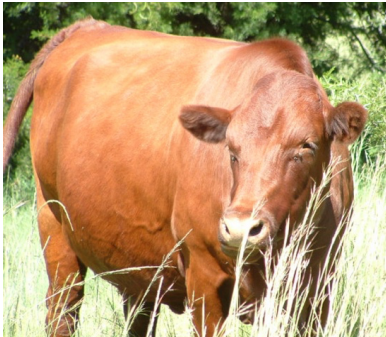


COOPERATIVE DEVELOPMENT PROGRAM



South Africa



Peru

Strengthening Farmer Cooperative Competitiveness

Midterm Report

Cooperative Agreement No. 720018CA00016

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Submitted to:

Genex Cooperative

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"The introduction of GENEX to us small farmers was of great importance. They brought us an important farming sense. We had theoretical farming experience and they brought a practical one. We had no programs, no plan for progress. They brought in the mentor to advise us. We now have cooperative buying power through their effort. We hope and believe to be successful and become commercial farmers in 2-3 years. Your efforts are highly appreciated."

Sakkie Mmako
Immerpan Cooperative, South Africa

I. SUMMARY

The GENEX Cooperative Development Program (2018-2023) in Peru and South Africa is a business-driven strategy aimed at transforming smallholder dairy and beef producers and their 34 nascent cooperatives and associations into commercial-scale, farmer-owned businesses that participate in value chains as suppliers to processors, as sellers of value-added products, and as buyers of inputs. In its first 2 years, farmers have improved their profitability, productivity, economic resilience, and competitiveness. Without the CDP, numerous outcomes, thus far, would not have been possible.

"This program is so well designed that people find it hard to believe me when I tell them about it."

Sanele Mbhele
Chairman, Owothathe Secondary Cooperative
South Africa

Overview. Having reached the approximate midway point of the *Strengthening Farmer Cooperative Competitiveness* CDP, it can be reported that, despite the COVID pandemic, GENEX is well on its way to achieving its project objectives. Local cooperative partners, stakeholders and implementing staff find little to fault in the purpose, strategy, and activities of the program. The participatory approach, grounded in a well-designed, flexible project design, by all accounts is working as intended.

The most effective activities have been those that: expose farmers to best practices; improve farm and cooperative operations and management; network within the local value chains; and support the idea that cooperatives are businesses first that require realistic understanding, approaches and expectations. The most successful technical approaches embrace mentoring, which staff overwhelmingly named most important; peer-to-peer learning; strategic planning; and cooperative- and farm-level data collection and analyses. Apart from COVID, obstacles farmers and co-ops face are a lack of access to affordable finance, uniformly identified as the greatest challenge by staff; lack of co-op leadership, including trust between members and board directors; and lack of access to broadband technology.

Two notable achievements have been the creation of FarmMark, the only community-owned buying service in South Africa that provides access to affordable farm inputs, access to markets, and access to commercial credit without donor assistance and immanent co-op member services in Peru to provide access to improved genetics by 64 farmers newly trained as artificial insemination technicians.

Data collected in surveys measured *what* changed over time; this midterm assessment imparts insight as to *how* it happened. The project's two-fold strategy was tested by asking two questions: First, has the CDP strengthened farmers' capacity to be co-op-ready, i.e., do they have existing or potential productivity capacity scale to: (a) operate commercially by adopting robust animal husbandry practices; (b) mitigate exogenous market, weather, economic, and other risks; and (c) understand the value of being a member of cooperative and support it financially through their patronage and through their leadership? Second, has the CDP bolstered cooperatives' capacity to be market-ready, meaning are the co-ops practicing sound governance; offering demand-driven, viable services; and managing their businesses effectively in ways that lead to improvements in their members' profitability?

The simple answer to those questions is yes. With the emphasis of project activities in its first two years on farmers becoming *co-op ready*, clear improvements in farmer know-how are leading to

desired increases in their productivity, market knowledge, and appreciation of co-ops. Attention in Years 3-5 is expected to turn largely to co-ops' becoming *market-ready*, with advancements already well underway with activities that strengthen co-op governance, management, gender inclusion, financial sustainability, and member services.

Trends Are Up. The results are positive. In the first two years of the CDP, local partners are experiencing stronger cooperative structures and governance; improved business strategies, operations, financials, retained earnings, member equity and planning; expanded offerings of relevant member services; more and better opportunities to grow their business with meaningful access to buyers, suppliers, and investors; deeper knowledge in animal husbandry and production; greater legal awareness and compliance; expanded access to affordable credit; and less reliance on donor resources.

The Strategy Is Working. The GENEX model is rooted in pragmatism and business principles whose hallmarks are: (a) creative, flexible, innovative and knowledgeable field-based management; (b) creating viable opportunities to further the objectives of co-ops based on thoughtful, participatory discussions at all levels of the project; and (c) internalizing lessons learned, best practices, and holistic approaches based on business objectives and a self-help, participatory culture to develop and deliver a project design that puts local partners first. Key standout project attributes are:

Mentors. One-on-one mentoring has long been central to the proposition that farmers must be made "co-op ready." Dedicated dairy and beef experts, all farmers themselves, have developed professional, trusted, appreciative relationships with local farmers in this project. Though frustratingly slow, the approach is working. The evidence is confirmed in the data collected in multiple surveys.

Experience. The value of GENEX's experience in its previous CDP cannot be understated. The project design, based on its previous 8-year activity, has avoided earlier mistakes. It builds on lessons learned, best practices, and an openness to innovative workarounds and new approaches.

Trust. A high level of trust has been earned between farmers, their cooperatives, and the CDP staff. Over time, relationships between farmers and co-op leaders with mentors, regional managers, and COPs have grown broader, deeper, and stronger.

Value. Farmers perceive value in the CDP, and hence see value in supporting their co-op. Peer-to-peer learning, manuals, one-on-one technical assistance and to a lesser extent, digital outreach and eLearning are viewed as value-added by recipients. It's a bottom up, not top down approach.

Cooperatives. For those with little, wrong, or misguided knowledge of cooperatives, the CDP has created a new awareness and understanding that is taking hold. There is generally a widespread acceptance and belief among farmers that co-ops are the vehicle, correctly run, that can help them to realistically achieve their dreams for farming more sustainably and more profitably.

Knowledge Management. GENEX has undertaken a genuine effort among its staff that promotes learning from and teaching one another within their geographies and across borders. Likewise, it has embedded in its local cooperative partners and stakeholders a desire to learn through their encouragement, inclusiveness, and self-help all while providing a helping hand, rather than a hand-out.

II. PURPOSE

The GENEX Monitoring, Evaluation & Learning Plan calls for a qualitative assessment to be conducted in South Africa and in Peru in the fourth quarter of Year 2 and the first quarter of Year 3 of the project. Its purpose is to take a temperature check of how the project is going midway through its implementation. While virus-caused travel restrictions halted direct on-the-ground contact with local partners, every effort has been made to uphold the spirit of the assessment's intent to be a useful tool to inform both the GENEX team and the USAID CDP managers on the project's progress.

Overall, this two-pronged assessment was designed to: (a) gain insights into how local partners, both co-ops and their farmer- and community-based owners, view changes in their competitiveness since the start of the CDP in terms of increasing their commercial transactions and market linkages, and (b) size-up the effectiveness of the core strategies, approaches, and activities in terms of achieving project goals and objectives. Underlying the assessment has been the evaluator's desire to understand the degree to which cooperatives are visibly and viably embracing, adopting, and promoting three core project objectives: (1) building member equity, (2) providing viable services that meet member needs, and (3) accessing affordable credit. If the data collected in recent co-op surveys reflect the standing of the cooperatives with regard to a range of metrics measuring developmental progress, then this assessment focused on *how* those metrics have been achieved.

Underpinning the entire project design of *Strengthening Farmer Cooperative Competitiveness* is a strategy based on the idea that cooperatives are only as good as their underlying farmer members. Thus, the project's foundational two-fold strategy was tested by asking the following two questions:

First, has the CDP strengthened farmers' capacity to be *cooperative-ready*, that is, do they have the existing or potential to: (a) operate commercially by adopting robust animal husbandry practices; (b) mitigate exogenous market, weather, economic, and other risks; and (c) understand the value of being a member of a cooperative and support it financially through their patronage and through their leadership?

Second, has the CDP bolstered cooperatives' capacity to be *market-ready*, meaning are the cooperatives practicing sound governance; offering demand-driven, viable services; and managing their businesses effectively in ways that lead to improvements in their farmer-members' profitability?

The report that follows is a snapshot of the *Strengthening Farmer Cooperative Competitiveness* project after its first two years, as viewed through the eyes and voices of the local partners indirectly and the CDP field and HQ staff directly.

Bottom line: Has the CDP delivered so far on its promise of helping cooperatives become commercially sustainable and less donor dependent? Are producers, community members and their cooperatives better off now compared to when they started, insofar as achieving their farming productivity and business profitability goals? Are *all* of the cooperative members who are participating in the CDP benefitting equitably? Is the project design achieving its intended objectives? What activities are most effective? Are modifications needed?

A. Project Design

The value proposition of *Strengthening Farmer Cooperative Competitiveness*, simply put, is this: in meeting their common needs, small-scale producers can accomplish more together in cooperatives than they can alone. The rub is that farmer organizations largely lack the capacity to effectively apply the cooperative business model to meet their member needs or to help them mitigate their risks. The solution: (a) strengthen livestock farmers' knowledge of animal husbandry and agriculture as the surest means of improving their profitability, productivity, resilience and, hence, their competitiveness and sustainability in the marketplace, and (b) strengthen member delivery of services and the marketing, financial, managerial, governance and organizational capacity of cooperatives to meet the needs of members to achieve commercial sustainability without donor assistance. The holistic, mentor-based approach to training, technical assistance, and resource leveraging interventions is intended to result in: (a) a higher value of multiyear commercial transactions where there had been none or few before, and (b) more market linkages with business, industry, government, firms, investors, and associations.

The results measured by surveys at both the cooperative and the farm levels reflect progress and change insofar as their: (1) capacity to be market ready as measured by their ability to participate effectively in value chains, (2) capacity for viable sound governance and business management, (3) commercial viability as measured by their solvency, (4) access to affordable financing, (5) reduced reliance on donor support, and (6) women and youth fully participating in their cooperatives. If the quantitative data collected in this CDP, thus far, measures *what* has occurred over time, then this midterm assessment imparts insight as to *how* it happened. Activities were developed to achieve each of the 6 outcomes that have been structured around three key objectives:

Objective 1. To Support Cooperative Growth & Stability By Strengthening Governance, Business and Agricultural Know-How. If farmers receive training to permit them to achieve a level of productivity to meet both quality standards and volume, then their capacity to be *cooperative-ready* can be expected to improve. In turn, if cooperatives advance their governance, business operations and agricultural know-how through training, technical assistance, and mentoring; provide access to affordable financing; increase access to member services and resources; and strengthen production of value-added products, then their capacity to be *market-ready* can be expected to improve. Ultimately, cooperative members' equity can increase as their cooperative manages their business with improved capacity and stronger governance practices that foster an atmosphere of trust among members who will invest in their cooperative.

Objective 2. To Mitigate Economic, Market, Weather and Production Risks. If farmers access and use animal husbandry CDP technical assistance and their cooperative's services, bulk purchasing power of inputs, and group marketing of their output, then they can expect to materially mitigate their economic, market, weather and production risks. Once farmers can reduce their risks, they can expect to be more profitable, more productive, economically more secure, more independent, and less donor dependent, as evidenced by stronger and more multiyear commercial transactions and market linkages — sales, contracts, product lines, capital, joint ventures — with business, industry, government, firms and associations, where there had been none or few before.

Objective 3. To Replicate GENEX's CDP Strategy & Approach. As its *Strengthening Farmer Cooperative Competitiveness* model is deployed, scaled and replicated, lessons learned, best practices, and proven strategies and approaches can contribute to the overall know-how of farmer cooperative development. This will support the CDP value proposition and strategy that producers can accomplish more together than they can alone to meet their common production, input supply, capitalization, credit, and marketing needs. The strategic approach is necessary to farmers' achievement of significant gains in productivity, profitability, and sustainability, and thereby, deliver value to their members, communities and the agricultural sector.

B. Activities

A decade of experience implementing CDP projects has informed the development of the current CDP activities. From its inception, the strategy, approach and activities underpinning this project have been holistic. Interventions were not intended, nor have they been implemented, as stove-piped activities with respect to each of the three key objectives. Objective 1 activities are high level; Objective 2 are more ground level. In other words, cooperative-level interventions, such as governance and business training, fall under Objective 1 which focuses on cooperative growth and stability. Farm-level interventions are tied more to Objective 2, with activities directed to mitigating economic, market, weather and production risks. Objective 3 activities center on scalability, replicability, and impact.

As described throughout this report, numerous innovative activities were added or modified from project managers' original plans as workarounds to COVID-19 and in response to unpredicted opportunities. By and large, after 8 years of implementing a previous CDP, no activities were found to be irrelevant in the project design of the current CDP. GENEX developed the current activities based on its experience, lessons learned, and best practices. See GENEX Project Design Context in the annex. When staff were asked if any activities were more effective than others, they were hard pressed to think about them in that way. As one staffer said, "All the activities are spot-on."

"Farmers are so excited; it tells us we are on the right track. There is no support from the private or public sectors like the CDP. What we are doing is an eye-opener for farmers. Even though I'm a farmer myself, I didn't realize how much was needed."

Thukela Mashologu
Regional Manager, Eastern Cape, South Africa

The most effective activities have been those that support the notion that cooperatives are businesses first that require realistic understanding, approaches, and expectations. Likewise, the staff has diligently sought to create pragmatic expectations among local partners with regard to their participation in the CDP. The most effective *technical approaches* have included: mentoring, peer-to-peer learning, strategic planning, and co-op/ farm level data collection and analysis. Overall, the most effective *activities* have centered on exposing farmers to best practices; improved farm and cooperative operations and management; and networking within the local value chains.

III. METHODOLOGY

Prior to COVID, the intended approach of this assessment was to take testimony directly from the CDP's local cooperative partner directors, members and staff; local stakeholders; and project staff to ascertain how they are perceiving the effectiveness of the CDP in terms of advancing the local CDP

cooperatives. The virus, however, materially constrained GENEX's plan for how it hoped to conduct its midterm assessment. The result was a step back from the original design of conducting on-site primary research with cooperative leaders and related stakeholders. Instead, the strategy banked disproportionately on a review of internal activity and analytical reports, training evaluations, farm-level and co-op-level data collected, and meticulous interviews with field- and HQ-based CDP staff.

There are several thematic components incorporated in the *Strengthening Farmer Cooperative Competitiveness* project design: member equity, member services, access to affordable financing, cooperative governance, animal husbandry productivity, and reductions in donor dependency. These big buckets were thoroughly vetted with each of the key informants interviewed. Responses, suggestions, and insights were assessed relative to the quantitative data collected to determine areas of consistency, relevance, and any spurious or confounding variables affecting project outcomes.

With a good deal of desk research conducted in advance, including a review of all field and headquarters' monthly reports; the gender analysis and integration plan; and research studies, such as *Improving Smallholders' Farm Record-Keeping*, every effort was made to draw out objective responses from those who were interviewed with an eye on identifying and addressing staff biases. At least once-annual in-person site-visits with those interviewed were conducted; on-site farm and cooperative meetings with numerous local partner cooperative leaders took place periodically; and interactions with a number of local stakeholders further contributed to being able to recognize and challenge any bias or subjectivity of responses to interview questions. Moreover, with 6 previous years' experience monitoring and evaluating the 2010-2018 GENEX CDP, which was similar to the current project, this evaluator had the knowledge, established relationships, confidence and trust of those interviewed to assess the objectivity, reliability, usefulness, and validity of responses of the key informants to judge whether biases were present in responses to evaluation questions posed in the midterm report questions.

