



Research, Business and Smallholder Farmers Synergy – the triple collaboration case of Smallholder farmers’ development initiative in Zimbabwe

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Abstract: This article shares the benefits of collaboration among researchers, business and farmers leading to synergy beyond the three entities. It argues for wider adoption of the bigger team throughout the country as benefits are immense.

Key words: stage gate, 3-I framework; synergy, commercialization of agricultural research, impact and international cooperation

I. BACKGROUND INFORMATION

Research, business and smallholder farmers within selected districts of Mashonaland East province of Zimbabwe teamed up to execute transformative agricultural projects for improved community welfare. Beneficiary farmers were from Murewa, Seke, Marondera Rural, Wedza and Chikomba. The research and extension interventions involved the Scientific and Industrial Research and Development Centre (SIRDC), Lafarge Holcim Zimbabwe and Agricultural, Technical and Extension services (AGRITEX) under the Ministry of Lands, Agriculture, Fisheries, Water and Rural Development (LAFW&RD). Ideas derived from South Korea’s *Semaul Undong* Movement (development from grassroots upwards) were also infused. Apart from Lafarge Holcim, other

businesses involved included the Grain Marketing Board (GMB), Banks (Agricultural Finance Corporation (AFC) Bank; Steward Bank, People’s Own Savings Bank (POSB) and mobile telephone operators/money transfer services in the area such as Econet, NetOne and Telecel. Wholesale, retail and hardware outlets operating at various Business Centres had spillover effect. Harare, Chivhu and Marondera business had influence to varying extents. Agro-input suppliers (seed, fertilisers, chemicals) and fuel service stations were also involved. The synergistic effects were realized at varying paces –direct participant farmers benefit more than those who observed and/or heard through dissemination events. The key objectives were transfer of technology (improved maize seed); on-the-farm training and extension advice; fostering teamwork as promoted by the Stage Gate process and connect interventions with increased household food security. The reduction of poverty and hunger as a result of the successful implementation of the project was in line with Sustainable Development Goals (SDGs) 1, 2 and 12. The better access to good quality seed (more adapted to climatic conditions of erratic and reduced rainfall) was in line with SDGs 9 and 13.



II. KEY SYNERGISTIC INTERVENTIONS

The development initiative witnessed synergy in action between research, business/industry and farmers and the key interventions entailed:

- Technology transfer of Sirdamaize 113 (www.sirdc.ac.zw) - a drought tolerant maize by SIRDC to farmers within the context of the Stage Gate ® Process
- Technology transfer of agricultural technologies from South Korea (RDA) adapting the *Saemaul Undong* development model, that places great emphasis on development from grass roots and utilizing locally available resources (www.adb.org)
- Targeted Agricultural Extension Services to smallholder farmers involving AGRITEX
- Maize cultivation, under research and extension supervision, through demo fields and individual farms across all districts shared by figure 1
- Communal farmer layers programme, drawing from grain produced
- Buying of end product by the GMB
- Transfer of money to farmers through banks and mobile money platforms
- Income use in meeting social needs, buying household tools and utensils as well as homestead improvements
- Sharing of accomplishments through various networks and at varying events
- Findings and benefits being promoted country-wide (www.sirdc.ac.zw)

Other interventions included (www.sirdc.ac.zw):

- capacity building in both techno- business matters
- study visits for peer review for selected district
- formation and registration of farmer's cooperative(s) to enhance interface with industry and business
- to initiate value-additions programmes based on resultant farming output
- small holder farmer training and production mentorship on farming as a business

III. IMPACT OF THE SYNERGISTIC INTERVENTIONS

- The smallholder farmers' maize yields and aggregate output improved tremendously (www.sirdc.ac.zw)
- Maize grain deliveries to GMB depots also increased (www.gmb.co.zw)

- Smallholder farmers 'retained grain increased leading to localized food security (maize is a staple in Zimbabwe)
- Income from the sale of produce had profound impact on households with some: buying agricultural tools, refurbishing homesteads, buying home implements while others paid medical bills as well as school fees for their children.
- The earnings at smallholder farmer level also triggered investment in projects such as broiler production, layers programme, rabbitry as well as rural-urban trade engagements
- The improved purchasing power also benefitted rural wholesale/retail shops, hardwares and rotation credit schemes (*mukando*)
- Rural district council (RDC) levies, burial society duties and farmers' club membership fees were also paid.
- Water and sanitation needs were also, to some extent, met construction of ventilated improved pit (VIP) latrines/Blair toilets they did not previously
- The rural Zimbabwe is connected through interrelations and marriages which extend beyond Mashonaland East province. The synergistic benefits also followed the same, spreading nationwide.

IV. SYNERGY DEMONSTRATED:

Research, business and farmers synergy was demonstrated in many ways which include:

Research:

- Disseminated technology and received feedback on their processes leading to organizational improvements
- Marketed their product
- Practical capacity building in technology transfer, commercialization, communication with communities and gained much needed policy-maker endorsement
- Enhanced collaboration with partners, RDCs, community-based NGOs and international partners
- Enhanced publicity as such was shared through print and e-media
- Triggered strategic investments in retaining products within the various districts

Business:

- Supplied inputs and were paid by institutions and farmers
- Diversified stock in response to improved purchasing power



- Agro-based raw material (grain) supply fed into various value-addition initiatives such as stock feeds and mealie meal production
- General rise in purchasing power boosted business – buying of groceries, fuel, fertilizer, chemicals, among many other items

Farmers:

- Accessed appropriate technology
- Trained in techno-business matters
- Demonstrated the benefits of working together (ideas, timeliness to complete tasks, confidence building, identification of cheaper products, among many)
- Enabled to meet social obligations in health, education, shelter as well as sanitation and hygiene needs
- Enabled to make strategic investments in their lives

The economy at large:

‘When research, business and farmers are working together and reaping benefits, the wider economy also gains. Transaction tax values also follow the same trend. Project launch and dissemination events are officiated by Government officials. They take advantage to explain policies and programmes. They also receive feedback. Such feedback boosts future programming and strategies in national development.

2. **3-I Context:**

Pulkerd et al (2022) called for a balance among ‘ideas, interests and institutions) if agricultural development and marketing initiatives are to be sustainable. Under this article, it is shared that this angle was catered for. Technology was transferred and ideas shared across participating entities. Business income and profitability interests were met. Farmers gained new ideas, new technology and witnessed improvements in both food security and household income. This led to the concluding call for wider adoption of the case within Zimbabwe and beyond.

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livelihoods can be transformed for better through technology. All key informants that gave views on the project are acknowledged as well.

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