

*CABRI sector dialogue on value for money
in agriculture spending*

Zambia case study

Innovative Financing of Agriculture in the SADC Region



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2014



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Acronyms and abbreviations

CAADP	Comprehensive African Agricultural Development Programme
CABRI	Collaborative Africa Budget Reform Initiative
DRC	Democratic Republic of Congo
DFA	District Farmers Association
FRA	Food Reserve Agency
FISP	Farmer Input Support Programme
IAPRI	Indaba Agricultural Policy Research Institute, 2013
IFC	International Finance Corporation
IFAD	International Fund for Agricultural Development
NAIP	National Agricultural Investment Plan
UNIDO	United Nations Industrial Development Organization
Zamace	Zambian Agriculture Commodity Exchange
Zanaco	Zambian National Commercial Bank PLC
ZEFP	Zambia Emergent Farmers Program
ZMK	Zambian Kwacha
ZNFU	Zambia National Farmers Union

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1. Introduction

1.1 Purpose of the case study paper

The paper gives an overall description of innovative financing of agriculture in Zambia. It reviews two new ways of funding agricultural enterprises that offer opportunities for providing sustainable funding to the smallholder agricultural sector. It will assist governments in finding alternative ways of financing smallholder agriculture. It provides information on initiatives being taken by the private sector to extend seasonal loans to small- and medium-scale farmers, while managing the risk historically associated with lending to this subsector. The case studies can help African governments to make decisions on how to promote alternative ways to finance smallholder farmers who desire to engage in commercial farming and boost agricultural production. They shed light on how organised farmers can access finance from the formal banking sector and repay the loans successfully, and how the usual constraint of lack of collateral can be addressed in such types of lending to smallholders. This subsector is traditionally viewed as unbankable (they are either too risky to offer them bank loans or the farmers see banking services as expensive, with too many transaction costs). Hence the report tries to answer questions that often confront the new investor by analysing promising cases of emergent innovative financing, unveiling new approaches that have been tested, and providing some useful statistics on their performance. This is done through describing two case studies of new ways of financing the smallholder subsector that have been implemented in Zambia.

The analysis takes into consideration what are deemed to be pointers towards successful attainment of the objectives, as well as the challenges encountered in the attempt to attain those objectives.

The case studies are used to show participants at the workshop what can be achieved when financing small-scale

farmers, and what makes the financing models successful. Furthermore, they show how private sector actors, like the Zambian National Commercial Bank, have addressed challenges of lending to smallholder farmers for the mutual benefit of the bank and farmers. The Government is perceived favourably as managing the economy well when the private sector is able to lend to these farmers, using tailored products and services that suit the farmers' circumstances. This subsector constitutes a significant proportion of the electorate. At the same time, a larger, low-risk portfolio generates returns for the investors in the banking sector. Farmers, on the other hand, are able to use financial products and reap benefits of increased agricultural productivity if the financial products are appropriate for the type of farming they are undertaking.

As the reader goes through the paper, attention should be given to how the policy environment can be reviewed so that the agricultural sector can thrive, and that issues of food security, employment creation and economic development can be fostered through innovative financing. It is recognised that the conditions on the ground vary in each of the countries represented at the workshops, but participants are encouraged to think about how they would tackle the issues raised in the case studies to solve the situations in their respective countries. The discussions on the different case studies would centre on the following considerations:

- What can be learnt from these two experiences?
- What evidence is there that the stated objectives of the initiatives are being attained?
- What could be done to improve these initiatives?
- What other methods could have been used to attain the same results?
- What criteria would you use if you had to recommend

one of these two as an efficient way to improve innovative financing of agriculture?

- Which one – if any – of these initiatives would you choose for your country's situation and why?

The two case studies reviewed in this paper are:

- The Munda Smallholder Credit Facility is an example of indirect smallholder lending that provides farmers better access to finance in order to help them grow their businesses and to offer a practical alternative to the discontinued national Input Support Program, in which the Government of Zambia had provided inputs to farmers. This initiative is also piloted by Zanaco, working through District Farmers Associations (DFAs), that are affiliates of the Zambia National Farmers' Union (ZNFU).
- The Zambia Emergent Farmers' Support Programme (ZEFP) is an initiative that was commenced by the Zambia National Commercial Bank PLC (Zanaco) in cooperation with the International Finance Corporation (IFC) and Rabobank Foundation (Netherlands) in 2007/8, as a way of combining access to finance with support services for emerging farm businesses.

The case studies are reviewed against the background of the policy thrust outlined in the National Agricultural Investment Plan (NAIP) which forms part of the Comprehensive African Agricultural Development Programme (CAADP) for the

country (for further details on the policy thrust, see the section on the background to Zambian agriculture below).

In light of this policy thrust, the case studies highlight what the private sector has done to take advantage of the opportunities availed by the policy environment, including:

- salient features of each of the initiatives and the extent to which these have contributed to productivity increases and general well-being of participating farmers;
- how the technical and implementation arrangements have contributed to the outcomes; and
- the prevailing challenges in terms of scaling up of such initiatives, and what lessons can be learnt from previous and current practices.

The case study is structured as follows: The next chapter gives an overview of the agricultural sector in Zambia, the planning framework and situational context of private sector financing of the sector. Chapter 3 discusses each of the two initiatives, highlighting how they came about, how they were implemented, and the outcomes and lessons that can be learnt. Definitions of the terminology behind innovative financing of agriculture and the models are also provided. The final chapter discusses the overarching issues on innovative financing of agriculture emerging from the case studies under review.