Although this assessment is largely qualitative, based on a narrative derived from questioning key staff, annual farm and cooperative quantitative data comparing 2020 data to 2018 baseline data was also reviewed to inform this midterm assessment. See annex for selected list of documents reviewed in desk research.

Questioning key informants, both at the granular and the birds-eye levels, tested the effectiveness of the CDP project design, centering on cooperative developments, advancements and any setbacks in the first two years of the CDP. Approximately 50 questions and talking points were constructed to guide conversations with those interviewed. The approach was less about comparing responses of each interviewee to every question, than on having a framework to discuss the project as a way to produce a narrative that could uncover patterns and offer insight into the effectiveness of the CDP from the staff's perspective, and to the extent possible, their reporting of local partners' perspective. Staff was specifically asked to describe each of the local partners, their status, unforeseen opportunities and challenges, geographies, patterns, progress, etc. See annex for the full questionnaire.

Consideration was given to conducting web-based field interviews with local cooperative partners. However, experience with frequently poor and intermittent broadband and telephonic connectivity; local travel constraints; language challenges to free-flowing conversations; an absence of skilled translators well versed in the technical language of livestock farming, cooperatives and development;

and an inability to delve into detailed questions amid cultural barriers deterred this approach to the research. Ultimately, the original plan was abandoned given the anticipated poor outcome.

Instead, over a period of approximately 3 weeks, extensive key informant calls (27.5 hours of recorded interviews transcribed into 50 single-spaced typed pages) were conducted over Zoom with the headquarters project manager in Wisconsin, COPs in Peru and South Africa, and each of the 6 regional managers in South Africa and Peru to review each cooperative and their underlying farmer-owners' advancements under the CDP. Despite the inability to conduct on-site key informant interviews, this evaluator concluded the interviews with a high degree of confidence that the responses and insights garnered from the COPs and field staff were reliable.

To a good extent, this was made so because government authorities in both countries deemed the CDP an essential agricultural service. This meant there was never a complete or long disruption in the interactions between the CDP staff and farmers/ cooperatives. In South Africa, the mentors are farmers themselves; they never stopped working. In Peru, COVID caused a total lockdown, but that only prevented mentors from working with farmers and associations for a few months, until September 2020.

In Peru, a professional translator was retained for the interviews with regional managers who spoke no English in order to ensure that questions asked and responses received were exactly as intended without the potential possibility of nuance or interpretation added by the English-speaking CDP chief of party who might otherwise translate. That proved to be problematic after it was determined that the translator not only misinterpreted most of the questions put to the regional managers, but likewise misinterpreted their responses. In fact, clarity was restored by the COP who listened, but did not participate in the initial interviews. Eventually, the translator was dismissed and the COP translated.

This result was a much-improved conversation that yielded important details, insights, and suggestions. Fears that the regional managers would be less open with the participation of their supervisor involved turned out to be unfounded. In the future, if translators are to be retained in similar circumstances, then it is recommended that Hispanic-born American translators, knowledgeable in agriculture, be engaged with the expectation that they would better understand both the technical language and the nuances of both Spanish and English.

IV. MIDTERM ASSESSMENT FINDINGS

A. Progress on Achieving Objectives

Staff in both Peru and South Africa were emphatic on what they believe to be the single most important strength in the CDP and the biggest challenge farmers and their co-ops face in achieving market viability. The CDP's biggest strength, they argued, is its mentors; the biggest challenge, far and above anything else, is a lack of access to credit.

Overview. Trends are up. In this the first two years of the GENEX CDP, local cooperative partners are experiencing stronger cooperative structures and governance; improved business strategies, operations, financials, retained earnings, member equity and planning; expanded offerings of relevant

member services; more and better opportunities to grow business with buyers, suppliers, investors and lenders; deeper knowledge in animal husbandry and production; and greater legal awareness and compliance. When given access to affordable financing, technical assistance and mentoring, producers and their cooperatives have improved their profitability, productivity, resilience, and hence, their competitiveness in the marketplace.

Despite the unforeseen obstacles presented by COVID-19, there were considerable advancements among a spectrum of key metrics: (a) cooperative organization and governance, (b) business and financial profitability, management, and sustainability, and (c) animal husbandry productivity. The data reflects clear progress on the achievement of the project design's key objectives.

- (a) Obj. 1. In response to activities designed to strengthen cooperative governance, business operations and management, and animal husbandry capacity, cooperatives are stronger, more stable and more viable today than when the project started. When measured against key performance indicators, the 34 local cooperative partners in South Africa and Peru experienced better growth than anticipated in terms of sales. Most of the co-ops are well on their way to having put into place viable organizational structures. Sound governance is being practiced and members are supporting, investing and participating in their cooperative. In a good number of co-ops, interns are expected to transition into serving as professional managers for the co-ops. Co-ops' strategic plans reflect an understanding and effort to meet the needs of its members by offering services, training, networking, etc. that have been identified as needs by their members.
- (b) Obj. 2. In response to interventions designed to teach farmers and cooperatives how to prepare, endure, and overcome economic, market, weather, production and other unforeseen risks, like COVID-19, services and other mitigation strategies are being employed to reduce donor dependency, strengthen commercial sustainability, and increase member participation. That said, the overhang of COVID-19 has meant activities designed to strengthen the financial structure of the local co-op partners have faced limitations which, in turn, have reduced expectations for member equity and membership gains.
- (c) Obj. 3. In response to activities designed to engender widespread and deep awareness and understanding among field staff and the local cooperative partners, the project has leveraged its strategy, approach and promise of possibilities with local stakeholders — investors, buyers, sellers, government, and lenders — the GENEX CDP project is becoming a model that is gaining attention and traction with potential partnerships both within and outside the project geographies.

The GENEX Cooperative Development Model. When asked if the GENEX CDP model is about right in terms of its strategy, design and approach, every one of the staff was in agreement that it was right. Not a single member of the team, in one-on-one interviews, said they would do anything differently. That said, the group, as a whole, acknowledged setbacks as a result of COVID even though it was pointed out that a good deal of progress has been made thus far, at least according to the data collected. The group also acknowledged the time lags inherent in agricultural production and the even longer cycles when it

"I would not change anything. There is a lot of flexibility in the project design. It was well thought out based on previous experience."

Lieb Venter
COP, South Africa

comes to livestock production in terms of cows reaching maturity and meaningful productivity, which is about 2.5 years on average. CDP Project Manager Matt Rhody said it plainly: 5 years may sound like a long time in a CDP project, but it's not in agriculture.

Both Peru's and South Africa's field teams acknowledged that despite advancements on achieving a number of co-op benchmarks, the efforts overall in the first 2 years of the project have largely concentrated on the farm level activities. There was an acknowledgement that the emphasis on activities, beginning in Year 3 of the project, will shift to the cooperative level. This is in line with the project design that farmers' need to be "cooperative ready," that is, they need to understand the value of being part of a co-op, if a cooperative has any expectation of becoming "market-ready," in part, by providing viable services to its members. Aside from the obvious emphasis on cooperatives, the field staff's clear comfort zone is with agricultural and animal husbandry matters, not cooperatives. It is a learning curve for a staff who through no fault of their own have little or no experience with co-ops. Well run, functioning co-ops have a limited history of operating in both Peru or South Africa, particularly in the livestock sector.

The Mentoring Difference. Mentoring is more than a process of skills transfer or training, although a mentor does need to have the skills and knowledge that the mentee needs. In this GENEX activity, mentors are a personal link where the more experienced mentor treats the less experienced mentee as an equal in terms of how support is given to the mentee in reaching his or her goals and coping with new and changing conditions. Field staff pointed out that it differs from training in that it is not a one-off event or series of events with predetermined content and expected results. Rather, mentoring responds to actual needs and issues of the mentee as and when they are felt or expressed. It, therefore, requires frequent interaction over a period of time until the mentee feels empowered to pursue his or her goals with a sense of confidence and independence. One staffer referred to mentoring as, "walking the road together."

Generally, mentors provide support in the following areas: farming best practices, farm operations and management, and network building. The latter entails introducing and linking farmers to organized agriculture and commodity organizations, input suppliers, marketing agencies, such as FarmMark and government services, such as local agricultural extension officer(s). All of the mentors are mindful to provide a helping hand to farmers rather than taking responsibility for their farmers.

Matt Rhody put it aptly, "Mentors are the face of the CDP. These are the people farmers see on their farm on a day-to-day basis." South Africa Regional Manager Thukela Mashologu had this to say: Mentors are not arrogant. They don't talk down to people. Even though mentors are white guys they can speak Xhosa, which is the local language. The point Mashologu makes is that technical expertise is only a part of what is behind being a successful mentor and achieving successful outcomes in the CDP. Understanding local culture, language, and being able to communicate through stories and examples, compared to the more linear pedagogy typical of Americans, is an important dynamic. "It has been a differentiator," he pointed out, adding, "it is more important than race." "Mentoring works because farmers have a high level of trust in mentors," he said.

SUCCESS STORY

In Peru, COP Joe Mantilla says that the biggest accomplishments by far, despite COVID, is increasing the capacity of farmers to access and utilize technology, primarily with artificial insemination. Before the CDP, few if any farmers were able to access improved genetics. Today the local CDP partners are adopting and applying it. How did they do this? It started with mentors providing training, technical assistance and managerial guidance. After convincing farmers that each of their associations could provide the service to their members, each president with the advice of the association board of directors, invited 3 farmers to be AI trained, with a requirement that at least one of the 3 be a woman. The idea is to provide the service to both members and non-members alike, but with members being able to access the service at a preferential fee. Using

"I had never thought of learning artificial insemination, but thanks to the CDP, it is becoming a reality and not only to genetically improve my cattle, but also those of other members of the association and farmers in the district."

*Luis Gonzalo Llanos Bustamante
Vice President, Fortaleza Cattlemen's Association, Peru*

GENEX genetics purchased from a local distributor, each association decides how to handle its service. Without the co-op service, farmers typically paid out of their pocket for better quality; they put up money, not their association. As a co-op service, the co-op signs a contract with a national distributor on behalf of its members and is given a line of credit. In at least one co-op, several farmers obtained credit lines averaging about \$4,000 each, a promising sign of how co-ops can meet member needs. It's up to each association as to how it wants to operate. The CDP does not tell the groups the best way to address any of this, but leaves it up to the association. Once the service starts, technicians are paid.

Mentors have become one of the defining characteristics of the GENEX project. Farmers' reliance on them and the value they ascribe to the agricultural experts is undeniable. Once the current project ends, mentors will no longer have the financial support to continue in their current role. That they will be sorely missed is without question. While they provide training, they are not trainers in the traditional sense, whereby they might provide trainer-of-trainer programming as a means of contributing to the sustainability of the CDP programming. Rather, they respond to specific on-farm needs unique to each particular farm or cooperative. In that sense, they are providers of technical assistance. To address the expected desire and need for technical experts once the current CDP ends, it was recommended in the previous GENEX CDP project that cooperatives build into their strategic thinking, business plans, and budgets funding for accessing local technical experts independently, either on a farmer-paid fee basis or as a service provided by the co-op to its members. This could be a valuable service designed to meet the needs of cooperatives' local members and would provide continuity and sustainability to the objectives of this CDP, once the current project terminates.

Peer-to-Peer Learning. The flip side of learning from mentors who are expert in farming, is farmers learning from one another. GENEX has enabled peer-to-peer learning via several effective strategies thus far to achieve project objectives.

Newsletters. One type of peer-to-peer learning, discussed at the 2019 CDP all-hands-on-deck staff conference in Wisconsin, is a digital or print newsletter highlighting new developments, advancements, and successes among the local CDP cooperative partners. The intent of this *peer-to-peer*



learning in the form of an "insider" newsletter is to showcase and share personal stories, successes, best practices, lessons learned, ideas, and opportunities among participants, both on the farm and in the cooperative. Field staff in both Peru and South Africa believe it is axiomatic that farmers will have a higher probability of accepting, adopting and sustainably practicing new ways of farming that are different from their traditional ways when they can see how their colleagues and neighbors are faring with such practices. Indeed, the outcome for behavioral change is stronger than any external training and technical assistance combined, staff report. As CDP Project Manager Matt Rhody points out, "farmers are defensive by nature. Trying something new is risky. Farmers generally are not early adopters. Most wait to see if something is working before they accept it."

To this end, in 2021 the Peru field team launched *Farmer Cooperatives: Strengthening the Cooperative Competitiveness of Ranchers* and the South Africa field team launched *The Cooperative Connection* with stories on young ranchers; the use of improved bovine genetics; the value of cooperatives; managing through COVID with creative outreach and training tools; soil analysis; herd management; bulk buying; mentoring and improvements; and women livestock producers. Said Peru COP Joe Mantilla, "If someone can be a model for their neighbor or others in the association, then that will push them to adopt. The problem is that in agriculture this takes a long time."

Study Groups are another form of peer-to-peer learning. Their purpose is to create learning, capacity building, and empowerment among farmers. Benefits of study groups include an ability to network and benchmark performance against other farmers. This enables members to adopt new ideas and innovations while being exposed to local and international trends. The exchange of experiences in an exceedingly dynamic industry is critical to ensuring future sustainable growth.

In South Africa, study groups consist of small groups of farmers who regularly meet to discuss shared topics of interest. Each group is unique and draw on the backgrounds and abilities of its members to determine the topics that will be covered. *Study Group Days* are educational events hosted by a farmer, educator, or the CDP. They may be held on-farm, at a research farm, or in a central venue that can be attended by fellow producers, agriculture professionals, and community members. The events usually include demonstrations of specific management practices and equipment, and/or highlight research methods and results. The study group day can include demonstrations, presentations, posters, materials and walks through the farm, referred to as "farm walks." The typical study group size is 5-20 farmers. Where distance is a geographic challenge, more than one study group can be established per cooperative. Regional managers and mentors collaborate to establish and manage the groups.



According to CDP staff, farmers in study groups generally learn faster working together than farmers working alone. Members generally ask questions of one another instead of spending valuable time puzzling over the difficulty alone. In addition, a farmer can help his or her fellow farmers when they have difficulties understanding something that he or she does not understand. As the member farmers listen and ask questions, they soon start noticing a variety of different viewpoints on the same topic. This forces them to think more about their position, which in turn, encourages them to develop critical thinking skills. Working with their peers in a study group also gives the farmers an excellent opportunity to hone their interpersonal skills, an outcome that will surely come in handy if they become a leader in their cooperative. If they face a difficult situation in their study group, newfound people skills can also help with how they collaborate with others.

Yet another aspect of study groups is the sharing of experiences and knowledge among staff at the field level, between countries, and with HQ. A desire by staff to improve their understanding of American models of farmer cooperatives, cooperative finance, and cooperative governance in terms of their lessons for local application has resulted in a forthcoming internal staff study group whose aim is to raise the bar of cooperative knowledge among all field staff.

Gender. GENEX conducted a gender analysis and prepared a gender integration plan with the objective of reducing co-op member gender disparities in, access to, control over, and benefit from their cooperatives' resources, wealth, opportunities and services. There were two overarching questions: Are there gender-based obstacles that limit the full potential of women in their co-op relative to the CDP objectives and activities? If so, what are they and what can be done to mitigate those barriers?

The study found that women in both South Africa and Peru have a good deal in common in terms of their experiences, both at home and within co-ops. In most cases, however, men and women reflect their historical biases — patriarchal and cultural norms, perceptions, and stereotypes that cross all spaces and areas

"There are no other government or NGO donor-funded projects like the CDP. It is the first time farmers participated in anything like the gender study."

