

*SMALLHOLDER  
IRRIGATION  
AGRICULTURE IN  
DISTRESSED  
REGIONS: A QUEST  
FOR PRO-POOR  
POLICIES IN  
ZIMBABWE*

Bernard Chazovachii

*Lecturer: Great Zimbabwe University Box 1235 Masvingo,  
Department of Rural and Urban Development*

Reviewed by

Leonard Chitongo

*Lecturer Great Zimbabwe University, Masvingo,  
Zimbabwe*

## Abstract

Small scale irrigation agriculture in Zimbabwe has been made farmer-managed to allow resource-poor farmers to participated and address the challenges of poverty in distressed regions. Empowering the local people through Irrigation Management Committees was perceived to a pro-poor approach in reducing poverty. The Irrigation Management Transfer was also perceived to be an approach that would create an enabling environment for economic opportunities for the poor in accessing resource and assets, rural financial services, credit facilities, financial literacy programmes, access to transport and markets and other support extension services. However, it was noted that the approach was not philanthropic. In smallholder irrigation agriculture, there are structural exclusion mechanisms for the real poor. The entrepreneurial and labouring poor were the ones found with the requisites for the benefactors in the schemes with master farmer certificates and farmers' cooperative cards. Politically fragile rural communities are marred with political victimisations to farmers with the master farmer certificates and farmers cooperative card to an extend that confusion disturbed the rhythm in smallholder irrigation agriculture. In Sengwe, South Eastern Lowveld of Zimbabwe, access to irrigation schemes is confined to wealthy and the educated as evidenced by the ARDA Tshovani scheme. No enabling environment was created for the poor especially on marketing institutions for the produce. Therefore the smallholder irrigation agriculture had pro-poor attributes on siting, planning, construction, but on software part, nothing close to pro-poor has been revealed .Thus the poor are quest for pro-poor policies in resuscitating smallholder irrigation agriculture in Zimbabwe.

**Key words:** smallholder irrigation, pro-poor, poverty reduction, agricultural development, distressed regions.

## 1. Introduction

Smallholder farmers are historically deprived persons having access to land which normally supports small or medium sized agricultural enterprise. There are various names given to such farmers to show their status or capacity and capabilities. Terms like small scale farmers, resource-poor farmers, subsistence farmers, peasant farmers, food-deficit farmers, household food security farmers, land reform beneficiaries and emerging farmers are used to describing smallholder farmers in irrigation or communal farming. Despite their negation, in Zimbabwe, smallholder farmers with average farm size of between 2 and 3 ha, doubled maize and cotton production in the 1980s when extension, marketing and credit services were provided (Rukuni and Eicher, 1994, Machethe etal, 2004). According to Nhundu etal (2010) the estimated irrigable area in Zimbabwe is 550 000 ha of which 200 000 ha have developed. With the current functional area at 120 000 ha (Manzungu, 2003, Burney and Naylor, 2012), 30% of the farmers in the smallholder irrigation schemes lack the capacity to fully utilise their irrigated plots.

## **2. Evolution Of Smallholder Irrigation Agriculture In Zimbabwe**

Smallholder irrigation agriculture was launched in Zimbabwe in 1913 as a means of famine relief and subsequently to settle black farmers displaced from designated areas for white commercial farmers. In 1928 the smallholder schemes were heavily subsidised, a pattern that continues today. In essence, smallholder irrigation development is being constrained by problems that have plagued smallholder schemes since 1928. Three broad types of smallholder schemes: government, farmer-managed and jointly managed schemes. The government-managed schemes are developed and maintained by the department of Agriculture Technical and Extension Service (AGRITEX). In new schemes, there tends to be a shift away from this practice towards farmer-managed projects. Farmer-managed schemes are developed by the government but owned and managed by the farmers' irrigation management committees (IMC) with minimal government interventions in terms of management. For jointly managed schemes, the farmers and the government share the financial responsibility for the operation and maintenance. For such schemes, the government is usually responsible for the head works, while farmers take responsibility for the field infrastructure (Mudima, 2010).

After independence, Zimbabwe still had no irrigation policy in place but relied on the 1983 DERUDE document, which Meinen-Dick (1995, 2010) viewed as the most definitive statement on irrigation policy. However the document had been incorporated into the Zimbabwe policy framework 1995-2020 (Manzungu, 1995; Burney and Naylor, 2012). The key features of the water and irrigation were that; priority would be placed on farmer-managed and operated systems. Government would assist in capital development while farmers will retain the responsibility for operation and maintenance of irrigation systems. Greater emphasis would be placed on more efficient and greater equity of water use. Effective water use associations were encouraged and facilitated in the planning, development and evaluation of irrigation projects.