1 In Zambia, a smallholder farmer is one who cultivates >0 and <20 ha, while an emergent farmer cultivates 5ha to 20ha (IAPRI, 2013). Some studies refer to small-scale farmers as those who cultivate >0 ha to 10 ha (e.g., 'Innovative Approaches in the Provision of Rural Finance with Emphasis on Smallholder Producers: The Case of Zambia', by Dinde, Simacheche and Webby Mate, 2004). The emergent farmer is one who transforms from subsistence to commercial farming, and is more integrated with the output market than the subsistence farmer. In 2010/11, 87% of all smallholders controlled less than 5 ha of land in Zambia. Growth of the emergent farming sector in Zambia is driven by individuals with: 1) off-farm income to 'buy into' farming; 2) social and economic capacity to participate in statutory and vernacular land markets; and 3) sufficient initial endowment of land.

2. Background to the agricultural sector in Zambia

Zambia is a landlocked country located in southern Africa, lying between latitudes 8° and 18° south of the Equator and longitudes 22° and 34° east of the Greenwich Meridian. Zambia shares a common border with eight other countries: Tanzania and the Democratic Republic of Congo (DRC) in the north; Angola in the west; Namibia, Botswana and Zimbabwe in the south, and Mozambique and Malawi in the east. The country has a total land surface area of 752,616 km², and lies between 1,000 and 1,600 m above sea level. Zambia's main drainage systems are the Zambezi, Kafue, Luangwa and Chambeshi-Luapula rivers. The country has five major lakes: Kariba (man-made), Bangweulu, Mweru, Mweru-Wantipa and Tanganyika.

The country is rich in resources with great agricultural and agro-industrial potential and opportunities. In the decade 2001 - 2011, it exhibited growth rates of an annual average of 6%, rising from -2% in 1975 and 1995. The growth was mainly due to high global copper prices and robust investments in telecommunication, construction, and other sectors. Despite the stagnant rural economy, the growth rate of agriculture, fisheries and forestry, as a sector since 2009, has been a robust 10%. However, due to the vagaries of weather, the growth pattern has, in some years,

been volatile, recording negative rates in years such as 2005 and 2007.

In order to create an environment which further supports the growth of agriculture, the Government of Zambia has made pronouncements in the National Agricultural Investment Plan (NAIP 2014 - 2018) under the Comprehensive Agriculture Development Programme. The main thrust of the NAIP is to create an enabling environment for public sector investment in agriculture and institutional strengthening, aimed at improving the predictability of government action in agricultural markets alongside strategies for poverty reduction, diversification of the sector, and improving resilience of the food systems in the wake of climate change.

On its part, the Government sees the sources of investment in NAIP over the five-year implementation period, adding up to USD2,730.69 million. This is broken down as follows: 78.4% or USD2,141.33 million will come from the Government and the cooperating partners; 14.4% or USD391.67 million is expected to be contributed by farmers; and 7.2% or USD197.70 million will come from the corporate private sector. This budget includes neither investments going on at farm level nor those by the corporate

private sector. Ongoing and planned interventions total USD457 million, of which USD308 million is budgeted. The financing gap is estimated at just over USD651 million.

In this context, the role of private sector financing is seen as crucial to supplement government efforts in financing agriculture to improve productivity. Access to farm credit is another critical, yet underdeveloped, aspect of improving farm productivity. According to the nationally representative Rural Agricultural Livelihoods Survey (RALS) conducted in 2011, only 13% of Zambian smallholders had access to credit. The history of private sector financing of agriculture, in particular the smallholder subsector, shows

outgrower schemes¹ taking the lead ahead of other forms of financing (Figure 2). A vast majority of this credit was acquired through outgrower schemes for cotton.

Commercial bank credit remains low, in part because of a lack of collateral to access credit among farmers operating under customary land tenure systems. However, some important strides have been made by ZNFU, in partnership with cooperatives and commercial banks, to facilitate credit access through the Lima Credit Scheme. Under this scheme, good standing membership in the farmers' union acts as a form of collateral to support farmers' access to credit.

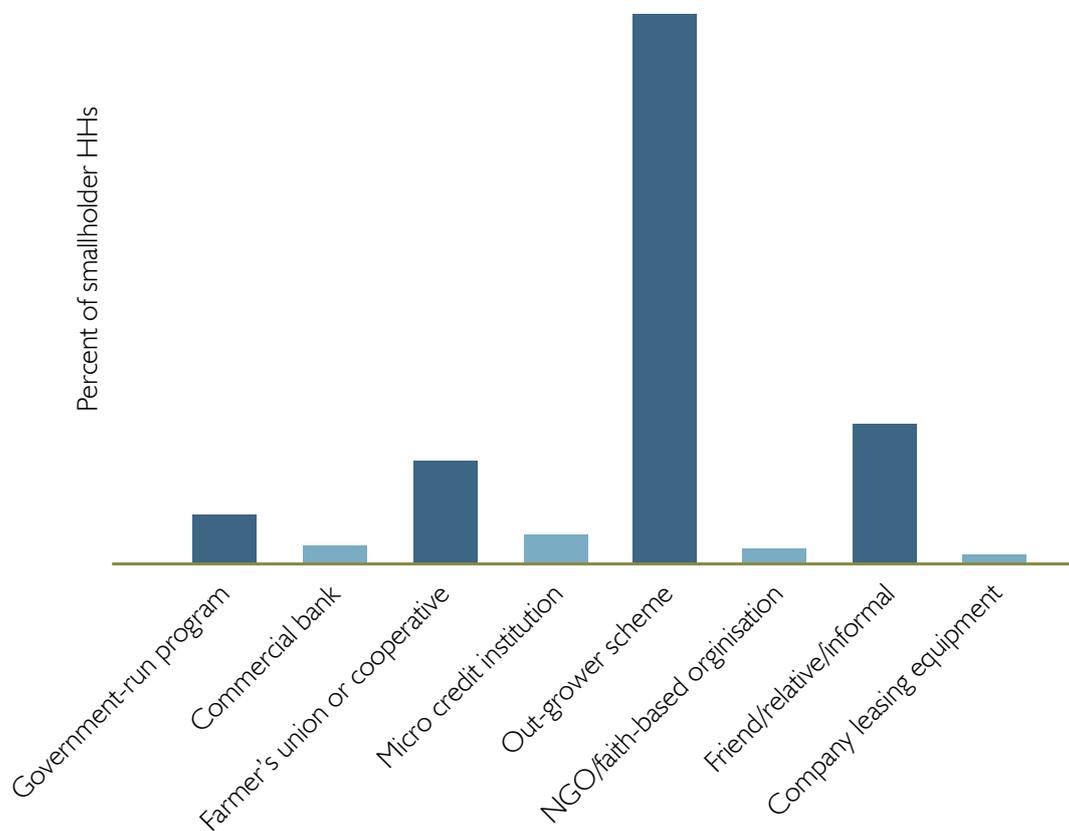


Figure 2: Sources of credit among all smallholder farmers 2010 - 2011

Source: Central Statistical Office, 2012.