Kgabo Rammutla
Regional Manager, Hi-Veld, South Africa

of life that have excluded women from specialized training, participation, and leadership on an equal footing with men. Both genders recognize one another's strengths, weaknesses and contributions, including the inequalities between the sexes. Cooperatives follow the pattern of this phenomenon, where many of the social problems translate into the deep inequalities that mainly affect women. Both genders expressed their desire to improve the role of women in their groups. At the same time, the purpose of the analysis was not to promote a set of gender standards, requirements, or to directly challenge local values. Rather, it was to create awareness and understanding of how gender inequality and the lack of female empowerment may limit the achievement of cooperatives' full potential and to suggest pathways for overcoming those limitations.

Obstacles found limiting gender equality and female empowerment were: (a) disparities with regard to access to all co-ops' resources, wealth, governance and services; (b) lack of access to governance, business and agricultural training; (c) challenges to real leadership and decision-making in the co-op; (d) legal discrimination; and (e) cooperative, spousal, and gender discouragement.

Despite the fact that women were relatively well represented participants in the research and in the CDP, many elected female co-op leaders appear to have only nominal power, according to the study's authors. Yet, in the study's key informant interviews, co-op leaders not only expressed a desire to improve the role, access and contribution of women, but were open to bringing about greater awareness and understanding of these issues in a safe space to discuss them. A number of field staff interviewed for this report, suggested that creating greater awareness and understanding of the role of women, especially younger, better educated women who may be more comfortable with the use of technology, would be a step forward in providing them with a real voice. A South African field staffer reported that gender policies are enforced, indicating that most co-ops are gender diverse. "Female leaders on boards are not figureheads," the staffer argued. "They own livestock and have their own farms." Says Regional Manager Kgabo Rammutla, "co-op AGMs are focusing on gender inclusion."

PROGRESS

It may be happening slowly to the casual observer, but in the first two years of this CDP, 80 percent of the interns retained by the local cooperative partners themselves, independent of outside influence from the CDP staff, are women; one third of the AI technicians in Peru, at least one per association, is a woman; and, in response to the gender analysis, a majority of co-ops are addressing the need for gender inclusion in their annual meetings. With respect to the latter, the majority of both men and women in the gender research indicated their desire to remove impediments that limit anyone's meaningful participation in their co-op.

Other means recommended to promote gender equality and empowerment are to widen training programs to ensure *all* members of the cooperative have access to it. Another is to formally embed such language in cooperatives' enabling documents. While policies and laws have been enacted in both Peru and South Africa to protect and promote gender equality and female empowerment, the fact is, the reality falls short insofar as actualizing gender equality and empowerment. The CDP gender research found those in rural areas where cooperatives exist to be especially bound to traditional ways. Nevertheless, education can be a powerful equalizer. As member-owned, operated and controlled organizations, co-ops may be uniquely able to move the needle forward in this area. Cooperatives by their very nature are advocates of education and training.

To address the obstacles, a gender integration plan was developed that outlined desired outcomes, barriers to achieving those outcomes, mitigation measures, and detailed plans and timelines progressing forward. While progress has slowed due to COVID, GENEX intends to implement its *Gender Integration Plan* as part of all its activities, rather than to stove pipe the interventions. It views the gender issues holistically connected to all economic endeavors of the co-ops.

Gender Committees. While there are no known gender committees in South Africa, there are some in Peru among cacao and coffee co-ops where international NGOs require them. Peru's field staff is expected to set up gender committees regionally because local co-ops are too small to have them, according to Regional Manager Jose Alcantara. He prefers in-person gender training. "Some topics like gender are not conducive to eLearning," he said, "because this is an area that is traditionally male dominated. In-person training provides better relationship building, allowing people to understand how one another feel."

B. Unplanned Innovations

Driven singly or by a combination of factors, including COVID, unanticipated opportunities, internal research, and local cooperative partner initiatives, CDP managers have designed, developed, and deployed numerous new, unplanned, innovative initiatives that leverage the CDP project design and activities. Collectively, these innovations have strengthened the GENEX CDP's 3 key objectives, strategies and approaches in terms of the post-project sustainability, reduced donor needs, and expanded impact with its local partners. One particularly important outcome of the innovations tied directly to local farmers has been a deepening of member cohesion within their cooperatives.

Internships. The GENEX CDP project design established an internship program to expose U.S.- and field-based students to international development, cooperative management and governance, and farm production. The program appears to have worked exceptionally well, thus far, in terms of meeting project planners' intent. Since its inception, interns have focused on improving both cooperative- and farm-level productivity, profitability, and commercial sustainability via the FarmMark initiative (described later in this section) that supports bulk purchases in South Africa; a study on the ways and means of strengthening farm-level dairy production records management; gender research; and monitoring and evaluation of the CDP.

An innovation not considered in the project design, but employed in the 2019-2020 period, has been the utilization of interns in each co-op in South Africa to manage members' input purchasing needs; day-to-day managerial and administration functions; and help with gender integration plans. During the start-up, the CDP is covering interns' pay, with the full expectation and agreement by each cooperative that they will assume the full salaried costs of the interns who will transition to employment status once the CDP ends. By 2023, the interns are expected to be ready to manage each cooperative. In the meantime, CDP-financed interns are filling a management vacuum. GENEX field staff saw a need and turned it into a two-pronged opportunity to address the need for improved management at the co-op level while engaging and promoting youth and gender.

"Women interns have been welcomed with open arms. One of the interns was even named beef farmer of the year by the agriculture department. They can communicate well with boards and with government agencies better than the farmer members."

Craig Carter
Regional Manager, KwaZulu-Natal, South Africa

Generally, the internships were advertised to children of members, field staff networks, government officials and the "co-op network." Leaders in the local co-ops believe that involving children of members provides a strong incentive both financially and professionally for keeping them engaged locally, which they hope serves them as a preferable alternative to moving to urban centers to seek opportunities they may perceive to be more lucrative. According to staff, the co-ops looked for candidates who could grow with the co-op. While not all interns meet the youth definition, most do. Moreover, 80 percent of the interns are women; staff reports that there appears to be strong acceptance of women professionals in the co-op management. That most of the interns are children of members is an attribute that engenders cohesion in the co-op, according to staff. However, not all are family members, which is a demonstration of the level of professionalism being adopted by some of the co-ops. Field staff report that co-op leaders believe the interns will be critical to strengthening their co-ops as the project begins to focus on governance, business, and services. South Africa COP Lieb Venter said, "I've been to no co-

op meeting where dissatisfaction of the intern program has been expressed." When the project ends, the expectation is that each co-op will take over paying for the interns.

In Peru, field staff are talking with technology institutes and universities to provide interns who can give technical assistance to the 21 associations. The objective is to have an intern serve in each group for a 3-month period year-round, either at the farm- or co-op-level. The service associations and the co-ops are expected to be able to carry forward once the CDP is terminated. Says Regional Manager Jose Alcantara, "co-ops with young people do better than those with people 45 and older. Older members give the younger ones more freedom to lead and engage. Also, young people are more comfortable with technology. The more successful groups give greater opportunity to young people which brings about a desire for younger people to be interested in getting involved with their cooperative and the CDP." (*Objective 1 Activity*)

Dairylearning.com. In 2020, GENEX investigated the applicability, adaptability, and accessibility, that is, the feasibility, of offering farm-level production distance-learning courses to smallholder farmers worldwide. It turned out to be a particularly timely endeavor given today's COVID pandemic with its accompanying widespread travel restrictions. Virtual experiences suddenly came into demand. Building on GENEX's affiliated in-house distance education dairylearning.com capability, the objectives of the study were to: (a) create and pilot dairylearning.com courses for farmers in emerging countries, and (b) create a viable plan to bring dairylearning.com courses to smallholder farmers.

The study found that: (a) there is widespread demand for dairy management education by smallholder farmers, a finding that coincides with the technological capability to deliver and receive virtual education in evermore distant sites geographically; (b) virtual education among smallholder dairy farmers is effective; and (c) 10 countries are strong markets for eLearning: Peru, Argentina, Columbia, Chile, Ecuador, Bolivia, Kenya, Uganda, South Africa, and Nigeria, followed by Brazil, Morocco, Egypt, Algeria, and Tunisia. A key conclusion is that if farmers believe and accept the notion that training, even virtual training, will substantially improve their production capacity to produce at a level to meet quality standards and in the volume required to supply market demands, then they will seek out opportunities to learn and embrace it.

Peru has been offering virtual training on animal husbandry and farm-management topics. Where possible, integrating dairylearning.com into programs for the farmers who have Internet access has been proven to work. It was used for smallholder farmers in training on nutrition, reproduction, and genetics in Fall 2020. Local CDP dairy farmers, however, found the study's conclusions overly optimistic. Farmers faced several barriers, namely their lack of Internet minutes and access to technology. Generally, Internet minutes are purchased piecemeal. Cards are purchased with only so many minutes, which means farmers have to make a decision on the value to them of each outlay. They can go to sites with WiFi, but these places are not near farms. The South Africa CDP farmers are mostly beef producers and, therefore, the dairylearning.com was not relevant to them.

In Peru, another barrier turned out to be more problematic because even with Internet minutes accessible, most farmers do not have access to Internet *connectivity*. Only 73 farmers of the 1,200 CDP farmers were able to connect to dairylearning.com, according to COP Joe Mantilla. He had hoped up to 200 farmers would participate in the eLearning, but less than 30 percent of the CDP farmers did.

"Just 360 of the 1,200 even have access to it. In Peru, only 35 percent of the country is reached by broadband," said Mantilla. "Farmers mostly communicate by cell phones," he said, though in some places 100 percent of farmers lack Internet and cell phone coverage. "Dairy learning is well designed, understandable, and good; we just can't broadly access it," asserted Mantilla. (*Objective 2 Activity*)

FarmMark. To address the challenge of farmers' lack of access to finance, the South African CDP field team launched FarmMark, a buying service designed to provide access to affordable inputs, access to markets, and access to commercial credit sustainably and independent of donor assistance. FarmMark offers the means to overcome these barriers by: (a) negotiating directly with manufacturers for discounts on inputs, and (b) financing the purchase of those inputs. This initiative was not part of the original CDP project design.

SUCCESS STORY

Before the CDP, farmers in South Africa would go to farm stores to purchase medicines. Animals were dying because they generally were not examined, diagnosed or treated with whatever maladies they may have had. Poor water quality may have also been an issue. Vitamins, supplements, and vaccines were likewise absent. In a nutshell, farmers did not know how to manage animals and even if they did, they lacked access to needed inputs. FarmMark not only used its own resources to purchase vaccines, it also financed interest-free micro loans to farmers on 30-day terms. Interns organized the farmers and provided the service to the local co-op partners. Without FarmMark, it costs \$0.16 per animal for the medicine alone; with FarmMark the medicine plus service costs just \$0.07, 129 percent cheaper than what it would otherwise have cost, a result of the bulk purchase discount, lower packaging cost, and elimination of waste. Today, some 900 sheep have been inoculated. Farmers are paying for the medicine; the CDP is providing animal husbandry training support. Also, before FarmMark, government vets serviced the farms, mostly treating one disease at a time, however, there was no system of maintaining farm records. The problem is that there can be duplication or unneeded inoculations because there are no records. This changed under the CDP. Records management is a simple solution to improved management, but it had previously not been routinely undertaken.

Although FarmMark arose independently, it came about as an outcome as both the need and opportunity developed from the implementation of the various CDP activities. FarmMark is the first and only known South African organization jointly created, owned and operating a community-based, non-profit business of its kind. It is legally organized and registered as a private company, comprised entirely of South African citizens. It is developing commercial relationships with farm input suppliers, buyers and processors, traditional lenders and related stakeholders. Board members and the general manager of FarmMark have experience with handling the CDP from whence it emerged. FarmMark was conceived and designed entirely by local partners in collaboration with one another. In the past, there were just input supply co-ops. "With FarmMark, we are also introducing the concept of marketing co-ops," said South Africa COP Lieb Venter. (*Objective 2 Activity*)

Dairy Record-Keeping Software. Smallholders in emerging markets generally lack record-keeping options. However, for a farm to effectively monitor its farm practices for increased productivity and profitability, it is essential to identify key performance indicators upon which those practices can be evaluated. To address this need, which was identified by field staff working with local cooperative partners, GENEX, Valley Agricultural Software, and URUS conducted research in South Africa, Peru

and Ecuador to study the viability, acceptability and technology appropriateness of digital record-keeping tools and farm-management guides as a means of improving the efficiency, productivity and profitability of smallholder operations. The study resulted in *DairyComp Go*, an easy-to-use smartphone software app, designed specifically for smallholder cattle farmers in emerging countries. In 2019-2020, a beta version of the app was tested in a small group of farmers in Peru and the Dominican Republic. The results were promising. In Uganda, URUS has explored the potential for funding a feasibility study to test its commercial viability to scale up the technology regionally.

The report found that the use of Internet connectivity to input cattle information into physical devices can create a global database of simple herd management trackers. This has the potential to lead to profound changes in farm management because there will be access to specific information and decision-making capabilities that were previously unavailable, either technically or economically. Smallholders and emerging producers will be able to monitor productivity information rather than rely on memory and intuition to make farm-management decisions. (*Objectives 2 and 3 Activities*)

"If you're a co-op and start with no production data and don't know how the farms are doing, you cannot effectively make management decisions or provide services to members. The only way to measure impact is with data. With more data, co-ops can make better business decisions."

Guido Kinds

Author, *Improving Smallholders' Farm Record-Keeping*

CDP Strategy: Scalability, Replicability & Impact. In Nigeria, URUS has sought to build upon its GENEX CDP activity and developmental experience by partnering with the world's largest farmer-owned dairy cooperative to implement a large-scale dairy development program in regions underserved by local producers. With new Western investment and technical assistance in local production, there is an opportunity to counter the country's long dependence on foreign imports in the dairy sector and sustainably improve the incomes of small-scale producers, a group that until now has largely been left out of the country's dairy value chain.

In Kenya, URUS has sought to build on its GENEX CDP activity by joining a consortium of implementing organizations to support an effort by the Mbirikani Women's Dairy Cooperatives, a consortium of 10 Maasai women's dairy cooperatives, who are unable to supply milk in the volume and the quality needed because the small-scale producers are too fragmented and too small in size. They need to operate at a commercial scale, but they need farmer training and technical assistance on livestock production and they need to aggregate farmers via cooperatives to achieve a commercial scale that will benefit from the strong managerial and operational capacity necessary to achieve improvements in farmers' profitability. Similar efforts are being explored by GENEX, URUS and/ or FarmMark in Tanzania, Uganda, Democratic Republic of Congo, Zimbabwe, and Angola. (*Objective 3 Activity*)

Farm Credit Revolving Fund. The *Farm Credit Revolving Fund* is an outgrowth of the CDP in South Africa and is part of FarmMark's mission to meet the needs of farmers and their cooperatives. The proposed fund is a mechanism to bridge the creditworthiness gap of disadvantaged farmers. It grew out of a series of strategic business visioning and planning activities that GENEX conducted with each of the 13 cooperative partners in 2018-2019. Those 13 co-ops now comprise the consortium that own 45 percent of FarmMark.

Based on the experience of the CDP, GENEX and its South African partner, FarmVision proposed the establishment of a Farm Credit Revolving Fund designed to catalyze the financing of inputs for the consortium of economically disadvantaged livestock producer-owners. Over a period of several credit cycles, as borrowers establish credit histories and repayment of loans, South Africa's First National Bank and the Eastern Cape Development Corporation have committed to offering financing at commercial rates and guarantees in partnership with FarmMark, the new not-for-profit business owned jointly by the 13 emerging CDP farmer cooperatives and FarmVision, a private group of agricultural economists and development practitioners in South Africa.

