



STIMULATING ZAMBIA'S AGRICULTURAL LIME SUB-SECTOR BY THE PRIVATE SECTOR TARGETING THE SMALLHOLDER FARMERS.

Background:

One of the developmental goals of the world is to end hunger, achieve food security and improved nutrition and promote sustainable agriculture especially among the rural farmers found in developing countries whose production and productivity is lower than their counterparts in developed countries (UN, 2016). Zambia through its vision 2030 and the global world have agreed to achieve this by 2030 through ensuring sustainable food production systems and implementing resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality to support life in its diverse forms (GRZ, 2006; UN, 2016). A number of agricultural stakeholders all over the world have since called for doubling of agricultural productivity and incomes of small-scale food producers, in particular women, pastoralists and fishers, through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment (World Bank, 2019).

The republic of Zambia agrees that plant nutrition and soil fertility have an impact on achieving increased crop production and productivity for most rural farmers whose soils have degraded resulting in high acidity level over years because of using unsustainable farming practices (NAIP, 2013; SNAP, 2016). For instance, World Bank (2018) notes that Agro-Ecological Zone III covers 41% of the country, and comprises leached and acidic soils with rainfall of 1,000–1,500 mm per year; this has potential in affecting agricultural productivity. Therefore, government and other private sector players have been promoting preservation of the soils through conservation farming practices for some time now as corrective mitigation measures.

Studies have shown that liming is one of the most efficient and prevailing practices to correct soil acidity and improve crop yield in this country (Sichilima, 2020; IAPRI, 2016). In Zambia, though agricultural lime has been touted to improve agricultural productivity amongst the smallholder farmers, its usage still remains very low. For instance, use of lime by smallholder farmers between 2012 and 2019 has been less than 1% with a slight improvement in 2015 hence negatively impacting on national crop yields (Sichilima, 2020; IAPRI, 2016).

Unlike the other synthetic fertilizers, private sector participation in the production and supply of agricultural lime has stagnated coupled with no internalised technical support at smallholder level despite some observed improvement in lime varieties produced by a few private firms (Sichilima, 2020).

The government policy direction on lime production and processing has been quite elaborate though its regulation is non-existent compared to the regulations of fertilizer and other chemicals which have been quite thorough but not lime. This does not incentivize the

production and supply of genuine lime products on the Zambian market affecting the already low adoption rates as the issue of trust comes into play.

It is very clear that the current business model supporting the growth of the agricultural lime value chain in Zambia is not sustainable and is worrisome. Lack of market leadership with a supportive regulatory framework that stimulates participation of all market players including the downstream farmers is what Musika envisions in this agricultural space.

To this end, Musika intends to support and stimulate commercialisation of agricultural lime that benefits all the market players by increasing its adoption rate by the rural smallholder farmers in Zambia. This will contribute towards the realisation of national strategies and goals such as the National Development Plans and Vision 2030.

Musika is a Zambian non-profit company, supported by the Swedish Embassy in Zambia, the Norwegian Government's Norad, Irish Aid and WorldFish which stimulates private investment in the agricultural market, with a particular focus on the smallholder and emerging farmer sectors. Musika works across the country and in all aspects of the agricultural sector, providing advisory services and business support to agribusinesses that are committed to engaging smallholder and emergent farmers in strong and mutually beneficial commercial relationships as their clients, suppliers and customers.

Musika's approach to reducing poverty and creating wealth in rural Zambia involves stimulating business relationships between the corporate sector and smallholder farmers that provide not just market opportunities but also the knowledge and confidence for men and women farmers to invest in and grow their businesses. As Musika embarks on implementing its new strategy, it is seeking partnerships with reputable and innovative Zambian for-profit companies that share its ambitious agenda of supporting innovation and inclusive growth in the agricultural market.

Further information on Musika's work and methodology can be found at www.musika.org.zm

INTERVENTION TITLE:

STIMULATING ZAMBIA'S AGRICULTURE LIME SUB-SECTOR BY THE PRIVATE SECTOR TARGETING THE SMALLHOLDER FARMERS.