Note: HH = household.

1 Outgrower schemes are business arrangements where organised groups of smallholder farmers enter into contract with commercial farmers who wish to increase their production, but do not have land. The commercial farmers contract the smallholder farmers who have land and they provide them with input financing, output markets, extension advice, management services, processing and packaging, transportation and water provided on credit, allowing costs to be recouped at the time of selling. The contracting company provides these services to smallholder farmers with a primary interest in the pooled volume of products for the purpose of processing and marketing.

3. Improving financing of agriculture: a review of two different initiatives

Farmers are a heterogeneous group with varied plot sizes, production capacity, mechanisation, resources and expertise. The diagram below (Figure 3) shows a typology that pertains to access in the Zambian context to appropriate financial services for farming activities and overall household expenses.

The case study explains what has transpired in terms of the innovative financing as defined, namely: 1) new models that are not widely used yet; 2) adaptation of existing models in a developing country context; and 3) down-scaling models for smallholders.

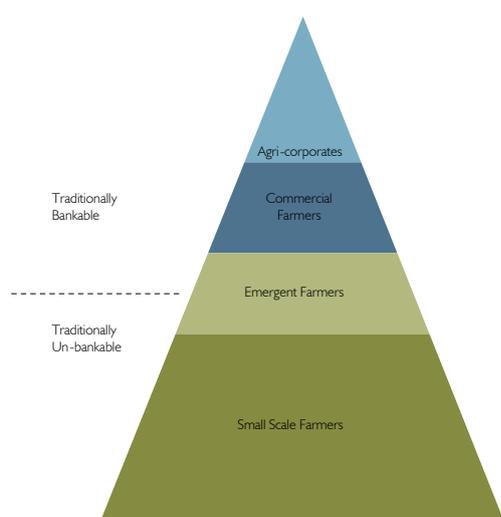


Figure 3: Bankable production typology

Source: Rabo Bank, 2014.

The Zambian National Commercial Bank PLC, popularly known as Zanaco, created in 1969, is one of the leading banks in the country with 59 branches and agencies, and 121 additional points of presence. It was partially privatised in 2007 when Rabo Bank acquired 49% of the Government's interest in the bank, and was listed on the Lusaka Stock

Exchange in November 2008. Over 50% of the shares are owned by Zambians and the Zambian National Farmers Union (ZNFU).

The smallholder subsector which, as shown in Figure 3, is the bottom of the pyramid, and the largest numerically in most of our developing countries, is often characterised by:

- low cultivated hectareage, ranging between > 0 ha and <20 ha;
- low yields due to inadequate agronomic skills;
- lack of adequate financial management skills; and
- poor record keeping.

They are perceived to be unbankable either because banks consider them too risky to offer them bank loans (they lack the collateral and the credit culture), or the farmers view banking services as expensive with too many transaction costs, and not tailored to the specific conditions of the smallholder farmer.

The emergent farmer cultivates slightly more land, >5 ha to 20 ha, and buys into emergent farming using off-farm income, growth of small-scale operation, their social and economic capital to participate in statutory or vernacular land markets, or sufficient initial endowment of land resources. Their production is more market-oriented and profit-focussed (farming as a business enterprise) than smallholder farmers, who are mainly subsistence farmers though they sell some of their production for income.

The first model of innovative financing discussed hereunder is designed specifically for the group of farmers low on the pyramid, while the second model is specifically for emergent farmers.

3.1 Indirect lending through financial institutions: The case of Zanaco's Munda Credit Facility

3.1.1 Munda Credit Facility: Purpose and set-up

The facility was created by Zanaco to provide smallholder farmers with better access to finance in order to help them grow their businesses and offer an alternative to the discontinued government financial assistance programme (FISP), where inputs were supplied gratis. The modus of operation is that Zanaco lends to the District Farmers Association (DFAs) who is, in turn, affiliated with the ZNFU. An assessment of a farmer's total needs is done before each growing season by the DFA, which then submits these assessments to the ZNFU to tender for the accumulated need for fertiliser and seeds. Zanaco then finances these inputs backed by 50% cash collateral, deposited by the DFAs. The

farmers who are organised into cooperatives or associations are then able to obtain the inputs from such companies as Omnia Fertilizer Zambia Limited and Zamseed.

The Government's role is to finance the scheme (as part of the shareholders of the bank)¹ and to provide technical support to the farmers through the network of government agricultural extension workers, though their presence on the ground is limited due to low numbers. The Government also provides an enabling policy environment through regulating agricultural input and product pricing, and moral support by participating in the launch of the loan products at the level of Minister of Agriculture and Livestock.

At the end of the crop-growing season, the harvest is sold to the processors, who channel the payment to Zanaco which, in turn, deducts the outstanding loan balance, inclusive of interest, and associated costs, such as group insurance premiums. The remaining surplus is paid out to individual farmer accounts through their DFAs (Figure 4).