It has secured a meaningful commitment from a several financing facilities that are open to establishing an uncollateralized loan window for nascent borrowers, if it can establish basic credit histories and repayment track records among the potential borrowers. "Lenders want to participate, but don't know how," said South Africa Regional Manager Kgabo Rammutla. With willing "first-in" investors, Rammutla asserted that, "If this initiative can work in South Africa, then it can work in similar economies at an even larger scale. (*Objective 3 Activity*)

C. Cooperative Partners: A Snapshot

SUCCESS STORY

"Historically, in Peru, farmer groups organized as associations because it was easy. They just needed to have one goal. It could be a product promotion, for example. But there was little economic benefit. Now, with the help of the CDP, farmers see the limitation of associations. They see that the only way to improve their economic benefit to themselves is to switch to a cooperative. Andachaca had been a cooperative, but changed to be an association. Then it decided to return to a cooperative structure because its members see the value in being a co-op. This is a result of the CDP."

Wilder Suarez
Regional Manager, Pasco, Peru

Two surveys were conducted in 2020, one to assess progress at the cooperative level and one to assess progress at the farm level. In both cases, the data results are the clearest indicators of the effectiveness of the training and technical assistance. Project "success" is not measured in terms of the number, diversity, type or approach to any particular training or technical assistance, but in the acceptance, utilization and sustainability of the intent of the training insofar as bringing about material changes in productivity and profitability among farmers and their cooperative enterprises. An analysis of the detailed findings informed this evaluation in terms of questions posed, fact-checking, perceptions, anticipated outcomes, and the value of metrics measured.

Cooperative-Level Survey

Member Equity. In the baseline, only 15 percent of the co-ops in *South Africa* reported having any value with regard to member equity contributions. Since then, members have begun to understand the need and the value of funding their cooperative with their own contributions. By 2020, the number of cooperatives recording member equity had grown to 62 percent. In some cases, co-op members have started to invest a required \$30 per farmer to fund their member equity account.

Each farmer brings a cow to the feedlot as their member equity contribution. This is a critical step to creating a culture of cooperative ownership. Depending on the cooperative, funds held as member equity have been used for operating expenses, special projects, or financial leverage.

In contrast, *Peru* has a more established cooperative sector, which is reflected in its healthy member accounts. The overall level of cash recorded, however, decreased over the period, an outcome attributed to the need of cooperatives to use their internal funds for various operating needs, including their response to COVID-19. In the case of the latter, the value of having well-funded member accounts for "rainy day" needs is clear.

Member Services. The co-op survey found a good deal of realism in regard to services. When GENEX began implementing its CDP 10 years ago, there were a lot of grandiose ideas of what co-ops wanted and thought they could do. The wish list was long, mostly beyond reach, and unrealistic. Today, more experienced staff are guiding co-ops with practical advice on achieving their vision. Participatory-led development is largely the reason why. GENEX has offered a guiding hand, but field staff made clear in interviews that co-op members are the decision-makers, not mentors or other local field staff.

Most of the partner co-ops have made advances in providing member services over the prior year. Among the most notable is that co-ops are accessing *farm inputs* at discounted prices for their members. To achieve this, the 13 local co-op partners in South Africa collaborated to form a buying service, FarmMark, to purchase inputs in bulk at cheaper prices. This new service, in turn, has increased in the level of member patronage. Also, worth noting is the number of member services offered compared to a year earlier, a reflection in part to the development of strategic and business plans, training and mentoring activities of the CDP field staff. In South Africa, 12 of the 13 cooperatives reported offering *more* services to members in 2020 compared to 2019. In contrast, only 3 of the 21 cooperatives in Peru reported offering more services in 2020 than they did a year earlier.

In response to the complete shutdown of auction sales in South Africa resulting from COVID restrictions, local co-ops saw an opportunity to support their members market their cattle with *video marketing* directly selling to the slaughter-

house, thereby, allowing them to bypass the middleman. Working together, farmers consolidated their animals, saving on transport and avoiding the likelihood of being cheated by speculators. Farmers realized they could obtain

"After successfully selling livestock directly to the Meat Traders Abattoir, we will never again sell our livestock to the speculators."

Mr. Selborne Cecane, Chairman
Mayime Cooperative

better prices by cutting out the intermediaries. Without the intervention of the CDP skipping auction houses and going directly to the slaughterhouses would not have occurred. Also in South Africa, one of the more creative services is a new *fuel depot* in the Free State (Queenstown) province that will be operated by Bemifa Cooperative which can sell fuel cheaper than anyone else.

In Peru, the top service dairy co-ops are gearing up to provide artificial insemination of improved genetics. This is a core GENEX area of expertise, which is one reason local co-ops have chosen this service. They saw a unique opportunity to fast track their acquisition of improved genetics in a way not otherwise possible. There is a lesser interest in South Africa in AI, because unlike dairy producers, beef farmers rely on bulls, rather than AI. In Peru, several co-ops also have sought to process cheese,



Photo: Yurisan Lopez Guzman, 1 of 64 Farmers in Peru Being Trained To Be An Artificial Inseminator Technician

because it's easier and also pasteurized milk for schools. In the earlier CDP project, there was a lot of interest in processing, but few had the capital or wherewithal.

Another emerging area of interest among the Peru co-ops is in *soil analysis*. Recognizing that if soil and other natural resources are not managed properly and sustainably, then livestock producers self-limit their productivity, profitability, and sustainability, local co-op partners are seeking support to start a soil analysis cooperative. They understand all too well that poor management results in soil erosion and degradation; deforestation from the need for additional farmland; and pollution of groundwater from overapplication of fertilizer and hazardous runoff of nitrates and phosphates. Inefficient and wrongful management of soil not only negatively impacts the environment, it affects their capacity to contribute to their local economies by restraining their productivity and profitability.

Mitigation Measures. In Peru, 11 of the 21 cooperatives reported that they implemented more mitigation measures, which is based on meeting a number of the project's outcome indicators: capacity to be market ready as measured by their ability to participate effectively in value chains;

capacity for viable sound governance and business management; commercial viability as measured by its solvency; access to affordable financing; reduced reliance on donor support; and women and youth fully participating in their cooperatives. In South Africa, 12 of the 13 cooperatives showed improvement in achieving a higher number of mitigation measures.

Financing. In both South Africa and Peru, there was an increase in the level of financing co-ops were able to access. In South Africa, especially, the change in one year was respectable, increasing \$293,289 to about \$3.2 million, an increase of more than 10 percent. In Peru, the change was even more impressive, with a 13 percent increase over the prior year. Several co-ops in both Peru and South Africa have been applying for both host government grants and to lenders for financing. Despite being a slow, arduous process, a few applications have been approved and funds are flowing. South African co-ops have accessed a combined \$800,000 more in financing than in the previous year, including over \$500,000 that Nestle invested in Makhoba Cooperative to promote community development.

Solvency. The baseline recorded 1 co-op in South Africa as being solvent out of 13 and 17 of the 21 cooperatives in Peru as being solvent, that is, having a level of assets that exceeded the level of debt. A year later, the latest co-op survey found all 13 cooperatives in South Africa to be solvent and 20 of the 21 cooperatives in Peru to have achieved that status, though the figure may be somewhat misleading because few co-ops are believed to have reported accurate data at the project's start.

Sales. Another significant metric that reflects advancement is sales, and indirectly, income to the cooperative in the form of retained earnings and to the members in the form of profit. In South Africa, sales among the 13 co-ops rose 30 percent. Among the 21 co-ops in Peru, sales rose a collective 11.5 percent. Mostly, the larger gain in South Africa can be attributed to the more nascent starting point for co-ops compared to Peru. The Peruvian agricultural cooperative/ association sector has a longer history; is more advanced; and had a higher level of sales when recorded in the baseline.

Governance. The 11 governance indicators, including several management-related questions, found that 31 out of 34 co-ops improved their governance practices. Overall, scores increased from 24 percent to 62 percent in South Africa and from 42 percent to 63 percent in Peru. Indicators measured include: financial reports transparency and dissemination, tax compliance, strategic plans, business plans, annual budget, external audits, legal registration and compliance, a hired manager, holding of annual meetings and use of bylaws.

Gender and Youth. In both Peru and South Africa, levels of female membership, participation, and leadership were relatively high compared to the total number of members, with few changes between 2019 and 2020. While the data reflects a somewhat sharp increase in the number of youth and women benefitting from the services offered by their cooperative year over year, data collectors believe this reflects incorrect data provided by the cooperatives in 2019 for the baseline. The figures were corrected and updated in the 2020 survey. The validity of the data improved, according to field staff, as they and the co-ops became better acquainted and levels of trust rose.

Local Cooperative Partners' Strategic Plans. One of the first steps in transforming a nascent farmer group into a viable business cooperative is to create a strategic plan. All 34 partner cooperatives have articulated their vision and completed a strategic plan based on that to guide their activities, focus

and way forward. Thirty of these organizations had never previously developed a strategic plan. In this respect, there was widespread agreement among the CDP staff that one of the most important achievements in the CDP has been the education of what a cooperative business is, and how to apply the model to serving farmers. "Local co-ops are relying on their new strategic plans. They never did this before the CDP," said Peru Regional Manager Wilder Suarez.

Over the last year, regional managers assisted cooperative boards strengthen their organizational capacity by helping them to finalize strategic plans for all partner co-ops in both countries. The only co-op that had a strategic plan in place at the time the baseline survey was conducted was Ikhephu in South Africa. This was a carryover from the previous CDP and required updating. Overall, the plans center on input



supply, artificial insemination, processing, and transportation of products. All technical assistance and training that GENEX provides is based on the key activities identified by the co-ops in their strategic plans, thereby providing support to help the co-ops achieve their goals. Strategic plans and the business plans that follow are brief, understandable, and measure the progress and achievement of goals. The local partner cooperatives' strategic plans are significantly more realistic, achievable, understood and supported by the groups compared to some in the previous CDP.

The majority of the local farmers in Peru and South Africa had misconceptions about co-ops and did not think of them as a vehicle for serving their needs. Understanding a cooperative is more than a temporary arrangement to access government and donor support. It is a way to drive their own progress. As farmers' awareness and understanding of co-ops expanded, the result has been excitement, motivation, and pride among the members. Among some local partners there is a realization that the co-op structure is more viable insofar as economic returns and operating a profitable business than the more limited association model that has traditionally characterized the cattle sector.

Farm-Level Survey

At the farm level, aggregate income for all 34 co-ops rose 8.88 percent in 2020 from a year earlier. This compared to a rise in aggregate expenses of 28.29 percent for the same period. It is not surprising that expenses generally rose at a higher rate compared to income given the challenges of the pandemic. In some cases, however, the increase in farm level expenses far exceeded the income available to cover those expenses.

Despite the COVID lockdowns in each country, South African farmers experienced better gains, with a 17.58 percent rise in income in 2020 over 2019. Expenses, however, grew at more than double that rate, at 46.68 percent, with several outliers on both the income and expense side. There appears to be little consistency or uniformity among groups within the three regions or among the regions, though one can conclude that weather, local markets, input costs, access to affordable credit, and

buyers are chief among the factors driving the findings. The data should be of particular value to the mentors in their efforts to understand needs in terms of where to focus their technical assistance.

In contrast, the data in Peru found that sales were essentially flat amid an increase in expenses of about 10 percent. The outlier was the San Martin region, which saw an increase in expenses of just over 16 percent.

Strategic Planning

In Peru, co-ops approached their strategic planning by conducting SWOT analyses. Most listed similar objectives, strengths, weaknesses, and opportunities. There were just a handful of outliers.

Objectives mostly focused on achieving farm-level objectives individually, rather than thinking about achieving those improvements via cooperative services. Farmers said they wanted to: increase the production and quality of fresh milk; improve the economic conditions of families in the communities through proper livestock management; increase livestock product markets; improve prices received; obtain organizational training; acquire of a mini dairy plant; improve animal feed; and improve the health, genetics and quality of their livestock.

On strengths, farmers indicated their access to donor and government support; experience; land tenure; economic stability; access to water; and strong markets. The distinction between reducing donor dependency and the value of operating independent, sustainable farms and cooperative businesses is not yet a widely embedded value.

The number of weaknesses members identified was quite long. The good news is that many of the CDP activities are aimed squarely at addressing those weakness. Farmers named the following: too little knowledge of information and communication technologies; lack of innovation; limited Internet access; low milk production and productivity by cattle; lack of continuous training; weak and disorganized cooperative structure; lack of training for board of directors; too few members; lack of planning; lack of commitment and responsibility by most members; low quality of milk they collect and market (implying that GLORIA, the predominant processor, will not increase the purchase price); high cost for the maintenance of cold tanks for fresh milk; inactive members; elderly farmers; lack of youth; lack of member unity; poor roads; and few breeders.

Insofar as the threats that worried cooperative members, farmers identified a good number: member resistance to change; changes in municipal policies that some believe may end the school "glass of milk" program; climate change's harmful effects on livestock; migration of young people to cities for work and school that results in livestock being abandoned; uncertainty over the withdrawal of the processor, Gloria, which in turn, might reduce the value of farmers' belonging to the association; low price paid by Gloria for fresh milk, which causes farmers to engage in activities other than livestock; parasitic diseases that make livestock vulnerable to disease; drought; and the lack of clear communication within the association, which generates conflict and division.

The cooperatives listed as opportunities: new financing sources, the capacity to service unmet demand for local milk and dairy products, providing an AI service, eco-tourism, and the availability of government support programs that support improvements in animal health.

Local Stakeholders. Peru's field team has been assertive in identifying, reaching out and connecting government, private company and industry stakeholders to the local co-op partners. In particular, local universities, National University of St. Martin; San Martín Institute of Public Technological Higher Education; National Agrarian University of the Jungle; and Hemilio Valdizan National University have been approached to analyze soil, forage, feed, milk, etc., as well as places to source interns.

There is limited government-provided extension, but to the extent it is available, the CDP field teams facilitate their work with the local co-op partners. In this regard, extensionists invite associations to whatever trainings are being offered. Most farmers take advantage of this service. At the universities, the farmer or association needs to pay for any service they receive. Today, few are paying for it. However, the CDP is facilitating arrangements with the universities by establishing a structure for the associations to access the schools on behalf of their members as a service.

At the municipality level the CDP is seeking to create a means for the government to purchase 100 percent of milk produced by the local CDP partner co-ops in response to the shutdown of Gloria. This is a way to mitigate the impact of Gloria leaving the San Martin market.

The most consequential developments have been the inroads CDP field staff has made with lenders AgroPeru Fund (Agrobanco), Agroldeas, and Rabobank on behalf of the local partners. In the industry sector, the CDP team has reached out to MAFROX, a beef processing company that sells beef cuts rather than the whole carcass for the higher prices received and it has submitted a proposal to Fontagro in support of silvopastoral farming. These initiatives were not in the original proposal but represents leverage and creative solutions.

In South Africa, field staff took an holistic approach to guiding the cooperatives through their strategic planning exercises. This took place in two ways: (a) a sober internal analysis of each cooperative's capacity, needs, etc., and (b) a realistic look at external opportunities, barriers, etc. Strategic and business plans of the groups, to the extent they existed at all, were reviewed insofar as strengthening the assumptions upon which the plans were built, assessing the realistic capacity to achieve their goals, and the potential to successfully deliver what its members agreed to in their plans. To measure progress on the implementation of plans, a scoreboard was put into place.

Objectives of the cooperatives, while varying to some degree from co-op to co-op and region to region, generally focused on achieving production improvements at the farm level, though a good many goals were given equal weight at the co-op level. At the farm level, business plans cited improvements in crop yields, farmer training, calving, and animals sold. At both farm and co-op levels, groups included as top goals: increased revenue, increased profit, increased access to finance, improved legal compliance, increased number of farmer members, increased number of jobs created, strengthened co-op leadership, more member services, and increased participation in the value chain.

On strengths, the co-ops identified bulk buying, bulk marketing, support from government, member unity, availability of water, strong leadership, governance, and communication with members, large number of livestock, youth involvement, and infrastructure. Apart from the group as a whole, two cooperatives were outliers — Ikhephu's feedlot and AI service and Mayime's winery venture.