## **3. Role Of Smallholder Irrigation Agriculture In Poverty Reduction And Agricultural Development**

Agriculture in general is a source of income and livelihood for many rural households in developing world. Smallholder irrigation is important in employment creation, human welfare, improved productivity all year round and stabilise the political environment in sub-Saharan Africa (Delgado, 1998, Machethe, 2004). It moderate rural-urban migration and create growth linkages and enlargement of the market for industrial goods (Ericher and Rukuni, 1996; Machethe, 2004). It is a major potential solution for poverty reduction and economic growth (DFID, 2002 Machethe, 2004). Investing in small irrigation is one of the most effective ways to develop smallholder agriculture and contribute to poverty alleviation. This has been proven in countries like Bangladesh where growth in public sector funded canal irrigation and private sector funded

tube-well irrigation have played a major role (Shah, 1993, Machethe et al, 2004). Irrigation enables smallholders to adopt more diverse cropping patterns, switching from low-value subsistence production to high-value market –oriented production. The translation to the market economy of smallholder schemes integrates the poor into land, labour, commodity and information markets and empowers them. An increased production makes food available and affordable for the poor. Sally et al, 2003 in Machethe et al, 2004 concluded that smallholder agriculture intensification by improving the management and productivity of land and water in a sustainable manner is a solution for both poverty reduction and agricultural growth in sub-Saharan Africa. Irrigation development benefited the rural poor in reducing food prices resulting from increased production; increased on-farm and off-farm employment leading to income generation for the poor. Thus irrigation contributes to food security. Smallholder irrigation schemes have not performed well in Africa. These schemes have performed poorly in terms of yields and economic returns (Barghouti and Le Moigne, 1990; Underhill, 1990; Machethe et al, 2004).

#### **4. Pro-Poor Strategy And Poverty Reduction**

Pro-poor policies are strategies targeting most disadvantaged, in income, opportunities or hardships. Their impact would lead to an increase in the income levels of the poor faster than the average rate of growth in income as a whole, reduction in recorded poverty levels and an improvement in other MDG indicators and the HDI and HPI indicators. Policies are pro-poor when it is labour rather than capital intensive, target rural and urban labour intensive sectors including construction, services, creates income and employment for the poor and disadvantaged for example the youth and other unemployed (low-skilled), women, other disadvantaged groups like the elderly, disabled, displaced people, rural/urban migrants etc, and lastly serves to reduce inequality. For the pro-poor policies to succeed, there should be an enabling environment for economic opportunities to be created for the poor in their sectors e.g. access to resources and assets, access to basic services, access to rural financial service, credit facilities, financial literacy programmes, decentralisation, local empowerment and participation, good governance, access to transport and markets and other support extension services.

#### **5. How Pro-Poor are Smallholder Irrigation Agriculture**

The government of Zimbabwe with three ministries i.e. Ministry of Agriculture, Mechanisation and Irrigation are involved in the planning, implementation, maintenance and rehabilitation through the Public Sector Investment Programme (PSIP) budget. Therefore engagement into rehabilitation resuscitates the vulnerable groups in addressing pro-poor challenges. The state empower the beneficiaries in the training on how to operate the system especially the hardware components (infrastructure- from the water source to the irrigation plots) but the software issue like training of farmers/beneficiaries on how to effectively and efficiently

manage productivity in the schemes is not done. Having the knowledge on how to improve productivity is something pertinent since thus where livelihood outcomes are derived. Failure to give assistance on operation costs on the field would affect the deprived farmers from moving out of vulnerability context. The way sites of the schemes are selected does not primarily consider profiles of the surrounding communities. They consider soils, and relief and potential of the area to achieve sustainable agriculture. The beneficiaries selected would be those deprived by the irrigation development, those supporting with free labour and not considering level of poverty among community members. This therefore implies pro-poor considerations are secondary.

Beneficiaries are chosen on the bases of master farmer training certificates. Those without the certificates are negated in the system. Already there is an element of elite capture since those with certificates are established farmers. The selection does not consider the situation under which certificates were obtaining. Socio-economic considerations were supposed to be in place for the beneficiaries to have fair and equitable rewards. Some schemes consider a Farmer's Cooperative Card. A card that would give a farmer the opportunity to borrow inputs in the farmers' cooperative shops in rural service centres and growth points. Farmers' cooperative is associated with those who can afford especially the entrepreneurial and labouring poor. These are classes that can engage themselves into both on and off-farm activities for their livelihoods. They afford to pay for subscription on monthly or seasonal bases to the farmers' cooperative. The real poor cannot manage this. Automatically the weak, poor and vulnerable households are secluded, worsening the vulnerability context of the rural household in depressed regions. Exclusion would act as a catalyst for increasing deprivation and vulnerability of poorer households (Bhim, 2001).

For those joining the scheme through recommendations from Arex Officials, local leadership, the political fragility of the rural environments in Zimbabwe have distorted proper empowerment of the real poor to an extent that smallholder irrigation agriculture in depressed communities ceased to be pro-poor. Zimbabwe had gone through a political quagmire for the past 10-15 years in which issues of certificates of master farmers and farmer's coop cards were no longer in use. Plots were taken over by ruling party ZANUPF sympathisers who neither have experience or in real poverty. In the case of Chinyamatumwa irrigation scheme in Bikita, the scheme became dysfunctional as a result of political misunderstandings. Small scale irrigation agriculture is a communal asset owned by the pool. In terms of common property rights, the scheme is a common pool resource. The political misunderstanding resulted in the tragedy of the commons. The state ignored the dysfunctional name of the scheme; failing to realise that the vulnerability of the poor is being worsened. This actually reveals that small holder irrigation agriculture and its custodians are not pro-poor.