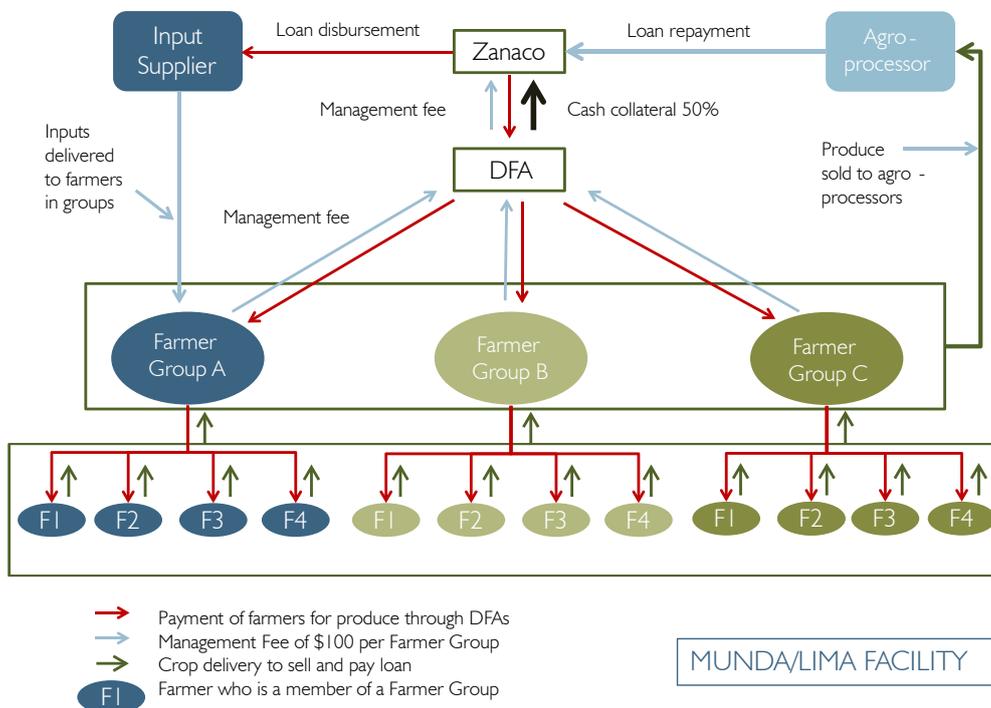


Figure 4: Munda (Lima) Facility

¹ 46% of Zanaco is currently owned by Rabo Bank, 25% by the Government of Zambia, and 29% is held by local institutional and private investors and employees.

Through the DFA, the collective smallholders are responsible for the loan repayment of each individual, according to social sanction or an 'all for one' principle. If repayment is not effected on time by the individual farmer, participation of the said farmer in the next season round is prohibited. The same applies to the DFA that fails to pay on time.

In the 2011/2012 farming season, the scheme disbursed a total amount of USD4 million to 25 DFAs, representing 4,026 participant farmers, working on some 10,088 hectares; an increase from 600 ha in the 2008/09 farming season. These are less than half of the 69 DFAs (in total) that are affiliated with the ZFNU. The farmers' maize yields have increased from the original 1.5 metric tons per hectare in 2008/09 to 3 metric tons per hectare during 2010/2011 due to the use of hybrid seeds and fertilisers, and adoption of conservation agriculture practices. As the scheme grew in popularity, the Munda facility was transformed into the LIMA programme in 2010, with currently over 16,780 beneficiary farmers. The loan repayment rate is reported to be 99%, hence ensuring a good measure of sustainability.

3.1.2 Strengths

The current interest rate regarding the ZMK-based rate (16% per annum) minus 5% (11% p.a.), which is a competitive rate in Zambia, is seen as a positive element towards the success of the scheme. The arrangement whereby the DFA pays only a USD100 fee for the group and does not oblige the borrower to provide any additional collateral beyond the cash they have deposited, is also seen as a strength, using the 'all for one' principle. From a Bank's point of view, the portfolio has performed well with minimal

defaults, hence the positive attitude towards expanding it.

The scheme has been supported by the Government's Food Reserve Agency's early setting of the price of the crop (maize) in the season at a particularly higher than regional price to cover the amount they buy for food security purposes. This sets the price regime on a fairly competitive level for subsequent buyers.

3.1.3 Challenges

This model relies heavily on the Zambian National Farmers Union's organisational abilities to manage risk and operational structures of DFAs. Outside of these it would be difficult to replicate.

Its sustainability also relies on crop diversification at farmer level and the enhanced corporate governance skills at DFA¹ level. While most DFAs are big enough to arrange finance, collection, storage, processing and marketing, smaller associations may have difficulties handling such issues. Second, the production environment of the members in a DFA is similar enough to be manageable, but the pattern of membership and leadership of DFAs varies from one district to the next, with those that are mixed (large- and small-scale farmers) being stronger in corporate governance and more business-oriented than those with only small-scale farmer membership (Sumelius, 2011), as small-scale farmers tend to copy behaviour of larger-scale members. One challenge with mixed DFAs is that they might have difficulties fulfilling the needs of the members, as prescribed in their roles (see Table 1 for their roles). The advantages of membership may not be as obvious for large commercial farms that can manage on their own, directly with the processing industry.

1 The District Farmers-Association (DFA) is a legal entity with its own elected governing executive committee. There are two categories of DFAs; small-scale and large-scale farmers DFAs, with small-scale DFAs representing more than 80% of the total DFAs affiliated to the union. Large-scale DFAs are a mixture of large-scale and small-scale farmers, but only in a few cases is the membership predominantly large-scale. In terms of affiliation fees to the union, the small-scale DFAs pay a fixed annual fee, while individual members of the large-scale DFAs are levied directly by the union, in collaboration with the DFA leadership, at a small percentage of the turnover (ZFNU, 2014).

