

# **SOIL FERTILITY CHALLENGES –THE FARMER EXPERIENCE**



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# BACKGROUND

- Kenyan farmers majorly operate on small land holdings with over 30% of them on less than an acre of land
- Per capita land cultivated is therefore on the decline:
- With diminishing land resources, the most promising productivity enhancement mechanisms revolve around how fertilizer is used
- Documented evidence indicate that fertilizers are factors for enhanced turn-around in food production, food security as well as poverty reduction in Africa (IFDC, 2010)

# Background

- Farmers recognize government efforts in addressing the affordability of inputs - Njaa Marufuku Kenya (NMK) and the National Accelerated Agricultural Input Access Programme (NAAIAP) initiatives.
- However, there is still need of polishing delivery mechanisms of those inputs towards improving ease acquisition

# The Farmers' Experience

- despite the need for enhanced productivity there is still low levels of fertilizer use among the farmers of Kenya.
- This is attributed to farmers' experiences revolving around challenges in accessibility, affordability of the fertilizers, adulterated/contaminated fertilizer, poor enterprise of choices, supporting environment to production and the farmers' knowledge on correct type and usage application of fertilizer.

# Affordability

- Despite government efforts, affordability of fertilizer remains a challenge for most small scale farmers
- Majority of the Kenyan smallholder farmers are resources poor to afford the recommended amount of fertilizer per unit size of land.
- Unsubsidized 50kg fertilizer goes for an average Ksh. 3000 and can cost even more depending on distance from the port.
- Unsubsidized fertilizer cost is not standardized
- “kipimo” (small measure) cost a farmer even more per kilo. Unfortunately most farmers find themselves purchasing under this open market arrangement which is a problem in it self as explained in the next slide

# Adulterated/Contaminated Fertilizer

- The open market policy allowing traders to open packages is an impediment in itself since it allows for adulteration/contamination of fertilizer
- The combination of adulterated inputs (fertilizer, seed, pesticides) translates to extremely low productivity level and a very deprived farmer.
- Further, traders exploit farmers when it comes to pricing of the “kipimo” fertilizer meaning it costs the farmer more than buying the 50kg bag.

# Accessibility:

- Farmers travel long distance to acquire fertilizer. Added cost of **transportation** to the user points effects product profitability.
- **Packaging** of fertilizer in 50kg bag may not be ideal for farmers with small land sizes -projected average (50kg/ha) and the fact that many (over 30%) of the farmers operate on less than one acre of land means fertilizer is out of their reach
- **Supply timelines** of subsidized fertilizer againts natural whetther conditions. Supply delays means planting delays or lack of fertilizer usage
- **Supply protocols** of subsidized fertilizer are very demanding and cumbersome that most farmers give up on using fertilizer

# Lack of Supportive Environment

- Delayed payments for farmers' produce translates to delayed acquisition of fertilizer and other inputs
- Inadequate or lack of extension services means the farmer remains ignorant of production facts
- Unorganized farmer structure mean that farmer do not enjoy economies of scale
- Non cushioned farmers against natural disasters (fall army worm, drought etc) – no compensation on inputs translates to total loses





# Farmers' knowledge about the correct use/application of Fertilizer

- Lack of knowledge on the correct use/application of fertilizer is widespread especially among the small scale farmers
- Farmers have a fixed mindset on certain fertilizer brands and types, which may not necessarily be correct
- Farmers know very little and in most cases nothing about their soil composition and therefore unbalanced fertilizer usage/application

# Profitability of Enterprise choice

- A factor of the demand and supply dynamics, production and pricing has been a long standing hindrance to the Kenyan farmer
- Lack of information, market research, appropriate knowledge on weather expectations, lack of entrepreneurial mindsets has majorly attributed to poor enterprise choices
- Poor enterprise choices, means application of wrong choice of inputs
- As such, farmers have no guaranteed value for their produce continue in low productivity, low incomes and abject poverty



**Thank  
you!**