Although Irrigation Management Transfer (IMT) was a global reform, it was a top down approach to development. No situational analysis was done to the local benefactor communities. It was not sensitive to developing communities. Vulnerable communities' plight worsened. Farmer-managed schemes became dysfunctional. The law of invisible hand was the order of the day. So instead of putting the last first, they put the first last, hence insensitive to the agonising communities. When smallholder irrigation agriculture was initiated, they were livelihood based but later turned to function as agribusiness activities where levies like water bills, electricity or fuel bills were to be collected. Although the irrigation schemes have significantly contributed to the livelihoods of people in Sengwe, South Eastern Lowveld of Zimbabwe it is worth pointing out that access to these irrigation schemes is confined to wealthy and educated rural people. For example, for a person to be a member of Agriculture Rural Development Association, Tshovani irrigation scheme he/ she have to pay z\$12000 per year which is used mainly for meeting electricity bills and other operation cost. Only the rich in rural areas could afford such exorbitant membership fee, a master farmer certificate by Rupangwana irrigation scheme exclude the uneducated rural people who are largely females. This is far away from the philanthropic attitude purported by programme.

Noting the significance of market, smallholder irrigation agriculture had no institutions for marketing the produce for the poor. Pro-poor policies are known for creating an enabling environment for economic opportunities in areas like rural financial services, credit facilities, financial literacy and access to transport and markets but all these are not accessible at most smallholder irrigation projects in Zimbabwe. Rehabilitation programmes in smallholder does not capture the aforementioned resources for the poor. In new institutional economics, the issue of transaction costs is very important in the success of every organisation. Knowing the level of vulnerability of the benefactors of these schemes, transaction costs would not be met by farmers. Smallholder irrigation agriculture failed to take note of transaction costs resulting in perishing of the perishable produce during their season. This killed the whole effort by the poor farmers through worsening their plights.

This implies that for farmers-managed schemes, government only revealed that pro-poor attitude on irrigation siting, planning, construction and rehabilitation but the hand over take over was 'each man for himself and God for us all'. The tragedy of the commons experienced in irrigation schemes has clearly shown that most of the defaulters for example at Chinyamatumwa, Rupangwana irrigation are the poor who could not pay subscriptions for the engine to supply water. In most cases, most institutions in irrigation agriculture failed because of human and financial capital deficiencies. The government failed to realise that although investment cost have been catered for, operations and maintenance is a daunting task for the poor. This calls for the government to revisit their poverty reduction policies and come up with a pro-poor policy to address

the plight in smallholder agriculture. The poor are quest for pro-poor policies in for smallholder irrigation communities.

## 6. References

- ABBOTT, D.2010. Pro-Poor Policies: What are they? How Do They Contribute to The Achievements of The Millennium Development Goals? Sub-Regional Workshop for the North Pacific: Integrating Millennium Development Goals into National Development Strategies and Budgets, UNDP Pacific Centres.
- BHIM, A .2001. Literature Review on The Economics of Common Property Resources: Review of CPRM in Tanzanian Report Prepared for NRSP Project In 7857, University of York, and Department of Environment.
- BURNEY, J.A AND NAYLOR, R.L .2012. Smallholder Irrigation as a Poverty Alleviation Tool in Sub-Saharan Africa, World Development Vol 40, No.1 Pp110-123 Elsevier.
- FAO .2000. Socio-Economic Impact of Smallholder Irrigation Development in Zimbabwe, Regional Office for Africa.
- MEINZEN-DICK, R. MARKELOLA, H AND MOORE, K. 2010. The Role of Collective Action and Property Rights in Climate Change Strategies, IFPRI, Policy Brief No.7.
- MOMBESHORA, S, SOBONA MTISI AND JOSEPH CHAUMBA .2001. Institutions, Governance and Policy Processes, Zimbabwean Country Study; Case Study of Sangwe and Mehenye Communal Areas in Chiredzi and Chipinge District, Mapping Phase Report.
- MUDIMA, K.2010. Socio-Economic Impact of Smallholder Irrigation Development in Zimbabwe: A Case Study of Five Successful Irrigation Schemes, Private Irrigation in Sub-Saharan Africa .*Unpublished*.
- NHUNDU, K AND MUSHUNJE, A. 2010. Analysis of Irrigation Development Post Fast Track Land Reform Programme. A Case Study of Goromonzi District, Mashonaland East Zimbabwe. *Unpublished*.
- RUKUNI, M .1987. The Evolution of Smallholder Irrigation Policy in Zimbabwe1928-1986, Irrigation and Drainage System 2:199-210, Kluwer Academic Publishers, Netherlands.