Table 1: Support services provided by ZNFU and DFAs to members

Producer Organisation	Topic of support
ZNFU	Negotiations with government on issues related to farmers' interest, taxes, legislation, property rights, etc. Lobbying activities Umbrella organisation representing the whole agricultural sector Improving commercial integration, creating commodity-based associations Creation of a political/territorial structure for farmers through the DFAs Coordination of DFA activities Providing channels for project funding, record keeping and auditing to local DFAs Improving farm competitiveness Improving commercial possibilities through interlinking of producers, processors, buyers/resellers, merchandisers and retailers Conservation farming
DFAs	Technical and economic advice to farmers Creation of information centres for farmer education and information Negotiation on regional prices Collection, storage, processing and marketing of products Help in credit arrangements

Source: Sumelius, 2011.

Despite the 50% cash collateral – instead of a legal claim on the harvest as collateral, which may be seen as limiting the farmer's leverage – the model still attracts custom and demand.

3.1.4 Potential for expansion

Due to the fact that this approach introduces farmers into the 'bankable category', it indicates a potential for expansion. Indeed, the increase in demand since inception and the fact that agricultural land is not the constraint, shows that if more resources are mobilised, from both domestic and international sources, the scheme can be expanded. The repayment rate remains high at 99% despite expansion to over 16,000 farmers.

3.1.5 Evidence of outcomes

From the available secondary literature, empirical evidence on outcomes is limited. The increases in yield reported above are what is available, but on their own are insufficient to infer that there are positive outcomes at farm level. It is clear though that the capacity of Zanaco to lend to previously unbankable clients has improved, as indicated by the large number of farmers reached and the continued expansion of the programme.

The high loan repayment rates also indicate that farmers' skills to manage their farm business enterprises, financed by loans, and their credit management skills have been strengthened and are being utilised effectively.

Anecdotal evidence points to some cases where farmers have materialised higher net farm incomes, and some have invested this income in improved housing with brick and corrugated roofing, and in irrigation facilities.

3.1.6 Questions for reflection

- Can farmers organised into unions sufficiently manage risk so that the banking sector can extend loans to their members through them with a reduced level of collateral?
- How can we support national farmer unions to organise farmers to the level where corporate governance is sufficiently high for the private sector to have confidence to extend agricultural credit to their members on favourable terms?
- What would be the ideal role of government in innovative financing of agriculture, whereby the private sector works directly with farmers through their unions?

3.2 Emerging Farmers Finance: Zanaco's Zambia Emergent Farmers Program (ZEFP)

3.2.1 The ZEFP: Purpose and set-up

The ZEFP was designed as a model for emergent farmers to access a package of support that includes both finance and support services. A pilot project was completed in August 2009, whereby Zanaco provided both working capital and investment finance, while the International Finance Corporation and Rabo Development financed the technical assistance grant that was channelled through ZNFU. According to Rabo Bank (2014), emerging farmers are:

*"...typically larger than smallholders, have a more entrepreneurial mentality, have a basic level of financial management and are growth oriented. Emerging farmers are an interesting target group because they have the potential to develop into full scale commercial farmers. This requires investment financing, working capital financing and other banking services compared to a smallholder who typically only requires small amounts of working capital."*¹

Rabo also provided bank capacity-building, which included credit skills and farm performance monitoring training to Zanaco. The cost of this type of capacity-building is ideally shared between the partners (Rabo Bank, Zanaco and IFC).

Each applicant that received the loan was also provided with access to technical assistance to accompany the credit facility and make it successful. The farmers were trained in farm management and financial skills. In addition, external

specialists provided support for individual farmer loan applications and business plans.

In this model, individual farmers apply for the loan from the bank with help from technical experts. Once the loans are approved, they get inputs and technical assistance from the private sector players engaged to provide services to these farmers, which the bank pays for in advance and recovers after the sale of the farmers' produce.

The main objective of the programme was to develop and test a model, using strict business principles, to provide commercially-based access to finance and agri-support to a class of farmers currently unable to access bank finance.

It focussed on:

- farmers with at least a three-year track record;
- proven or identifiable enterprise in the farmer;
- adequate equity¹; and
- minimum farm size, depending on the farm enterprise (emergent smallholder farmers have land holdings, ranging from 5 to 100 hectares).

The component of technical assistance given the farmers included services from:

- fertiliser companies and agricultural line companies (Omnia Fertiliser Co.);
- agri-chemical companies (like Cropsolve);
- farmers associations (like the Poultry Association);
- cooperatives, dairy processing companies (Parmalat, Afgri);
- crop insurance companies (Zamace, the Agri-Commodity Exchange); and
- business training consultancy firms.

1 Rabo Bank, 2014. Emergent Farmers Programme Zambia. <https://www.rabobank.com/en/about-rabobank/rabo-development/projects/zambia.html> (17/11/2014: 08:58).

2 No specific conditions are stipulated on the level of equity, but this is assessed in relation to the total financial requirements of the project and the complementary resources needed as the contribution by the farmer after securing the bank loan in order to make the project successful.

The schematic representation of the model is presented in Figure 5.