MAXIMUM VALUE:

The maximum value to any grant made in this competition is \$150,000, but the evaluation of proposed initiatives, and therefore Musika's funding capacity, will depend heavily on the potential benefits to the agricultural sector as a whole of a proposed initiative, on the tangible benefit of Musika partners, medium and small scale farmers, communities and SMEs and on the scale of the investments being made by the individual bidders themselves.

INTERVENTION OBJECTIVES

One of Musika's core objectives is always placed on supporting the testing and integration of agricultural technologies that allow the smallholder farmers to actively participate in and benefit from improved commercial agricultural market opportunities. To this end, Musika aims to actively stimulate and support a diversity of commercial investments in agricultural products and market services that are targeted at, or include a high proportion of smallholder farmers that is gender inclusive.

Therefore, Musika is prepared to offer technical support and early stage catalytic financial support incentives for commercial entities across the agricultural sector to make investments in developing and testing business models that provide real benefit to smallholder farmers.

INTERVENTION BACKGROUND:

The need to apply agricultural lime on many soils has long been recognised in Zambia. Its benefits in improving yields for a wide range of crops have been demonstrated in many studies. Considerable research work has been done on lime use in Zambia. The research activities have been done across the country by different institutions, such as; the Ministry of Agriculture through the Zambia Agriculture Research Institute (ZARI), the University of Zambia (Mitchell and UNZA (2005), fertilizer and seed companies (Uniturtle, nd), including Musika Development Initiatives (Chilundika, and Sichilima, 2020). However, it is clear that in the past year or two there has been increasing discussions around trials and demonstrations with lime, particularly for small-holder farmers with a view to increasing their productivity.

What has been abundantly clear from the studies generated by both the public and private sector is that both private and public sector participation in the production and supply of agricultural lime has stagnated whilst the variety of lime on the market is slowly increasing. Furthermore, there has not been significant traction in the uptake of lime by smallholder farmers, the demand levels have been low despite the significant advantage lime use offers in improving yields for major crops.

One critical finding from the majority of the studies is that the value proposition for smallholder farmers remains elusive; there is a significant latent demand which remains unexploited (Mitchell, 2005; Chilundika, and; Sichilima, 2020). This situation has been exacerbated by low levels of awareness amongst the smallholder farmers about the benefits of using lime in their crop fields. There have not been adequate or sustained demonstrations regarding the opportunity cost of not using agricultural lime.

This presents a clear need to develop new strategies, business models and outreach channels that will target especially the challenges the small holder farmers are encountering in their quest to adopt the use of agricultural lime, these include, but are not limited to; technical information gap, the bulkiness of most of the agricultural lime in Zambia; which is in a powdery form and creates huge challenges on transportation (high transportation costs), spreading/applying the lime in the fields, long distances between the farming communities and the suppliers of lime (access points), lack of sufficient soil testing facilities around the country, inadequate

monitoring of the quality of the agricultural lime offered for sale on the Zambian market, inadequate involvement of the companies promoting and selling chemical fertilizers (inorganic fertilizers), agrochemicals and those in the improved hybrid seed industry on the Zambian market, in engaging and carrying out massive smallholder sensitizations on the adverse effects of high soil acidity levels on crop productivity.

Given the critical role agricultural lime can play in enhancing agricultural productivity and production and enhancing soil structure in Zambian agricultural space, it is a logical priority for Musika to ensure that the commercialisation of agricultural lime is maximised and that smallholder farmers equally participate in and benefit from economic growth in the Zambian agricultural market – a situation that will not only benefit the rural farmers involved but the smallholder agricultural sector as a whole and the private market actors that work in it.

