution for making every drop count. Water use efficiency is therefore central in increasing food production. This discourse is strong and is also imposed on smallholders, in spite of the stated intentions of the distributive water allocation reform has been very slow with 99.5% of the rural households only accessing 5% of the available water in South Africa (Cullis and Van Koppen, 2008).

This paper uses the case of the Limpopo Province of South Africa which pursued the water saving technologies in former smallholder schemes with the hope of increasing water use efficiency while maintaining agricultural productivity. The paper will further analyse how the pursuit of water saving technologies in the form of floppy irrigation technology which was meant to increase water use efficiency seemed to have the opposite effect for the smallholders. Rather than realising the envisaged benefits from the water use efficient floppy irrigation system, the joint venture scheme resulted in the displacement of smallholder land owners. The justification for the investment in agriculture in the former Bantustans (now communal areas) was meant to enhance benefits accruing to the communal area farmers. The physical water scarcity narrative is a recognized way of framing the relation to water resources at the national level. It is now being used in our case as an instrument for disempowering the smallholder farmers in the Limpopo Province.

This paper will therefore use the Joint Venture Scheme in the Limpopo Province of South Africa to critique the nature of the technology used, look at who is benefiting, also from the various other uses of water than irrigation, who is making the rules and what are the sustainability implications. All these will be viewed within the gender lens to see their implications for men and women in the study areas. Practical recommendations will then be made to provide solutions and the way forward.

2. Study area description

The study was conducted in two Joint Venture Schemes (JVS) in

the Limpopo Province of South Africa as shown in Fig. 1.

The two schemes are Mogalatsane and Setlaboswane which are downstream of the Flag Boschielo Dam. The schemes are part of a cascade of irrigation schemes along the Olifants River downstream of the Flag Boschielo Dam. The schemes were traditionally operated by individual farmers in the pre-1994 period. The state assisted with inputs, ploughing and extension with the individual farmers working on their individual pieces of land. Mogalatsane has a total of 133 ha for the 99 farmers with Setlaboswane having a total of 115 ha for the 96 farmers. The high percentage of women members is related to the demography and the fact that crop cultivation has traditionally been a women's domain. The majority of the famers in the JVS are female. This is mainly due to most of the males moving to urban area for employment. In South Africa, 60% of the population is based in urban areas. The survey results show that in Mogalatsane 64% of the households were female headed.

In Setlaboswane the trend was the same with 63% of the households being female headed and the remaining 37% being male headed. Table 1 below sums the numbers on the two case study sites.

The two case schemes were selected from a total of 5 schemes within the upper part of the Flag Boschielo schemes whose total irrigated area amounts to 500 ha which all separately had JVS partnership with Arthur William Creighton (AWC). The five schemes form a cascade along the Olifants River and are namely Petwane, Elandskraal, Mogalatsane, Kolokotela and Setlaboswane all within the Greater Serkhukhune District Municipality. Fig. 2 shows the cascade of the schemes along the Olifants River including other schemes beyond the five Flag Boschielo schemes.

The Joint Venture schemes agreements were signed in 2008 and the Memorandum of Agreements (MoAs) ran for 3 years. These were part of a broader vision to revitalise irrigation within the Limpopo Province. The Joint Venture Schemes which heavily relied on the use of the Strategic Partner evolved administratively since it was first mooted in 2001 with little or no consultation with the farmers or the civil society (Derman and Hellum, 2009). The underlying assumption was that this was a good model which would see the smallholder farmers getting profitable and functioning farms at the termination of the lease agreement (Derman et al., 2008). Joint venture schemes were further perceived as enabling the smallholder farmers in making a footstep into commercial farming (Mayson, 2003; Veldwisch, 2004).

3. Materials and methods

The study in the two schemes began as part of the Challenge Program of Water and Food (CPWF) which began from 2010 to 2014 and was hosted by the International Water Management Institute (IWMI). The first method used was a literature review which looked at what had already been published as well as grey literature and reports. The second approach entailed key informant interviews conducted with researchers and practitioners in agriculture in both the national and provincial governments. Key informant interviews were also conducted with current and past committee members of the Joint Venture Schemes as well as with a representative of the Joint Venture partner and other knowledgeable traditional leaders and farmers.

The study also conducted a questionnaire survey with a total of 49 farmers being interviewed. This comprised a sample of 25% of the total of 195 farmers in both Mogalatsane and Setlaboswane irrigation schemes who were randomly selected. Out of the sample, 25 farmers were from Mogalatsane with the remainder of 24 coming from Setlaboswane scheme. The research findings were also presented to the Limpopo Department of Agriculture and other stakeholders in Polokwane on 17 October 2014. Download English Version:

https://daneshyari.com/en/article/4720852

Download Persian Version:

https://daneshyari.com/article/4720852

Daneshyari.com