"It's not like microwave popcorn that comes out in a few minutes. Farmers need to be deliberate, have a plan, and work hard. Plans should have dreams....a reach, but be realistic."

Kgabo Rammutla
Regional Manager, High Veld, South Africa

Not surprisingly, there were no shortage of weaknesses cited by the cooperatives. The list includes a lack of market information, lack of managerial and technical skills, lack of farming equipment, poor infrastructure (e.g., roads, fencing), lack of access to finance, poor quality of outputs, odd farming practices, lack of access to veterinary care, and soil erosion. Among outliers, Ikhephu, cited weak primary co-ops, dependence on government, and a lack of business sense by members; Mayime cited a lack of access to technology; Border Rural Primary Agricultural Cooperative made the point that farms are not operating at full capacity; and Birha Beef pointed out the lack of trust among members.

Threats were more consistent among the cooperatives. Most cited: drought, veld fires, animal diseases, theft, predators, plant invasion, and soil erosion.

South African cooperatives recognized several novel opportunities, notably eco-tourism as well as an appreciation of their access to new sources of finance with their well thought through business plans in hand. The outliers in this category were Ikhephu's AI service for both its members and eventually, for non-members, presumably at a higher fee for the latter.

Local Stakeholders. Identifying like-minded groups to partner with on an equitable basis was a priority driving the South African field team's assertiveness in identifying, networking and collaborating with a broad array of local associations, lenders, buyers and suppliers in support of unanticipated schemes like the FarmMark buying service and its farm credit revolving fund idea. Examples of these groups include: South Africa Red Meat Producers Organization; South Africa Milk Producers Organization; South Africa Ministry of Rural Development and several of its agencies, including the Agricultural Research Council; KwaZulu Natal University; First National Bank; the Department of Economic Development; Environmental Affairs and Tourism; Du Plessis Farming; South Africa Land Bank; and South African Department of Agriculture, Forestry and Fisheries. Internationally, GENEX in partnership with its field-based staff, reached out or responded to inquiries from the Trooper Group in Angola; Office of the President, DRC; FrieslandCampina in Nigeria, Bill & Melinda Gates Foundation in Tanzania, Kenya and Uganda, and Mbirikani Women's Dairy Cooperative in Kenya.

D. HQ and Field Perspectives

The overall approach to conducting this midterm evaluation was to conversationally engage key informants, namely the CDP implementing staff. The intent was two-fold: (a) to assess what and how results were accomplished; the challenges to implementing activities on the ground; and progress

achieved with respect to goals and objectives, and (b) to seek the unencumbered insights, opinions, and suggestions of the staff who implement the activities on a day-to-day basis. The former is mostly covered elsewhere in this report. The latter is covered throughout the report, particularly in this section. While a group of questions guided the interviews, no two were quite alike. Below are key informant's remarks, some categorized, others offered in the free flowing discussions.

Leadership. There was a consensus that some co-ops are doing better than others mostly because of their leaders, suggesting that the lack of leadership and vision is a major factor affecting the competitiveness of their cooperative. The idea of offering leadership training was broadly supported as a means of drawing out and strengthening the skills and capacity of potential and current farmers and managers in leadership positions. Thus far, this has not been a strong area of focus in the CDP. However, the idea of creating a *Leadership Institute* resonated with staff, whereby promising co-op leaders would be invited to participate in specialized training.



In South Africa, a course is taught on how to select a leader. Should boards recruit members and directors or should people just say they want to be on a board? Some co-ops choose prominent community members, but they are wrong for the co-ops, field staff argued. The problem is that co-op directors are sometimes chosen for the wrong reason, said COP Lieb Venter. For example, "some farmers are very progressive (Ikhephu Co-op), while others are mostly looking out for themselves," he said, adding that "choosing the wrong captain for the boat can cause setbacks. They can bring a lot of baggage to the position. Aggressive types will get on sometimes for the wrong reason, for their own self-interest. They may be self-centered, talk down to the boards." Education appears to be a key differentiator. "The better educated do better," said Peru COP Joe Mantilla. Intellectual curiosity is also a factor, say field staff. High capacity leaders can bring along others. The chair of Ikhephu, for example, has an MBA. Similarly, Mantilla argues, "better associations have better leadership and can be more successful."

Co-ops Rooted in Corporate Partnerships. Unlike other geographies in this CDP, the Pasco region in Peru has a history of co-ops. They have been here since the 1970s, which was a period of Agrarian reform, according to Regional Manager Wilder Suarez. In that period, the U.S. mining firm, Cerro de Pasco Corporation, founded by JP Morgan with USAID funding and later nationalized as Centromin Corporation, trained farmers in the co-op model. Today, companies like Starbucks, ADM, Hershey, Nestle and Mars are employing similar co-op models with coffee and cacao production.

Learning. Experiential learning, learning-by-doing, seeing examples, and storytelling is the language expressed by field staff when asked how farmers best acquire and master new knowledge. The co-ops are not ready to full buy in until they see that they really work, said South Africa Regional Manager Kgabo Rammutla. FarmMark, for example, serves as a microcosm of the co-op model, asserted South Africa COP Lieb Venter. "Farmers, interns and managers can see how it operates professionally first-hand. The more we show co-ops that they can achieve and operate on their own, the better they will produce," added Rammutla. The outcome is a "desire by the farmers to keep taking their capacity

to the next step." Referring to the value of the day-to-day interaction of mentors with farmers, Rammutla said, "we are like their guardian angels, here to provide support."

"The CDP in Peru has given us 2 manuals, 2 magazines and 2 CDs so that we can study more about livestock. We appreciate the presence of GENEX professionals since with their support we will continue to advance in improving our animals."

Neil Otto Ruffner Bottger
Oxapampa Livestock Association, Peru

Trust. Trust continues to be a big issue, said Venter. The rub for most members is whether they believe their board and managers are "really protecting our money. Can we trust them?" was how one field staffer put it. Part of the reason for this is that "co-ops never sat around the table to talk about what it means to be a business. The shift from a tribal culture to a professional culture is slow and meandering," South Africa COP Lieb Venter said. HQ Project Manager Matt Rhody argues that part of the reason for the distrust is that communication within co-ops and between members is limited and not particularly effective, an area the CDP needs to focus. This, in turn, is expected to improve governance and the self-confidence of directors and members. Some field staff offered that with more ethics and governance training, the level of trust could also improve.

Governance. One field manager described governance as "intimidating," a characteristic that could refer both to farmers and co-ops, as well as to CDP staff. A year into the project a governance handbook was developed as part of the co-op training, however, it turned out to be just as useful for field staff as for local partners. One upshot is the decision by HQ to conduct in-house cooperative training webinars for field staff on this and other cooperative areas. At the same time, staff reports that co-ops are slowly professionalizing the identification and selection of board members. Corporate governance training is key in this regard, "but it takes practice," one staffer explained, adding that "relationships with the regional manager and mentors is a more effective way to teach than having the Americans come over."

Training Seminars. In contrast to individualized technical assistance, staff was queried on the value and impact of large scale training programs of 50-200 attendees. The better, most impactful programs are regional, most field staff asserted. Smaller programs provide more interaction and cross-fertilization and this has more value, according to those interviewed. At the same time, while exposure by government authorities and other "VIP" attendees that have characterized past programs has value, it was suggested that this type of interaction could be better handled separately in one-on-one meetings. Thus, it was suggested that there be two distinct levels of outreach, one for partners and another for stakeholders. "Big events are one-way conversations and little is remembered," said one staffer. In South Africa, the inability to gather for training programs has had a negative impact, according to Kgabo Rammutla, because it prevents farmers from gathering and interacting.

Farmer Challenges. When staff was asked to identify what they thought farmers and co-ops in their regions would say are their major challenges, those most cited were: low production levels resulting from poor genetics associated with mixed breeds; few member services; and lack of confidence and teamwork among members. Peru COP Joe Mantilla's observations perhaps summed up a view pertinent to both South Africa and Peru: Obstacles faced by farmers have little to do with the climate or agricultural conditions in the country where they live or with the economics or politics of whatever country they call home. Rather, it's how close the farmers are to the markets; the price they get for their output; better soils; and access to resources for farming operations. In

South Africa, CDP field staff pointed out that emerging farmers have the potential to provide services for themselves through a cooperative structure, but the culture of successful member-driven cooperatives is largely absent in the country. In Peru, staff pointed out that the primary obstacles dairy farmers face are in acquiring a satisfactory price for milk within a monopolistic system and having the capacity to successfully apply for grants from the Peruvian government for production and infrastructure needs.

Matt Rhody — HQ Project Manager

"It's hard to break the link with donors. All countries will protect their food systems to avoid collapse. Part of government support is political which is intended to keep people happy, but it is counterproductive with projects like the CDP. It's not bad that farmers are taking help from their government. If the support is offered, farmers would be foolish not to take it, however, there needs to be a plan on how to use it wisely and productively. This is part of what the CDP does. Donors can be fickle. Their priorities can change quickly, so farmers and their co-ops need to put in place strategies to be resilient and better manage their businesses. The CDP promotes a strategy to reduce cooperatives' dependence on government. In South Africa, farmers are dependent on grants, but if it doesn't work out let's find alternatives. The CDP has been creative here, with FarmMark. In Peru, government needs to approve business plans and it's slow depending on who holds political office. No co-op today can fulfill their vision with farmer equity alone. They need the government's support."

Lieb Venter — South Africa Chief of Party

"In the previous CDP, we had to manage our way out of a storm, but in this project we started with the right model. Last time we improvised. This time we started at the farm level and then will shift to the co-op level. This is the big difference. Farmers in this project are beginning to believe in themselves. Mentors are critical to the project design; interns too. We would do the same again. The cross-pollination among the staff is important and is valuable to delivering the project. It's two-way learning. If asked directly what, if any difference the CDP has made for them, most would brag. They are thankful for the CDP and would acknowledge that they would not be in their current position without it."

Kgabo Rammutla — South Africa Regional Manager, High Veld Region

"The CDP is working because of its business-led, market-led approach. Nothing in the project design should be changed. The way the project has been conceptualized is correct. The general understanding of co-ops before the CDP is wrong. In South Africa, historically, co-ops were used as a vehicle for government to provide services to a group because it was easier to work with a large group compared to individuals. On communal land, traditional authorities made decisions. But then the co-op structure worked with government. They were not built on business or market principles. Government also didn't understand much about co-ops. It was mostly about numbers; they had to meet their targets. It was a bureaucratic tool. The fact that they were not working was a secondary issue."

In response to the question of what makes some groups or farmers more successful than others, Rammutla said, "it has to do with passion, commitment, and understanding the value of reinvesting in their business. The light is on. This is our livelihood. The key is to understand the right

questions to ask. Ask the wrong question, you get the wrong answer. There is a new breed of farmers. Education levels are higher. Farmers are younger. There are more women. Farmers are more committed to farming. They are putting their iron in the fire. We no longer see hobby farmers. The CDP has shaped how I think. I've learned to grow, gain self-confidence, and to think as a business person. I appreciate that GENEX allows staff to unlock our potential."

Craig Carter — South Africa Regional Manager, KwaZulu-Natal Region

"International NGOs, foreign donors, host governments distort the capacity to create commercial businesses. It is unbelievable in terms of imparting knowledge to our farmers, to emerging agriculture and strengthening farmer competitiveness. We've gained huge advantage and gained huge distance in terms of upliftment. There's a lot of negativity in South Africa insofar as the emerging markets are concerned. I get to tell the good stories. I'm also chairman of my local farmers association. I tell stories where farmers have succeeded and are actually talking about succession plans in terms of passing on their farms to their children. This is something new. I'm asked by friends and colleagues why don't we hear these good stories? Well, they should be hearing them. The stories lend value to the success of this project." On the CDP, "I would not change anything at this stage. We're getting momentum."

Thukela Mashologu — South Africa Regional Manager, Eastern Cape Region

"The individual is what makes some co-ops more successful than others. People go into farming because a farm was inherited. But few seek to make a living from it. Farmers often work 2-3 other jobs. They may drive a taxi, for example. Those who go into farming because they want to are the ones who make a difference. Also, the level of education gives a better understanding of markets, program management, and technology. Those who focus just on farming because they believe they can make more money are going to be more successful."

Joe Mantilla — Peru Chief of Party

"Most farmers believe they are better off with the CDP, even in the short 2 years since the program started. They believe the CDP activities will improve their productivity. They need to invest in themselves; they need to get loans which they normally have not done. They are learning to adopt risk like taking out loans, which they never did before. Normally, they look for grants, not loans because they are afraid of not being able to pay them back. This is, in part, a cultural problem. They don't see farming as a way to make more money. Typically, farmers live day-to-day and have no money in the bank for reserves."

Jose Alcantara — Peru Regional Manager, San Martin Region

"In San Martin, associations understand co-ops. Some work with cacao so they know what it means to be a co-op. Associations want to transition to being co-ops because they realize there are more economic benefits; co-ops are more business oriented. In associations there is no equity or return to the farmer once he invests." In response to a query regarding biggest accomplishments: First, because of COVID restrictions, the use of webinars, Zoom, etc. taught farmers how to use technology. Previously they only knew WhatsApp. Second, financial management proposals were developed and submitted to Agroldeas and AgroPeru. Third, AI was part of training for young people during quarantine.

Wilmer Bernal — Peru Regional Manager, Huánuco Region

"Because COVID wasn't expected, the digital training helped. The problem is with those who have no access to technology. Our response was to provide printed materials, but printed materials are not enough. This is why we need mentors. Farmers prefer face-to-face meetings. In-person sessions permit more participation that is farmer demand-driven. Q&A discussions are lost without in-person sessions."

Wilder Suarez — Peru Regional Manager, Pasco Region

"Before the CDP, there was no AI training. Farmers had to depend on the government, NGOs, or other institutions. Now they have their own inseminator that works for them. Today, farmers also have their own genetic improvement plan, feed and nutrition program, soil analysis plan, health calendar, and health programs as a result of the CDP. This holistic approach is new; it was not previously considered." Queried as to the biggest accomplishments: First, is the mindset of farmers who value co-op governance. This is the first step to achieving the other objectives. Second, is the introduction of mentors because the technical assistance for each farmer is critical.

"Farmers' first impression of the CDP was totally different at the beginning of the project compared to now. The initial perception was based on donors mostly providing only resources, such as cows. There was no training or technical assistance. The CDP focus on training has been a game-changer. Also, when the project began, farmers and their associations never undertook strategic planning. The old way of managing with the board or president telling members what they were going to do was the only way. There was no transparency, nor were members empowered. This is still a challenge, but it's improving."

"As a veterinarian by training and not very knowledgeable of cooperatives, I've learned a lot about how to handle organizations, the co-op model, governance, development, financial statements and economics, how to manage co-ops, and how to handle people from different cultures. Most important, I've learned about development. The team approach of the staff is key."

V. CHALLENGES AND WORKAROUNDS

Amid national lockdowns and extreme measures like the use of rubber bullets to enforce safe distancing in South Africa, it goes without saying that COVID-19 impacted the ability of GENEX to implement its CDP project on schedule and in line with its original blueprint. While its overarching strategy and technical approach has remained intact, a number of adjustments, workarounds, and innovations have been employed in response to the coronavirus pandemic to ensure the achievement of project objectives.

In-Person Training Constrained. In both South Africa and Peru, farmer income declined steeply as prices and demand sank, thereby depressing cash flows. Implementing activities in the March-June 2020 period was very difficult, according to staff. People in rural areas were "scared," said South Africa COP Lieb Venter, because there are a lot of "underlying illnesses such as tuberculosis, HIV/ AIDS, and memories of Ebola." Mentors saw 1-3 farmers at a time, reported Regional Manager Craig Carter, but they did not want to gather together more than that. "We tried to have small groups rather than meeting one-on-one because there is more energy with groups," Carter stated. In Peru, mentors only

worked with farmers via cell phones and Internet, however, that was found to be unproductive. "It was difficult for a farmer to follow you if not in person," said Peru COP Joe Mantilla, adding "they forget what you discuss."