INTERVENTION SCOPE

Through this challenge fund window, therefore, and as a market development project utilising the Making Markets Work for the Poor (M4P) approach. Musika is able to support, catalyse and stimulate early stage investments by the private sector in Zambia in increasing soil sampling and testing facilities in the country and making such facilities easily accessible to the smallholder farmers, innovations aimed at reducing the bulkiness of agricultural lime when marketed in its powdery form, reducing the turnaround time between soil testing and the release of results, strengthening and increasing the capacity of the specialized government departments charged with the responsibility of ensuring that the agricultural lime produced and offered for sale on the Zambian market meets all the standard requirements, innovations, business strategies and channels that will make agricultural lime more visible on the market and closer to the smallholder farmers, innovations that ensures that key players in the agriculture sector in Zambia, such as chemical fertilizer companies, hybrid seed companies and agrochemical companies fully participate in addressing the challenge of knowledge gap on the benefits of agricultural lime among the smallholder farmers in Zambia, innovations around bringing down the huge transportation costs associated with agricultural lime to the farming communities in the Country.

KEY CRITERIA

As with all of its interventions, Musika places an emphasis on the following criteria:

- 1. Sustainability** – Any investment support from Musika must be seen as catalytic to the long-term development of a commercial market opportunity that will be sustained beyond the life of the ‘subsidy’. Any financial support requested from Musika must be seen as mitigating a proportion of the commercial risk of establishing the business model, not as necessary to sustain the business operation. Submissions should demonstrate that, if the initial investment is successful, there are opportunities for expansion and/or replication. Submissions that are driven primarily by corporate social responsibility rather than commercial opportunity will be unsuccessful.
- 2. Ownership** – Any successful grantee remains the full and sole ‘owner’ of its investment. Musika is very clear that its partner companies design, develop and execute their own business strategies and manage all risks associated with their investment. **Musika is not in any way contracting companies to deliver services on its behalf.**

3. **Co-investment** – Related to the above two points, Musika wishes to see its support bringing down a portion of the initial risk for a company making its own investment in developing the market and as such is interested in the ‘cost share’ ratio between the company and Musika. In any successful submission, Musika will base its own limits for financial support on the value of the company’s own investment.
4. **Scale and/or Demonstration** – Musika will place a priority on supporting investments that involve or can potentially involve large numbers of agribusinesses to create scale. However, Musika is also interested in supporting pilot projects that test innovations that, if proven successful, have a direct trajectory to scale.
5. **Added Value** – The investment needs to ‘add value’ to farmers participating in that market opportunity. Such elements of added value can include, but are not limited to, the provision of extension and training, facilitation to access other market services that provide farmers with the technical knowledge, confidence and support to be able to maximise that market opportunity.
6. **Innovation** – The development of new business models and technologies that can benefit the smallholder market is strongly encouraged, as is the innovative use of any financial support requested.
7. **Traceability** – For its own purposes and also for ensuring on-going improvements in agricultural supply chain traceability and management, Musika requires that its partners are able to track the number of farmers and agribusinesses that they engage. Musika therefore request bidders to outline their intended measurement processes.

ELIGIBLE AND INELIGIBLE COSTS FOR FINANCIAL GRANT SUPPORT

Musika’s granting procedures permit it to cost share certain budget lines and to consider other budget lines as eligible cost share on behalf of the investment it is supporting. A basic, non-exhaustive breakdown is outlined in the table below:

Budget Item	Eligible for cost sharing by Musika AND eligible to be pledged as a cost share contribution by the bidder	Not eligible for Musika funding BUT eligible to be pledged as a ‘cost share’ contribution by the bidder	Not eligible for Musika funding NOR eligible to be pledged as a ‘cost share’ contribution by the bidder
Short term technical assistance	✓		
Assets and infrastructure required for direct use in initiating the investment	✓		
Training of farmers and other supply chain actors, promotional activities	✓		
Marketing, promotional exercises, short term discounting exercises to bring down costs/risks of farmers investing in a new	✓		

technology/service/market opportunity			
Salaries and other costs associated with directly involved technical and operational staff		✓	
Costs associated with the running of vehicles, motorbikes, storage, etc. directly related to the investment		✓	
The purchase of land			✓
Working capital costs (e.g. procurement of commodity, value of inventory, etc.)			✓
Overhead/management costs			✓

NB: Any assets bought by Musika for use in supported interventions are offered to successful bidders on a 'no-cost loan' basis for the duration of the support period, with ownership retained by Musika.

