



INFORMATION AGGREGATION

OVERVIEW

In the information and advisory services market, the BIF project found out amongst other things that

- Smallholder farmers have limited access to information.
- Broadcast timings for agricultural programmes are not synchronised with daily routines of male and female farmers.
- Not all channels available to most rural farmers are being used, in particular, mobile phones.
- Information is not delivered in the right format.
- Contract farming projects are not scaling up because of data gaps
- government extension service was only available at a rate of 1 extension worker to 10,000 farmers
- Absence of reliable farmer KYC data
- Cost of data collection prohibitive
- Expansion of projects beyond a certain number raises the Economics of Production unacceptably
- The BIF project found out that private extension service could be built with one field agent mapped to about 50 farmers. These field agents could be trained, to deliver
- For grains production, right inputs and assist farmers with planting the right varieties and teach farmers good agricultural practices leading to improved productivity. In dairy production, pasture production and care, proper milk handling and milk hygiene and supervise the aggregation of quality-tested-milk into a central cooling tank.
- They will help with coordination of farmers and recovery of grains at harvest. Therefore, farming with 1,000 farmers can be adequately controlled through 20-100 of such field agents.
- They can also help teach basic finance and personal hygiene skills, and help with data collection including farmer land size, location, and other due diligence information while registering the farmer into the program. The Rural Sourcing Management Solution from SAP is being tried by CBi Innovations Ltd. to achieve that.
- For each of these operations in the standard economics of production, there are existing fees which will be shared with them, and they will have the opportunity to build a customer base assisting with specific farm operations, selling insurance, inputs, agency banking services and so on.
- For this reason, a special Android hand-held device has been developed from which they could conduct all these services as a sort of mobile office.
- The multiple streams of income earned by field agents (young men and women) should enable community-based unemployed school leavers and above, transform themselves into low-income producers earning about \$10/day. At harvest, depending on their set of farmers meeting productivity targets, they can earn a productivity bonus in addition.
- As the field agents and farmers are self-employed business partners to CBi Innovations Ltd., earning their independent incomes based on their productivity, scaling up from 1Ha to 5Ha should not change the economics of production/Ha allowing a solution to the challenge of escalating costs preventing massive scale-up.

The problem we seek to address

BIF's initial expectation was that once productivity improvements had been discovered, they could then simply be scaled up. However, the programme found that as one constraint was removed others presented themselves and the pathway to scale was non-linear.

In the maize and cassava markets, for example, the provision of bundled services in outgrower and/or contract farming models has resulted in productivity gains for SHFs. Though positive, the challenge remains how to achieve such gains at scale – i.e. by getting 10,000 to 100,000 or more farmers on 10,000 to 100,000 or more hectares using the improved inputs and methods en-masse to popularise the change and create a new standard for crop farmers.

This requires levels of coordination, finance and logistics that aggregators, contract farmers and employers of outgrower models have not figured out how to deploy. Typically, their costs increase as they scale up, instead of achieving economies of scale by reducing transaction costs to enable higher profits. To overcome this problem, BIF designed a private sector model of village-based advisors and extension agents called Community LIFE (Livelihoods Information Field Entrepreneurs) Agents (CLAs) who use technological solutions (such as proposed above) to manage 10-50 odd farmers each and provide fee-based services to farmers paid for by commissions earned from the aggregator for the improvements in quality and productivity.

Their technology platforms also allow them to earn further income by providing ancillary banking, mobile telephony, insurance and other payment services on a commission basis. These multiple income streams make it possible for aggregators, etc. to scale up their involvement by improving the economics of production and therefore achieve scale where the market previously was unable to. Although the programme ended before the model could be tested by BIF, some BIF partners who see the value in the concept, such as the commodities exchange AFEX, have already taken up aspects of the model.