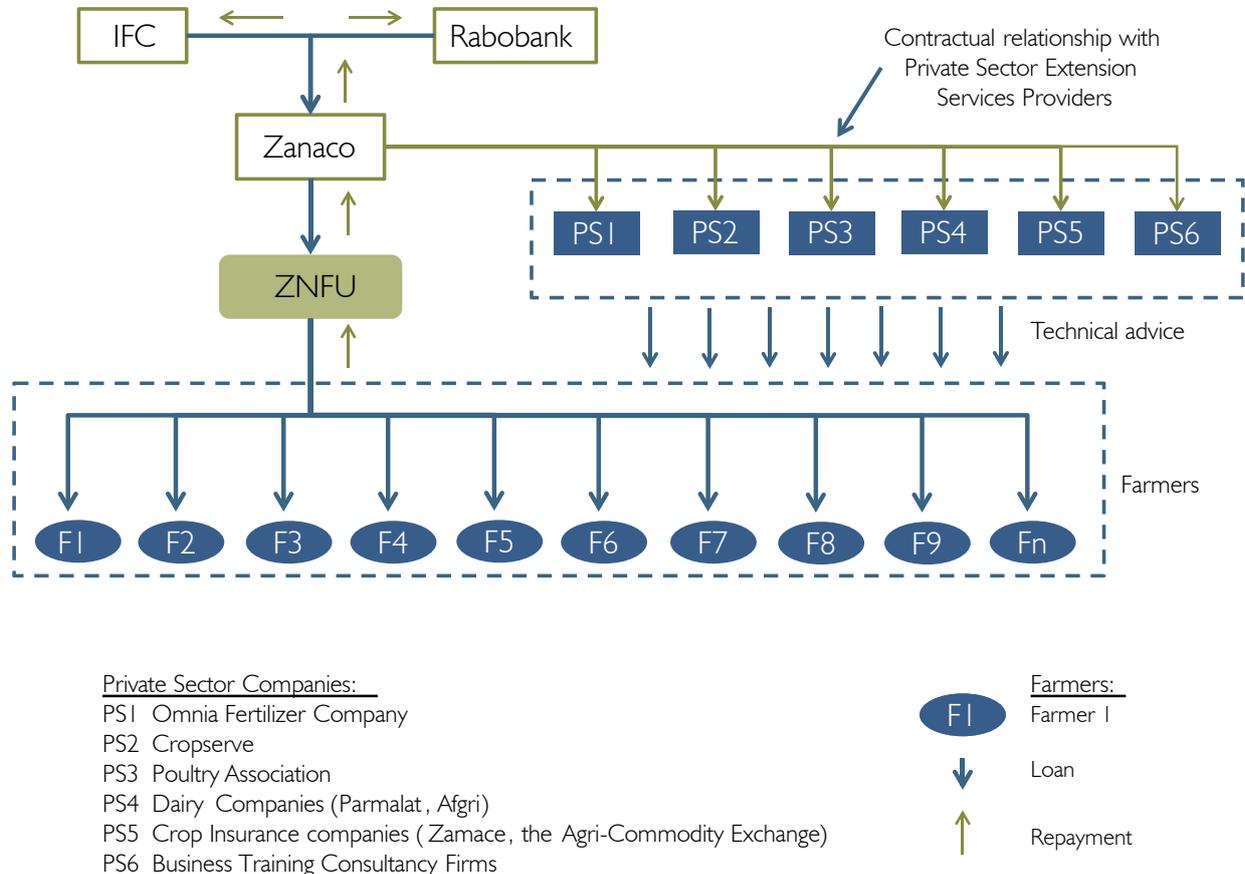


Figure 5: Schematic Representation of ZEPF Model

In this model, Omnia Fertilizer Company also plays a crucial role in soil sampling and determining the fertiliser programme together with the farmers. Cropsolve does the same for agri-chemicals. Other partners such as Parmalat, Afgri, and Zamace (the local Agri-Commodity Exchange), provide the market linkages for the sale of commodities produced by the farmers.

The involvement of the project partners is commercially driven; all parties acknowledge the immense growth potential of this group. Some of the key questions the approach tries to resolve are based on a market segmentation framework presented in Annex 4.

As of 31 December 2011, the programme had provided loans to 124 farmers. The enterprises have diversified beyond

cropping (sugar and rice) to livestock, inclusive of piggeries and dairies, as these subsectors have relatively strong market linkages that mitigate the risk of cash diversion by farmers and reduce reliance upon land as collateral.

3.2.2 Strengths

The main strengths of this financial product include:

- a portfolio diversified to include value chain financing in sectors with strong market linkages;
- adequate and timely access to finance;
- adequate and timely access to technical assistance made available by ZNFU/Rabo Bank, and IFC, a

major contributor to productivity enhancement and success of the model (see Table 2 below for impact on this element);

- customers able to run their farms as businesses; and
- availability of skilled agricultural staff, hired and trained especially for the new tasks taken by the bank.

3.2.3 Challenges

The main challenges are that:

- not all emergent farmers belong to ZNFU or other associations which give them exposure to other group activities; and
- the cost of agri-finance capacity-building has to be shared between willing partners, yet this is not always available.

3.2.4 Potential for expansion

The level of support in terms of technical advice and loan sizes to individual farmers is much higher in this model than in the first one. Expansion is possible if the financial resources made available permit coverage of larger numbers of farmers at this high level of input per farmer. The resultant yield increases, as shown in Table 2, have been confirmed to be large enough at the prevailing producer prices to enable those involved to repay their dues without any government subsidy; this is a positive indicator of potential for replication and upscaling. The level of technical assistance required to achieve

high returns is high and it is not always feasible for a country like Zambia to have the critical numbers for an expanded programme.

3.2.5 Evidence of outcomes

The results of the ZEPF, as reflected in productivity gains in the period 2009 to 2011, show the possible positive outcomes of this model (Table 2).

The technical assistance program implemented by ZNFU/ Rabo Bank and IFC "led to enhanced practices by the Bank and improved the productivity of the participating farmers" (IFC, 2012). Zanaco was able to hire and train a group of new agri-loan officers to strengthen the agri-finance capacity of its branches. "Without agri-finance capacity building of its rural branches, the ambitious growth targets for emerging farmers would not be feasible" (IFC, 2012). The scheme has now been expanded into sugar, pork, rice and dairy production which have strong market linkages, minimising the risk of cash diversion by farmers, and reducing reliance upon land collateral.

3.2.6 Questions for reflection

- How can the government help to reduce the risk so that the private sector can roll out large loans to the emergent smallholder farmer?
- What role should the government continue to play to complement the private sector players who invest in the agricultural finance business?