FORMAT AND SCOPE OF CONCEPT NOTE

Firms registered as public and private Zambian legal entities interested in working with Musika on this intervention are requested to develop a concept note (not more than 5 pages). Submissions from consortiums of firms are welcome and in such cases, in the format below 'company' would necessarily imply 'companies'.

The concept note should follow the following format and order, and include all key components. Submissions that exceed space limits and/or miss critical components will be penalised

1. Company profile (no more than half a page)	
	<ul style="list-style-type: none"> a. The name of the company involved and a short profile demonstrating relevance to this intervention and competency in implementing the proposed initiative b. Name, position/title of the contact person c. Contact numbers and email address d. Brief company governance structure e. Zambian company registration number and T-PIN number
2. Outline of proposed investment (no more than four pages in total, including addressing each component)	a) The business case for the initiative - i.e. what it is and why it is important to the company that it makes the investment, how it fits within the existing business, why it is important to engage the smallholder market and how it will become commercially sustainable
	b) The geographical area covered by the proposed initiative and rationale for the choice.
	c) An outline of the innovation within the proposed initiative, i.e. what elements does it incorporate that are not present in the market currently and how this initiative can 'move the market' forwards
	d) The 'added value' that the initiative brings to farmers participating in the market opportunity beyond simply a 'buy' or 'sell' transaction

e) The estimated number of men and women farmers that could participate and benefit from the improved market access offered by the initiative
f) The Gender Strategy on ensuring that women sustainably participate in the intervention
g) The measurement plan the company will deploy to capture the number of agribusiness involved
h) An outline of any partnership opportunities for collaboration with other players in the market
i) The proposed timeline for the key activities and investments
j) Any opportunities for increased direct/indirect employment as a result of the investment

3) **Simple budget** in the excel format below, which should be divided into:

- f. Total cost
- g. Company's own contribution
- h. Funds requested and purpose for those funds
- i. Brief explanatory notes to each requested budget line

Budget (fill in budget lines where applicable)		Units	Value	Total	Musika	Company (indicative)	Explanatory Notes
Human Resources							
Assets and Demonstration Units							
Training							
Promotions and Awareness							
Innovation Support							
Other							
				Grand Total	Sub-Total	Sub-Total	
				Grand Total			

EVALUATION

Concept notes will be evaluated on the above points and more generally in terms of the capacity of the companies submitting proposals to both successfully implement the proposed initiatives and to provide a **'return on investment'** for Musika's support in terms of long term and widespread benefit to the agricultural market as a whole.

Points will be gained by:

- Offering innovative agriculture market forum
- Offering a cost-efficient model based on content monetisation
- Financial leverage to cost share with Musika at incubation stage and that demo sustainability pathway beyond Musika support
- Consideration of any potential impacts on the **natural environment** and how any negative impact might be mitigated
- Consideration of any negative potential impacts on **Gender dynamics** and how any impact may be mitigated

SELECTION PROCESS

1. Musika will acknowledge receipt of all submissions
2. Musika's Grants Committee will evaluate all submissions based on the criteria outlined above.
3. Musika will contact bidding companies with successful concept notes, which will then be invited to a meeting at Musika to understand the requirements of Musika, undertake a very basic due diligence process and to work with Musika's technical team to develop a more detailed strategy and financial support package. Musika does not commit to contact the unsuccessful applicants. Note that this stage does not imply any guarantee of future support.
4. Musika's technical team will present any proposals that pass Stage 3. to the Musika Grants Committee for final review
5. If proposals pass Stage 4., the companies submitting those proposals will be subject to a due diligence exercise with the rigour and detail dependent on the value of the budget requested.

Note: Musika reserves the right to reject all or any proposals, or to award support without further discussion or negotiations if it is considered in the best interests of Musika's objectives.

CLARIFICATION AND SUBMISSION

Interested companies may seek clarification or any other information at the email address grants@musika.org.zm

The concept notes are acceptable in **electronic pdf copy only** and should be submitted by e-mail to grants@musika.org.zm only, not copied to any Musika addresses, by **17.00 on Friday 9th October, 2020.**

Faxed responses and physical copies will be rejected, as well as late responses.