In Peru, Mantilla said, "we learned in AI training that the most effective way of ensuring a change in behavior is to conduct training in person. That became difficult with COVID. "In the beginning, we thought we could send the farmers to the university or have central programs attended by large groups of farmers, but we found that we're more successful if we conduct the training on the farm." It's a better motivation for farmers to stay at their own farms because it engenders better acceptance of new practices, according to Mantilla. Training occurred in person, generally in small groups of 3-4 people from different farms.

Digital Challenges. While the focus of the CDP, by design, is centered on training and technical assistance, to the extent possible, there was a shift from in-person mentoring and group events to digital outreach. eLearning videos, webinars, written materials, and animated presentations were produced and disseminated via WhatsApp, Zoom, CD's, mobile devices, etc. In Peru alone, the local field staff created two manuals, ran 14 video conferences, made 11 presentations, and produced 2 comic books related to animal nutrition, reproduction and genetics. The digital and printed materials reached about 800 farmers out of a total of 1,200.



But there was a problem. The effort to overcome the slowdown through the use of technology did not work particularly well in either country. "Farmers are far more disconnected than we thought in terms of communications technology," said Matt Rhody, adding that "the lack of technology with regard to communication is real and significant. It doesn't work well with a CDP audience," he argued. "Nothing replaces in-person connections." They have low-end smart phones and even less computer or tablet capacity. Most field staff agreed that the need for a physical medium outweighs the virtual outreach. Some older farmers listen and adapt, but not most, with some falling asleep, staff reported, "which is why it's more effective to work on the farm."

Indeed, the number of CDP partners that logged onto webinars were few despite it being free. In Peru, printed materials combined with CDs appears to have worked best because mentors on the ground followed up with answers to questions. They proved to be critical in this process. Yet, webinars were also an important tool. They provided reach beyond what was possible from the project's direct touch. As a COVID workaround, webinars were mostly intended to get people excited about a topic which mentors, in turn, could follow up directly with farmers and cooperative managers at later dates to review with them one-on-one. According to some staff, the biggest value of the webinar seminars was not the material presented, but in the networking among the co-ops and what they were able to learn from one another. "Build it and they will come," seemed to guide the approach. GENEX provided the venue and opportunity and let the rest develop on its own naturally.

Likewise, South African COP Lieb Venter reported that webinars like those in Peru were simply not possible in his country because WiFi signals are nonexistent in some rural areas. In some place, there is only 3G capability. Mentors used WhatsApp almost exclusively. "Training is now conducted one person at a time, so it takes longer," said Venter, adding "farmers hardly ever answer their phone."

By September 2020, with COVID slowing down, the field staff and mentors started meeting directly with farmers and their associations. Prior to that they were only working by cell phone and Internet. Generally, they found that approach to be unproductive. It was difficult for farmers to follow the training if not in person, the field staff reported. Unfortunately, amid efforts to reopen in the fall, farmers in both countries faced further lockdowns, especially in South Africa with the resurgence of a more virulent strain of COVID.

Counterproductive Government Relief. In some cases, government COVID relief grants and other actions exacerbated the spread of the virus, as in Peru when it required those receiving emergency assistance to collect their funds in person at government banks. For the 30 percent of the country's poor, wearing masks and social distancing was not widely followed. Worse, only 30 percent of people in rural areas have refrigeration in their homes, which means they had to go to the market every day for food. Most houses are small, often with 10-20 people living in a single abode, according to COP Joe Mantilla, all of which contributed to creating super-spreader conditions. This figure accounts for approximately 60 percent of Peru's 23 regions. In these geographies, "almost everyone became infected," said Mantilla. Also, those in rural areas work every day because they have to; they have no resources to stay at home. At its peak, 80 percent of rural people are estimated to have been infected after shopping at their local market.

In South Africa, according to Regional Manager Craig Carter, every black farmer could apply for a grant of between 20,000 and 50,000 rand in relief funds. Vouchers were given for input purchases at supply venders that were pre-approved by government. The government "bypassed the whole co-op principle and that really frustrated us," he said, adding that, "the advice farmers were given was not in line with the CDP strategy. This was a big hurdle for us. You can't blame the farmers because it was free money." Asked if the CDP could have consolidated the vouchers via the co-op: It would have been possible, but it would have been a bureaucratically difficult and long process, replied Carter.

The problem is that there were only a limited number of vendors operating through a few shops. The CDP would have had to provide technical assistance to identify, support and register a vender in order to do this and there was insufficient time. The government just wanted to get relief money out fast. "This, in turn, created a problem for how the value of co-ops was viewed," said COP Lieb Venter. On the one hand, the government payments were a deterrent for farmers to use FarmMark. On the other hand, it brought about a creative solution to marketing cattle that helped farmers economically. As described in the success story on the next page, bypassing auction houses is a perfect example of what co-ops can do. It is a clear example of a co-op service responding to a member need.

Buyer Shutdowns. For CDP local partners, processors like Gloria in Peru stopped buying or paid low prices forcing farmers to lose money. Because the Peruvian dairy processor sector is essentially an oligopsony of few buyers like Gloria and Nestle there is no competition or other buyers for farmers' milk. Small-scale producers have been especially hard hit as buyers of their products have reduced

their purchases or shutdown altogether. The government tried to provide relief to farmers with low interest loans. The problem, however, has been an overly bureaucratic process, according to CDP field staff. "With so much paperwork required, it's impossible for farmers to comply. It's been 8 months since applications have been submitted," said the staffer, and "still no funds have been disbursed." To support the local co-ops, the Peru field team has been representing the local partners by speaking directly with the presidents of AgroPeru and Agrobanco on their behalf in an effort to facilitate the disbursements of the funds and cut through the red tape.

SUCCESS STORY

In South Africa, government COVID relief interventions to assist farmers with inputs, deterred CDP cooperative activities, causing difficulties for start-up businesses and increasing donor dependency. Some fast-thinking, creative mentors turned the tables in response to at least one obstacle. Faced with the complete shutdown of auction sites resulting from decreased market demand, CDP mentors saw an opportunity. Remembering the lessons learned from a foot and mouth disease outbreak a few years earlier that forced farmers to direct market their animals to buyers via online trading platforms, co-ops decided to market their members' livestock directly to slaughterhouses and cut out the middlemen at the auction facility. Acting quickly, mentors mobilized early to engage farmers despite COVID restrictions. When farmers could not market their cattle via auctions, video marketing was employed to sell directly to the slaughterhouse. CDP staff assisted in the selection of the right animals to market. Despite being a challenging time, farmers worked together, consolidated their animals, saved on transport, and prevented being taken advantage of by speculators. The benefits of belonging to a strong cooperative soon became all too clear. Through their cooperatives and associations, farmers bypassed traditional buyers of their livestock and went directly to slaughterhouses after they realized they could obtain better prices by cutting out the intermediaries. Without the CDP, skipping the auction houses and going directly to the slaughterhouses would not have occurred. Today, farmers are getting premium prices, according to South Africa Regional Manager Craig Carter. Farmers are sharing market information on WhatsApp. "The results make the case for co-ops."

Lack of Customer Focus. Aside from COVID, South African farmers' face hurdles in producing a competitive product in the beef market. "The challenge in both countries is for farmers to operate on a commercial basis in order to produce a product that is desirable in the marketplace, and thus, be competitive with commercial farmers," said CDP Project Manager Matt Rhody. In Peru, "it's a question of efficiency in the dairy sector," he asserted. In South Africa, "it's an issue of changing farmer operations to focus on profitability and commercial sustainability as opposed to just the number of animals kept." On the co-op level in South Africa, "it's operating in a business capacity made up only of farmers. It's not something they typically do. They rely on the municipal government, tribal chief, or some expert to come in and tell them what to do. To run something on their own is scary and it is more or less considered outside their capacity. Mentors help on the farmer level to build self-confidence. Regional managers build confidence at the co-op level."

Affordable Finance. By far, the biggest challenges for farmers is access to affordable finance. They cannot farm effectively or sustainably on a cash basis. Their problem is a lack of creditworthiness. Farmers also lack access to land to grow more crops and raise more livestock, because credit is needed to purchase land. With no credit history or ability to collateralize credit, farmers can face crushing interest rates of 25-30 percent compared to market rates of 7 percent.

Currency. Unlike South Africa, Peru's stable currency and stable fuel prices have been a moderating influence on agricultural production overall, despite the "extremely political" undercurrents at both the national and local levels in the country that affects nearly everything. "This can affect access to markets, inputs, veterinary care and credit," said CDP Project Manager Matt Rhody. Despite its volatility, the South African rand is stronger against the dollar compared to when the current project began in 2018. As this report went to print, the rand exchange rate was 14 to 1 against the dollar. It was as high as 18, however, when the original CDP activity started in 2010, the rand stood at just 7 to the dollar. It is worth pointing out that inflation in South Africa has risen in direct correlation to the weakening of its currency, which, in turn, impacts the cost of farm inputs like fertilizer, vaccines, and genetics. It's all made worse by the fact that co-ops have a tough time negotiating for lower prices because they have little bargaining power.

Climate Change. On the issue of climate change, field staff in both countries agree that agriculture is being affected adversely by more severe droughts, temperature spikes, and water shortages. Most agree that improved farm management can mitigate the impact of drought and other environmental challenges. In Peru, field staff find that the shortened rainy season of the last few years has negatively affected the availability and quality of forage. To mitigate this problem, the Pasco regional field staff began working with the agriculture ministry to make more water from public reservoirs available. A previously defunct water project was given new life as a result of engagement by the CDP staff, something that would not have occurred without the CDP.

In Peru's jungle, cows are challenged by rising temperatures, more pests, and persistent diseases which results in reduced productivity. With access to financing slowed, the project team was asked how farmers are meeting their day-to-day operating needs. First, in the jungle and highlands, farmers use free natural forage to feed 100 percent of their cows. The problem is that with natural grasses, cows do not produce a lot of milk. The reduced efficiency limits a key CDP objective: improving productivity and profitability. Moreover, there is a need to deworm, provide vitamins, and inject vaccines to maintain healthy animals. The cost can be beyond reach. Even with promised government loans, farmers cannot afford to maintain their animals properly. When a typical cow produces only about 4 liters of milk per day, the mitigation costs per cow is prohibitive. This problem has been mitigated in some regions by accessing the government's Animal Health Department's free vaccinations. Without that, 40 percent of the animals would die because of disease, pests, etc., according to staff.

In another mitigation measure, the field staff worked with the local cooperative partners to implement silvopastoral systems to mix trees and forage as a means of improving the quality of soil, thereby allowing trees to retain more water and minerals. This, in turn, puts carbon dioxide into the soil. In the Andes, the weather is more stable. However, altitude is a problem in Pasco where the elevation is as high as 15,000 feet. Cow productivity is affected because of the difficulty of growing nutrient-rich forage. To combat this problem, the field staff is working with local government engineers to better irrigate the land where it is needed to grow forage.

VI. CONCLUSIONS

This project is based on the premise that in order for producers and their cooperatives to increase their profitability, productivity, economic resilience, and competitiveness in the marketplace, and

thus, have less need for on-going USAID and other donor support, then it is critical that they achieve some measure of improvement in achieving the following:

- Cooperative business performance and governance
- Access to affordable financial resources
- Increased member equity
- Expanded offerings of relevant member services
- More and better opportunities to grow access to buyers, suppliers, investors and lenders
- Deeper knowledge in animal husbandry and crop production

Having reached the approximate midway point of the *Strengthening Farmer Cooperative Competitiveness* CDP, it can be reported that GENEX is well on its way to achieving its project objectives. Local cooperative partners, stakeholders and implementing staff find little to fault the purpose, strategy, and activities of the program. The participatory approach, grounded in a well-designed mentor-driven, on-site, face-to-face strategy, by all accounts, is working as intended. Notably, it is achieving the desired results and outcomes at this stage of the project, despite the COVID setback. Throughout, GENEX has been a facilitator, not a decision-maker.

The most successful geographies and cooperatives have the following characteristics: (a) higher education levels; (b) a history of cooperatives driven by their governmental, donor and corporate engagements; and (c) visions that are relevant, pragmatic, and achievable. Strategic plans, business plans, and financing applications are more realistic and attainable compared to the previous CDP.

A. Strategies, Standouts & Successes

The GENEX Model Is Rooted in Pragmatism and Business Principles

Despite its decades as a cooperative servicing farmers, exporting products and services internationally, and on-the-ground experience in a myriad of emerging economies around the world, most staff in GENEX would not consider themselves to be "development professionals." Yet, its approach and success implementing the CDP is striking. So what are the hallmarks of the GENEX strategy?

- (a) It embraces managerial creativity, flexibility, and knowledge of field staff, local stakeholders, and partners to address needs, leverage resources and conduct workarounds in ways not originally conceived in the project design, especially in regard to developing workarounds to unexpected barriers, namely the coronavirus. Within the broad framework of the project design, teams in each country are given the independent freedom to develop novel networking, problem-solving, and leveraging schemes to further the objectives of the CDP, and in some cases, supporting their local co-op partners with guidance and an authoritative voice to get things done.
- (b) It undertakes unplanned initiatives that have come about from thoughtful, participatory discussions at all levels of the project — field staff internal interactions with one another; local partner and stakeholder ideas growing out of open discussions; and both headquarters' and field suggestions as new opportunities arise. GENEX recognizes and then acts upon viable opportunities.

- (c) It internalizes lessons learned, best practices, holistic approaches based on business objectives and a self-help, participatory culture to develop and deliver a project design that puts local partners first. The approach is one where local staff listen, guide, and respond in ways that keep front and center the vision, needs, and capacity of farmers and their cooperatives. The corporate commitment of URUS, parent company of GENEX, cannot be understated.

The Strategy Is Working

- Mentors. Mentors have long been key to the proposition that until farmers are made "co-op ready," co-ops will be unable to be "market-ready." Dedicated dairy and beef experts, most mentors themselves have developed professional, trusted, appreciative relationships with local farmers in this project. Though frustratingly slow, the approach is working. Moving forward, regional managers will assume the role of organizational and business mentor as they begin to focus more on the flip side of the project's coin: helping cooperatives improve their governance, managerial and operational capacity.
- Experience. The value of GENEX's experience implementing a previous CDP activity cannot be understated. The project design is based on its previous 8-year CDP. Mistakes, lessons learned, and best practices each influenced the design of the current activity.

In its earlier CDP projects, for example, GENEX found that: (a) cooperatives needed a realistic understanding of the value of reinvesting profits back into their cooperative and paying patronage refunds to its members, which virtually none had at the project's start; (b) farmers' and managers' level of education was a differentiator insofar as both farm and co-op success; (c) training was best conducted for each co-op, rather than as a group to hone in on their specific needs; (d) ongoing mentoring was critical to long-term success; (e) strong, decentralized CDP field-based management was essential and made a difference insofar as effectiveness; (f) baseline data needed to be closely aligned with program delivery; (g) understanding the value of data and knowing how to utilize it was better understood and utilized among more advanced cooperatives than nascent ones; inculcating cooperative managers and members on the value of data collection, analysis and utilization was highly desirable and needed to be repetitive; and (h) understanding the country's historical/ political/ and cultural context was critical to successfully implementing a CDP.

The most successful CDP cooperatives shared several common attributes: (a) co-op managers, boards and members took ownership of their co-op; (b) viable cooperative business structures served as the foundation for future success; (c) leadership was a common denominator underpinning cooperative success and advancement; (d) having a sense of community and shared responsibility was critical to rendering decisions for the good of the co-op; (e) local CDP managers' personal, hands-on mentoring was essential to a co-op's success; (f) a long-term, 5-10 year horizon was needed to identify, select, recruit, evaluate, train, nurture, mentor, catalyze and facilitate market linkages with lenders, buyers and sellers, cooperatives and achieve viable, sustainable businesses; and (g) all co-ops needed upstream capacity building; GENEX created a "foundation" seminar to convey the building blocks essential for cooperative business success. Without building the upstream foundation for a business, which recognized a business' culture, shared responsibility and values, nothing downstream could be achieved insofar as building sustainable businesses.