Table 2: Impacts of technical assistance of the ZEPF 2008 - 2011

Financed Agric Sector	Yield before intervention	Yield after intervention 2008/09	Yield after intervention 2009/10	Yield after intervention 2010/11
Dairy	10 l /cow/day	12,5 l /cow/day	16 l /cow/day	17.2 l /cow/day
Poultry	75% peak production	80% peak production	90% peak production	93% peak production
Maize	2.38 tons/ha	5.2 tons/ha	5.8 tons/ha	4.9 tons/ha

Source: Zanaco, 2012.

4. Discussion and reflection

Agriculture financing in Zambia remains a window of opportunity for the growth of investment portfolios of many private sector enterprises interested in providing funding to agriculture, and those involved in production and processing of agricultural products. However, the business environment for agricultural financing continues to be constrained by several factors, including the following:

- *Policies which crowd out the private sector:* A key challenge in efforts to promote private sector participation in the agricultural market in Zambia is the crowding out effect of current subsidy programmes in the private sector. To address this will require reforming the operations of the Food Reserve Agency in ways that increasingly accommodate sustainable participation and growth of private sector actors in agricultural marketing. Several models of government intervention in produce pricing and marketing have been tried in the southern African region with some successes and failures, but policy inconsistencies in Zambia reflect that lessons from regional experience are not readily adopted. This indicates the intricacies of the political economy of agriculture in the region, and more so the conflict between how governments address issues of food security and rural development, on the one hand, and private sector development, on the other.
- *Policy unpredictability:* There is considerable inconsistency and instability related to import or export restrictions, timing and pricing of subsidised grains, and how and under what conditions staple food commodities are released onto the market.

A key issue for discussion is how risk could be lowered for the private sector to increase its investment in agricultural financing, or whether and how the private sector could use innovative financing products to mitigate this risk.

- *Inadequate farmer management information:* A major issue affecting private sector investment in agricultural financing is the availability of farmer information, which enables them to support the applicant for farm credit better. Farmer organisations rarely keep all the information that agricultural financiers require, neither do they know the full range of financial products available on the market and requirements of credit providers. To gain this information and maintain an up-to-date database is an expensive exercise. The questions that can be posed for further discussion are 1) whether programmes to strengthen agricultural market information, especially those that target farmer organisations and providers of agricultural finance, are effective and good value for money, and 2) how best to generate, maintain and avail reliable information on farmer characteristics. This would guide agricultural financiers to make decisions quickly and correctly on provision of finance to agriculture. How can innovative financing address information gaps in risk assessment?
- *Inadequate farmer training:* Most farmers who need agricultural finance, especially those in the emerging and small-scale sectors, do not have adequate exposure or knowledge of how to secure, viably use and properly service agricultural credit. High default rates experienced in the past, partly due to latent protection from politicians,

vouching for the rural vote in general elections, have reduced the risk appetite of the private sector credit providers. However, innovative financing models have, to some extent, been effective in addressing this gap through group lending which effectively uses peer learning and group collateral to reduce the risk of lending to these farmers. Some of the discussion points would be whether and how training on managing agricultural finance has been/can adequately be addressed (in future). Which farmer capacity development models would be most effective in enabling farmers to acquire information and skills to manage agriculture finance? What should the division of labour be between public sector farmer extension systems and private agro-finance enterprises in farmer capacity-building for more effective and sustainable management of agricultural finance?

- *Inherent fear of approaching formal banking services by farmers:* Most farmers are reluctant to acquire agricultural loans from the formal banking sector because of fear associated with their previous unsuccessful experiences. A combination of high cost, late disbursements, repayment terms that are too short, non-facilitation of repayment (distant loan recovery centres), high transaction costs, poor customer services by banks, illiteracy and other barriers into formal financial markets, hinder many farmers from approaching banks. The discourse on innovative financing needs to unpack solutions that such new vehicles can provide to the myriad of constraints that confront farmers when they approach traditional sources of institutional credit for agriculture.
- *Crop marketing challenges:* Major barriers to credit for farming are low producer prices and the late payment of farmers by produce buyers. Crops that have guaranteed prices from the government parastatals often do not get paid on time as the

government struggles to raise money through the treasury to finance crop purchase. In some instances, the producer prices are announced late, which poses a major risk for many farmers (who borrow without knowing the financial return on the investment). At the same time, uncontrolled crops experience so much volatility in producer prices that farming becomes opportunistic with high prices when national production is low (either due to natural disasters such as drought or pest damage, or risk aversion by farmers, following a year of glut). The role of middlemen in unregulated markets has also been exploitative to farmers. Given this phenomenon, the discussion point perhaps becomes one to the extent to which innovative financing models should combine production and marketing support to lower the risk of agro-finance users and providers. How far should providers of agricultural finance intervene in the marketing of products to lower the risk of clients and their business in agricultural finance?

- *Monopoly of some service providers:* Some providers of agricultural credit enjoy a monopoly position either as the sole buyers of the crop commodity in question or those well-resourced financially to extend agricultural credit. With very few players willing to take the risk to extend agricultural financing, particularly to the smallholder sector, the rules of the game are then dictated by institutions that enjoy a monopoly advantage. How far such monopolistic financial service providers take into account practical needs and concerns of their clients, and offer appropriate financial products, remains a question for further debate.
- *Approaches to Innovative Platforms for Technology Adoption (IPTAs)* as championed by the Forum for Agricultural Research in Africa (FARA), under the implementation of CAADP Pillar IV, have seen positive gains to integrating farmers along the value chains from research to markets. This programme

is being implemented in two rural districts of Zambia (Masaiti in the north and Siavonga in the south) and targeted at the smallholder farmer. Lessons from this approach can also be used to expand benefits to more smallholder farmers.

- For innovative financing models, the key issue is implementation, which depends on local conditions. Hence the key questions in the market segmentation framework presented in Annex 4 are important to understand the operational environment under discussion.