In its current activity, GENEX addressed several mistakes it made as a first-time implementer in its 2010-2018 project. It shifted its highly centralized managerial approach from its headquarters to a decentralized field approach. It developed a theory of change, strategy and approach to avoid the mistake it made in its earlier project which resulted in a proposal design based on the flawed hypothesis that the key problem facing co-ops was a lack of access to market information. The problem was not market information, but the lack of sufficient and detailed financial data on farmers' cooperatives, as well as the lack of organizational capacity to make appropriate use of it. Given the lack of experience of GENEX directors and staff in international development, a company-based advisory board designed to advise CDP implementors on project implementation was replaced with a program that engaged a rotating group of directors — all livestock producers themselves — taking on assignments to meet directly with local cooperative leaders on-site to advise them on governance, business and agricultural matters, based on their own experience as producers and as elected cooperative leaders. The idea, based on the farmer-to-farmer program strategy, embraced the notion that farmers themselves most effectively understand their counterpart's challenges, communicate better, and advance sustainable solutions compared to other so-called "experts." Previously, most directors had never traveled outside the United States, let alone to a developing country.

Where possible, key business-oriented staff from its earlier CDP were retained for the current project. The experience they bring to the current project is critical in numerous ways: operating commercially, rather than as an NGO; compliance with USAID rules and reporting; and a capability and readiness to address potential legal, staffing, partner and stakeholder potholes, obstacles and challenges. See GENEX Project Design Context in the annex for a complete list of lessons learned and best practices that guided the project design of the current GENEX CDP.

- Trust. A high level of confidence between farmers and CDP staff is essential. Over time, relationships between farmers and co-ops with mentors, regional managers and COPs have grown broader, deeper and more concretely. Partly, this is the result of the personalities, commitment, and knowledge of the mentors and other CDP staff. For example, few co-ops fully disclosed their financial and co-op data to CDP field staff when the project began. However, by Year 2, the groups freely gave additional, better, and more accurate information.
- Value. Farmers and their associations and co-ops perceive value in the CDP. Peer-to-peer learning, manuals, one-on-one technical assistance and, to a lesser degree, digital outreach are considered value-additions by recipients. It's a bottom up, not top-down approach. Likewise, initiatives like FarmMark and access to improved genetics and the AI training are highly valued by farmers. Compared to previous donors, farmers by and large, consider the GENEX CDP unique.
- Cooperatives. For those with little, wrong or misguided knowledge of cooperatives, the CDP has created a new awareness and understanding that is taking hold. There is a generally widespread acceptance and belief among farmers that co-ops, correctly run, will help them achieve their dreams realistically, sustainably and profitably. Local co-op partners are getting better prices because they are adopting better farm management programs. Farmers are clearly beginning to understand what it means to be in business.

Knowledge Management Underpins Everything

Inherent in the GENEX approach is *knowledge management*. To say implementing a development activity in two far flung geographies simultaneously is demanding is at best an understatement with each operating in countries with their own unique cooperative contexts and historical development, in addition to their particular social, cultural, political, and economic conditions. Yet, GENEX has consistently and successfully devised workarounds to obstacles, COVID-19 most significantly. It has undertaken a genuine effort for its staff to learn from and teach one another within their geographies and across borders and it has embedded in its local cooperative partners and stakeholders a desire to learn through their encouragement and inclusiveness, all the while providing a helping hand.

Without realizing it, when confronted with the unanticipated effects of the pandemic, the HQ and field staff engaged in a form of knowledge management as they instituted a process for creating, sharing, using and managing knowledge and information to boost the efficiency and efficacy of the CDP. It was able to connect different ways of delivering training and technical assistance to overcome marketing barriers and address input needs.

Combining existing learning methodologies with creative new approaches, HQ and field staff tried different delivery mechanisms to see what worked best to get the job done. Says Joe Mantilla, "it's difficult to have universal training of one size fits all." The list is long and comprehensive: mentoring; peer-to-peer study groups; digital and print communication and training materials, including comic-strips; eLearning videos; webinars; manuals, animated, and virtual presentations all developed and given in-person or disseminated via WhatsApp, Zoom, CD's, and mobile devices.

All the approaches are embedded in the GENEX project design, but more importantly the project works because of its collaborative culture; a desire to collect, analyze and systematically act on evidenced-based data and observations; and open and shared discussions of experiences and ideas. GENEX works at making sure that the right people, processes, and technologies are in place to support knowledge exchange. As its response to the pandemic illustrates, GENEX's strategy and approach has helped to stimulate innovative thinking, capitalize on effective practices, and foster better decision-making. The GENEX approach has been transformational not only with regard to the local cooperative partners and outcomes, but with respect to expanding the horizons and understanding of development of its field staff, corporate staff, executives, and directors.

Additional Observations

- Travel Limitations. HQ project oversight was limited by the inability to travel on-site to review program progress, meet with local partners, stakeholders and staff. Nothing replaces in-person site visits. However, the long-term relationships with staff in South Africa and a year and a half of working closely with the Peru staff aided the ability to supervise the program.
- Livestock Co-ops. Coffee and cacao co-op success are outliers. Firms like Starbucks, Nestle and Mars largely support co-op formation as part of an effective and reliable business model built on meeting their supply needs. The fact that co-op development is an outcome may be more a by-product than a deliberate strategy in the case of the coffee and cacao producers.

- Development Is Slow. Much of the focus in this CDP has been on changing farmers' behavior. Whether it's with respect to how they approach and govern their cooperative or manage their farms, farmers by nature are slow adopters and low risk-takers. Many are poorly educated, especially older farmers. It is true that young farmers are quicker to understand and take advantage of new technologies, but as Matt Rhody posits, "it all just takes time." This is made all the worse by the inability to meet because of COVID. Each of the staff expressed frustration with not being able to move faster. "It takes a long time to build momentum and change behaviors," said South Africa COP Lieb Venter. However, with a good bit of distance, perspective and objectivity of this evaluator, the quantitative and qualitative results reveal that in spite of the aphorism that development is slow, the project is indeed progressing at a good and respectable clip.
- Priorities. It is critical to keep front and center of the leadership of each co-op their central purpose: to develop and offer services to their members based on need as determined democratically by its members. Hand-in-hand with providing services is the need to build member equity. Otherwise, there is a danger of creating false perceptions by co-ops and negating the intention and effort of this CDP. This has been the historical dilemma of co-ops created for all the wrong reasons in countries. This definition and focus of co-ops should be bedrock and prioritized. The CDP is contributing to make this so.

B. Local Partner Cooperatives' Metrics are Improving

- Income. Co-op sales are rising; profitability is increasing; and revenue that results from member patronage is growing. Members are earning, saving and spending more money.
- Services. Co-ops offer and members are utilizing farm and marketing services. As more members benefit from services and resources, cooperative businesses are improving and patronage by members is growing; sound governance is being practiced, as evidenced by growing financial and managerial transparency, honesty, experience, independent financial audits; and open communication is resulting in members' trust of board members and management.
- Financing. Access to affordable financing is expanding via government and donor grants, commercial and government loans, value chain financing, and joint ventures.
- Equity. Member equity is growing in the form of member savings and capital reserves and is being used for collateral securitization to offset business setbacks.
- Management. Managerial and agricultural know-how is more valued as demonstrated by the level of co-op- and farm-level data that is collected, analyzed and utilized; cooperative procedures and policies that are in place; retention of professional managers; increases in farm productivity; use of best practices in agriculture; and animal husbandry improvements, such as AI and record-keeping. Business and farm resilience and mitigation measures are in place and are being practiced.

C. CDP Challenges

- Technology Is Out of Reach. The lack of access and utilization of broadband and, in some cases, cellular technologies were a significant hindrance, particularly in light of limitations imposed by COVID. Relatively few farmers have access to WiFi. Some, according to field staff, do not even have access to cell phones, making them extremely isolated. The lack of access to technology is a roadblock that field staff continue to try to address in creative ways. The newsletters in Peru and South Africa are intended to help in this regard, but it's not the same as farmers talking with one another from different co-ops, seeing how each are dealing with challenges, and learning from one another.
- Lack of Co-op Staff Experience. While the staff is doing a good job of promoting cooperatives, and the data supports this assertion, they are nonetheless shackled somewhat by their lack of academic co-op training. Each of the regional managers and COPs acknowledge their lack of direct experience of being a member or director of a cooperative of any kind or having worked professionally, either on the staff or as a consultant for a cooperative, beyond their experience with the CDP. This is a weakness. In both Peru and South Africa there is a deep desire among the staff to better understand cooperatives, cooperative farm credit, etc. This group understands that a key aspect of implementing the CDP is to provide training and technical assistance to strengthen the governance, management and operations of cooperatives. However, they all have some reticence with regard to their capacity to do so. GENEX has provided materials in this regard, but the group as a whole is yearning to learn more. To strengthen their understanding and capacity to conduct training to local cooperative partners and their farmer members, GENEX intends to provide training to field staff in both Peru and South Africa on co-op topics relevant to the CDP amid local contextual needs.
- Donor Dependency. Few farmers believe they can go without government help. Some field staff have asserted that governments have created this perception. Farmers are going to take the help if offered. "They would be foolish if they didn't," said one staffer. The CDP is going a long way to creating new approaches and behavior change among farmers to better understand the pitfalls of depending too heavily on donors. Farmers are learning how to farm better, become more resilient to unexpected shocks, and better manage their businesses.

D. Milestones

It may be too early to document milestones based on data, particularly given COVID and the nature of data collection, which is backward looking rather than anticipatory. However, a good number of achievements have been reached thus far.

- Cooperatives. In Peru, the government used to give subsidies directly to farmers. Today, it gives support directly to associations and cooperatives. According to the Peru field staff, the government is expected to focus more on co-ops in the year ahead. This may be an opportunity to engage government in substantial ways in terms of cooperative enabling policies, understanding and awareness. There is now a budget line for cooperatives within the Agriculture Ministry.

- FarmMark. In South Africa, FarmMark is up and going and responding to farmer needs. It's still small in terms of its reach and value, but getting started was its biggest hurdle.
- Improved Genetics. In Peru, 64 AI technicians have been trained by mentors to provide a new service to their co-ops. Most are members or children of members belonging to the CDP co-ops. They will get paid once the service is up and running.
- Strategic Plans. In Peru, some local partners with no previous goals or strategic planning are now developing viable business plans, which has motivated a lot of young people to see value in the CDP, particularly in regard to adapting the cooperative approach. A number of farmers have never been exposed to anything resembling strategic planning or livestock technical training in areas of feed, nutrition and genetics and they are hungry for more. In South Africa, the cooperative bulk-buying of cattle licks is already resulting in improved animal health and weight gain.
- Outreach. The dissemination of approaches and lessons learned occurs on two levels. Outreach and training/ technical assistance is directed to the CDP partners, but it is also being extended to government decision-makers, media, and academia, both within the CDP project countries and internationally in conferences and one-on-one meetings and presentations.
- Jobs. An unexpected outcome has been a jobs creation element of the CDP. Interns, mentors, FarmMark, and AI technicians have each contributed to the growth of new, permanent jobs.

VII. RECOMMENDATIONS

Leadership Institute

Issue: Co-op farmer-members, managers, and CDP staff uniformly cite weak leadership as a significant constraint to cooperatives' commercial development and a limiting factor to improving productivity and profitability at both the farm and cooperative levels. It also self-limits the achievement of gender equality and female empowerment, and inclusion and promotion of youth. Most groups called for strengthening co-op leadership. Indeed, it was found that the lack of leadership and vision is a major factor affecting a cooperative's competitiveness. The idea of offering leadership training is broadly supported as a means of drawing out and strengthening the skills and capacity of potential and current farmers and managers in leadership positions, improving governance and strengthening the self-confidence of directors and members.

Recommendation: Establish a *Leadership Institute* as a learning center for cooperative directors and board members where they will be able to expand their understanding and practice of cooperatives, governance and management, as well as issues, such as conflict resolution, staff hiring, gender, networking, and relationship building with government authorities and commercial decision-makers. Consider the inclusion of government staff with responsibilities for cooperatives and related areas.

WiFi Hotspots

Issue: Farmers and CDP field staff cite most farmers' lack of access to WiFi and Internet connectivity as a major deterrent to productivity improvements, distance learning, and data management in areas like traceability and artificial insemination.

Recommendation: Establish *Internet Hotspots* at co-op facilities. In many areas, Internet connectivity is a challenge. For farmers without reliable Internet, co-ops have an opportunity to position themselves as centers for learning, providing access to technology and information, Wi-Fi or devices, as a service for their members. Cooperative members may also choose to create a *Center for Education*, Leadership Institute, or employ the dairylearning.com model as a service, where members can take courses and learn as a group.

In-House Co-op Training

Issue: With little history of cooperatives in the two project countries in GENEX's CDP, both of the project's 6 regional managers and 2 chiefs of party readily acknowledge their lack of direct practical experience working in a cooperative, belonging to a cooperative, or serving in one in a leadership capacity. They realize they are also shackled by their lack of academic co-op training. It is a weakness they want to overcome.

Recommendation: Develop HQ-led CDP staff training on co-ops, governance, etc. A key aspect of development should be the inclusion of local staff, not just local partners.

Equipment Leasing Service

Issue: In their strategic planning SWOT analyses activities, a weakness widely cited for farmers is the poor condition of their farming implements and other equipment. While some equipment may be shared among members of a cooperative, leasing equipment as a co-op service for members or as a commercial business line that a cooperative could offer as a social enterprise to non-cooperative members is not something that has been explored despite the need and the commercial potential.

Recommendation: Explore the possibility of equipment leasing or helping co-ops purchase used equipment for dairy processing and other needs.

Branding and Marketing

Issue: With the advent of FarmMark in South Africa, farmers and their cooperatives, for the first time, have been given a dedicated means to market their output in ways that were uniquely beneficial to them. The concept of marketing co-ops was previously unknown and untested. The program is working, but more can be done. For example, in response to the complete shutdown of auction sales in South Africa resulting from COVID restrictions, local co-ops saw an opportunity to support their members market their cattle with *video marketing* directly selling to the slaughterhouse, thereby, allowing them to bypass the middleman. Cooperatives that spearhead

efforts to group market their members output can expect to materially mitigate their economic, market, weather and production risks.

Recommendation: Some co-ops could market their products to local markets if they are in proximity of big markets like Lima, but they need help with marketing and branding.

Outreach

Issue: COVID-caused restrictions in hosting medium and large-scale GENEX programs in the field resulted in a good deal of internal discussion as to the value, benefits and impact of country or region-wide programs that brought disparate cooperatives, government officials and stakeholders together. By and large, staff agreed that smaller, technically focused programming geographically close to farms and their cooperatives were more productive and desirable compared to larger scale policy-oriented program. There was a consensus that the sharing of success stories, lessons learned, best practices and other interactions with local farmers and stakeholders could achieve better outcomes on a smaller scale.

Recommendation: Rethink a past strategy of holding large scale programs that provide platforms to both local partners and stakeholders, including high-level government officials. The idea has been that the two learn from each other. However, the impact has been marginal. Instead, down-size such programs. Make them more effective by focusing on agendas and formats appropriate to each audience. To disseminate project results and outcomes, consider participating on panels and as keynote speakers in national and international fora with USAID, African Union, IFAD, ILRI, FAO, IFCN, etc. This will likely move the needle forward more effectively, deeper, and more broadly than in one-off programs with too many disparate agendas.