Based on the lessons learnt so far from the two case studies in Zambia, critical questions will be raised for discussion at the dialogue meeting, which may include:

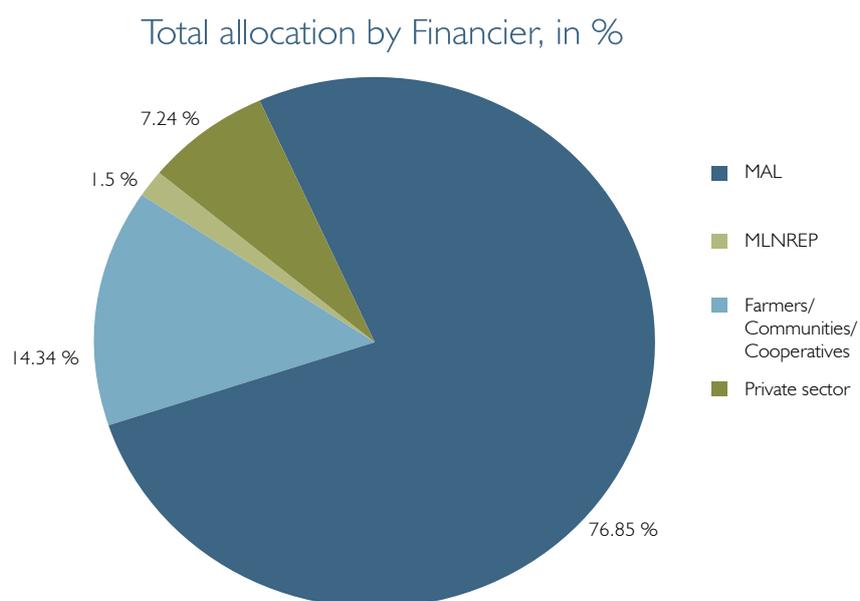
- What critical elements for success can be identified in each innovative financing model?
- What are the policy interventions necessary to support innovative financing in our respective countries' environments?
- Which stakeholders do we need to include for successful innovative financing of agriculture?

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Annexes

Annex 1: NAIP budget by source of funding



Source: Ministry of Agriculture and Livestock.

Annex 2: ZEPF – agri product and features

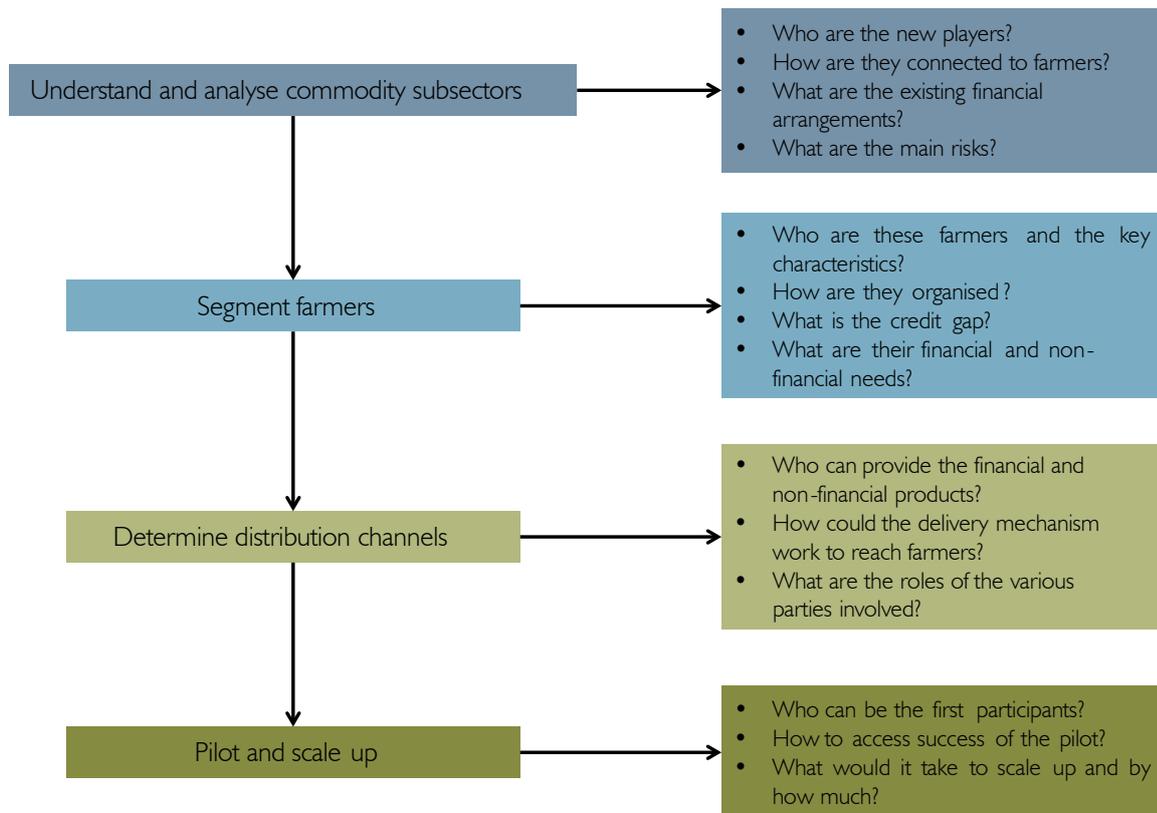
	Product	No. of farmers	Value of finance USD
1	Seasonal overdrafts	12	906, 154
2	Term loans	83	2 477 310
3	Seasonal overdraft + term loans	18	1 161 536
4	Other services	11	-
5	TOTAL	124	4 545 000

Annex 3: ZEPF key statistics (in USD)

Year	2008/09	2009/10	2010/11	2011/12
Exposure	530,000	940 000	1 705 000	4 545 000
Av. loan size	38,000	35 000	49 000	37,000
No. of farmers	14	27	35	124

Annexes

Annex 4: Framework to implement innovative models – the who, the how, and the what?



Source: IFC 2012.