Technical Expert Bank

Issue: Mentors have become a defining characteristic of the GENEX project. Farmers' reliance on them and the value they assess to these agricultural experts is undeniable. Once the current project ends, mentors will no longer have the financial support to continue in their current role. That they will be sorely missed is without question. They are not trainers in the traditional sense, whereby they might provide trainer-of-trainer programming. Rather, they respond to specific on-farm needs unique to a particular farm or cooperative. In that sense, they are providers of technical assistance.

Recommendation: An idea that was recommended in the previous GENEX CDP project, is for cooperatives to build into their strategic thinking, business plans, and budgets funding for accessing local technical experts, either on a farmer-paid fee basis or as a service provided by the co-op. One approach may be to identify a group of consultants with skills and expertise relevant to a cooperative and its farmer-member needs with pre-agreed upon fees and availability to work with the group on an as needed basis. An alternative to a "bank" of technical experts is to simply contract with those with the expertise as needed. This could be a valuable service designed to meet the needs of cooperatives' local members and would provide continuity and sustainability to the objectives of this CDP, once the current project terminates.

ANNEX

A. GENEX Project Design Context

In 2010, GENEX, then Cooperative Resources International, began implementing a 5-year Cooperative Development Program in South Africa and Nicaragua. The project was extended for 3 years, through 2018, and expanded to explore Tanzania as a potential GENEX CDP project country. A mid-term assessment was conducted in 2014; a Phase 1 report, coinciding with the originally expected end-date of the project was conducted in 2015; and a full final report was prepared in 2018. Over that 8-year period, GENEX, as a first-time prime implementer gained a great deal of experience, both as a manager of international development activities broadly and as an implementer providing farmer cooperative training and technical assistance. The 3 main assessments cited above articulated numerous strengths, weaknesses, lessons learned and best practices, specific to the project being implemented with suggestions for modifications in the then current project and for improvement in future programming. By and large, senior management agreed with, accepted, and implemented the recommendations. The bulleted list below are the key (abbreviated) recommendations aggregated from the 3 assessments that have been particularly pertinent to the project design of the current *Strengthening Farmer Cooperative Competitiveness* activity. GENEX has incorporated many of the conclusions and suggestions offered in the list below into its current project design.

- Co-ops need a realistic understanding of the value of reinvesting profits into their cooperative and paying patronage refunds to its members.
- Training is best conducted for each co-op, rather than as a group to hone in on their specific needs. Realistically assess the capacity of the target beneficiaries and design training and technical assistance programming accordingly. Ensure all co-op training is accessible to both men and women and that cooperatives are genuinely and forthrightly embracing gender diversity within their leadership and management. Make governance training a core, regular and repetitive aspect of each CDP. Inherent in achieving sustainability for co-ops is ensuring that such training and manuals on governance exist and continue to be available and updated.
- Utilize local experts to provide training and technical assistance, rather than staff trainers, whenever feasible, so as to meet the broadest most diverse needs of the targeted co-ops.
- Cooperatives are oftentimes unprepared to participate in strategic planning and business planning processes. They were simply not used to being asked their opinions or how they would go about problem solving. CRI should be sensitive to the need to bringing the targeted cooperatives along and not assume a level of know-how, self-confidence, or familiarity with typically accepted Western practices in this area. Thus, consider building into the future projects participatory process training.
- Strong, decentralized CDP field-based management is essential and makes a difference insofar as effectiveness. Empower local staff in country at a project's start. Identify and retain the *right* staff. Conduct due diligence to ensure staff are trained properly to carry out programming and understand fully expectations of them.

- Engage CRI directors and senior management in providing CDP training and technical assistance as a means of engaging the CDP as an intrinsic component of its business, rather than as a segregated, less consequential "development" project.
- Ongoing mentoring is critical to long-term success. Embed local staff closer to cooperative sites to ensure regular mentoring. Train and mentor prospective leaders relentlessly.
- Baseline data needs to be closely aligned with program delivery. Retain full time data collectors; provide comprehensive logistical and administrative support; fully brief managers on project design, planned activities, expected outcomes, etc.; and hold managers accountable.
- Develop, collect and analyze realistic, viable and valid data points as key metrics that can be measured consistently and reliably over the life of a project and yield meaningful cooperative impact data: (1) revenue, (2) income, (3) profit, (4) reinvestment in cooperative and/or patronage dividends; (5) access to affordable financing; (6) solvency; (7) farm services; (8) members; (9) youth; (10) value-added product lines; (11) legal registration/ compliance; (12) sourcing of inputs and raw commodities; (13) business linkages; (14) strategic plans and business plans written and executed. Collecting more than 15 data points will likely be met with resistance, an inability to gather the data, and/ or overload by the project implementers with regard to expectations of the targeted beneficiaries.
- Inculcating cooperative managers and members on the value of financial, business and agricultural data collection, analysis and utilization is highly desirable and needs to be repetitive.
- Find the means to be inclusive of cooperative beneficiaries, even if they might not fit a strict definition of a target beneficiary for a particular CDP.
- Take advantage of natural commercial linkages between the "business" implementer and local partner cooperatives whenever possible. Test ways to bring broader GENEX capabilities, such as milk testing labs, AI, soil testing, and records management into CDP's.
- Engage targeted beneficiaries in the M&E process at the beginning of a project's implementation. Rigorously adjust project implementation regularly in response to new information, challenges and opportunities in order to achieve projected outcomes and yield meaningful and sustainable impacts. Improve internal monthly reporting by linking field and HQ reports to achievement of objectives, expected outcomes, and workplans, and improving the level of the specificity, detail and activity. Improved, more insightful and more ongoing documentation of the project's advancements beyond the completion of output achievement is an area that should be embedded in future programming.
- Require participating cooperatives to sign MOU's outlining their responsibilities and obligations with regard to their participation in a CDP.
- Cooperative development cannot occur without including a focus on and inclusion of youth.

- Keep focus of each CDP on a single country or region.
- Engage government and other key stakeholders as partners from the start as a way to promote engagement and sustainability. Gain farmers and their cooperatives *buy-in* to CDP's by addressing their needs, priorities, and existing capacities, not the implementers perception of their needs.
- An exit strategy designed to leave behind cooperative business sustainability that focuses on the exit strategy of achieving independent, viable, commercial operations with strong business linkages and partners should begin on Day 1 of any project.
- Tell your story. Document, describe and disseminate news, information and successes a project via local news sources; electronic media, including websites; postings, and events with appropriate, dedicated personnel tasked to tell the CDP stories.
- Ensure realistic, practical and rigorous project design, budget development and project implementation based on a country's historical, political, business, agricultural and cultural context. Design programming that overcomes donor dependency expectations.
- Construct a point-based or grade-based system to evaluate a cooperative's eligibility to be accepted into the CDP and later, performance, once accepted.
- Manage creatively by seeking out and acting upon opportunities, strategies and approaches innovatively that support the project, but which were not originally conceived as part of it.
- Identify beneficiary leaders early and strengthen their capacity. Incorporate mentoring close to cooperative sites as a key element in each proposal design.
- Continue to focus the CDP on the bottom line by catalyzing and establishing joint ventures where the majority-owned and controlled partner is more advanced financially, operationally, technically, etc. This can often be the most effective way of strengthening local co-ops.
- Consider having a CRI-managed small-grant or lending program as part of new programming.
- Build into co-op business plans, consulting fees to engage consultants, firms and other commercial experts to replace CRI technical assistance.
- Limit the dropout rate of targeted cooperatives from the CDP by doing a better job in conducting due diligence in the initial selection of cooperatives.
- Going forward, consider shorter attitudinal surveys to focus and better link cooperative member feedback to the project's objectives and expected outcomes.

B. Desk Research

No.	Selected Background Sources
1	Peruvian Cooperative Partner Strategic Plans (21)
2	South Africa Cooperative Partner Strategic Plans (13)
3	GENEX CDP 2018 Application
4	CDP Monitoring, Evaluation & Learning Plan
5	2021 Cooperative Tracking Data
6	2021 Farm-Level Tracking Data
7	CDP Baseline Survey
8	GENEX Performance Indicator Reference Sheets (USAID PIRS) FY'20 & FY'21
9	Training, Intern, and Mentoring Guidelines; Training Programs (South Africa and Peru)
10	Trip Reports and Wisconsin All Hands on Deck Program Report (HQ, South Africa and Peru)
11	FarmMark White Paper
12	FarmInvest White Paper
13	Dairylearning.com for Emerging Markets Report
14	Co-ops vs. Associations White Paper
15	GENEX Semi-Annual Reports
16	Field Newsletters (South Africa and Peru)
17	GENEX Governance Handbook
18	GENEX Field & HQ Monthly Activity Reports (FY'19 - FY'21)
19	Various Intern, Local Partner MOUs, and Job Postings and Announcements
20	Improving Smallholder's Farm Record-Keeping Study

C. Key Informant Interviews

Date	Name	Title	
1-2 Dec 2020	Mathew Rhody	HQ Project Manager	Wisconsin
8-9 Dec 2020	Joe Mantilla	Peru, Chief of Party	Peru
14 Dec 2020	Jose Alcantara	Regional Manager	San Martin Region, Peru
14 Dec 2020	Wilmer Bernal	Regional Manager	Huánuco Region, Peru
15 Dec 2020	Wilder Suarez	Regional Manager	Pasco Region, Peru
11-13 Jan 2021	Lieb Venter	South Africa, Chief of Party	South Africa
14 Jan 2021	Kgabo Rammutla	Regional Manager	High Veld Region, South Africa
15 Jan 2021	Craig Carter	Regional Manager	KwaZulu-Natal Region, South Africa
18 Jan 2021	Thukela Mashologu	Regional Manager	Eastern Cape, South Africa

D. Country Regions and Cooperatives

South Africa - 13				
High Veld (4)		KwaZulu-Natal (3)		Eastern Cape (6)
Kgabo Rammutla		Craig Carter		Thukela Mashologu
Limpopo	Immerpan Red Meat Producers	Owothathe Cooperative		Bilatye & Mkhonjane Secondary Cooperative
Gauteng	Sisonke Balimi Development Cooperative			Zulukama Secondary Cooperative
Free State	BEMIFA (formerly, Fezile Dabi Red Meat Producers)	Makhoba Secondary Cooperative		Mayime Primary Agricultural Cooperative
Mpumalanga	Mpumalanga United Farmer Study Group*			Border Rural Primary Agricultural Cooperative
	* Original local co-op partner, Mpumalanga Red Meat Producers, merged with the Mpumalanga United Farmers Study Group	Isebonelo Esihle Secondary Cooperative		Birha Beef (formerly, Peddie N2 Primary Agricultural Cooperative)
				Ikhephu Secondary Cooperative

Peru - 21		
San Martin (7)	Huánuco (7)	Pasco (7)
Jose Alcantara	Wilmer Bernal	Wilder Suarez
San Pablo Cattlemen Association	Montevideo Community Livestock Company	Pozuzo Livestock Development Association
New Egypt Cattlemen's Association	Livestock Association of the District of Uchiza el Oriente	Chontabamba Livestock Farmers Association
Association of Farmers of the Province of Dorado	Posuzo Association of Livestock and Agricultural Farmers	Oxapampa Livestock Association
Perla Mayo Cattlemen's Association	New Progress Cattlemen's Association	Community Cooperative of Huayllay
La Fortaleza Cattlemen's Association	Livestock Committee of Huánuco Viejo	Community Farmers of Andachaca Rio Colorado
Pajatén Livestock Committee	Livestock Association of Huancabamba	Community Farmers of San Antonio Rancas
Huallaga Central Livestock Development Association	Jarara Association	Community Cooperative of Sacra Familia

E. Key Informant Questionnaire & Talking Points

I. The Project Design & Local Context

- Describe your country's environment: political, economic, market, weather, farming, co-op policy developments, etc.
- Is the GENEX CDP strategy and approach working? How do you know?
- COVID-19: (a) political, economic and social change, impacts, and outcomes and implications; (b) impact on the business and food and agriculture sectors; and (c) impact on CDP and work-arounds

II. Overarching Questions

- Overall, what have you learned so far? Wrong assumptions? Surprises? What about the progress and pacing of the CDP implementation?
- To what extent do the local cooperative partners really understand what it means to be part of a cooperative? Do members see the value of belonging to a cooperative? Is the co-op making a difference for them?
- Do farmers believe they are better off because of the CDP compared to before the project? They all signed MOUs, but do they really understand what means it to be part of the CDP? To what extent are cooperatives and their members satisfied with the services and technical support provided by the CDP?
- What are the co-ops' / farmers' perception of international and host government donors?
- How do country regions measure up against one another?

- What makes some co-ops/ farmers more successful than others?
- Some co-ops or associations, in fact, may be social enterprises? Communal land effect/ social enterprises vs. traditional co-ops vs. buying services vs. associations. Can you comment?
- Each of the co-ops laid out their vision, goals, strengths, weaknesses, needs, etc. in their strategic plans. How realistic are the plans? Are the goals achievable? Are they a "reach" or within the members' and co-op's grasp? How are they progressing so far? Workplans in place?
- By and large the strategic plans were consistent and followed previous patterns in terms of goals, strengths, weaknesses, opportunities and threats. Peru focused more on the farm level than South Africa, but by and large, there were not many differences. However, there were a couple of outliers, namely eco-tourism, AI, feedlots, and the availability of government support programs. Less interest in processing in the current CDP compared to the last one. Comments?
- What are the biggest challenges?
 - Farmers
 - Cooperatives
 - Managing through COVID-19
- What adjustments/ workarounds if any, has or should the CDP make to improve the likelihood of achieving desired results by the activity's end?
- Have there been unintended effects of the CDP, both positive and negative?
- What are the biggest accomplishments?
- What about opportunities? What are you looking forward to? Joint Ventures? Local newsletters? New joint ventures? Etc.
- What was the effective date of the data collected in the co-ops survey? Farm survey?

III. CDP Objectives

- Which activities have best supported Obj. 1? — Supporting cooperative growth & stability by strengthening governance, business and agricultural know-how. *What do co-ops practice?*
- Which activities have most facilitated Obj. 2? — Mitigating economic, market or weather related risks? *Are co-op/farm resilience/mitigation steps practiced?*
- Which activities have most facilitated Obj 3? — Learning and dissemination impacting cooperatives? *Co-op use of resources, TA and training? CDP replication?*

IV. Big CDP Project Design Components

- Member Equity
- Member Services
- Governance — Handbook (utilization, value, impact)
- Gender & Youth (gender equality & female empowerment; youth)
 - Are cooperatives gender-balanced and participatory?
 - To what extent has CDP improved participation by women and youth in cooperatives? In what ways, and through which activities have most facilitated that?
 - Gender Integration Plan — Status
 - How do weaknesses/ needs of youth compare to gender? Is CDP youth-gender focus and activities balanced appropriately?
- Access to Finance
 - To what extent has the CDP contributed to improvements in the capacity of cooperatives in financial management?
 - To what extent has the CDP improved access to affordable financing for cooperatives and their members? What activities have been most productive?

V. Unplanned Initiatives that Leverage Resources & Objectives of the Project Design

- Dairylearning.com

The purpose of the study was to investigate and test the opportunity, demand, value, strategy, and approach to virtual education as a means of increasing their productivity and profitability: (a) Create and pilot dairylearning.com courses for farmers in emerging countries; and (b) Create a viable plan to bring dairylearning.com courses to small-holder farmers. Has this happened? Progress?
- FarmMark — Progress?
- DC-Lite (Peru) — Improving Farm Level Record-Keeping

It was recommended that a digital record-keeping framework be created that: (a) involves an organization with a technical and dairy/ beef background, (b) accommodates multiple languages (targeting countries with many smallholder farmers), (c) provides training and technical assistance on record-keeping, and (d) establishes industry collaboration to integrate data flows. The tool should be easy to use, be affordable, be flexible, and suit multipurpose farms and dual-purpose cattle operations. Has this happened? Progress?
- Peru local funding support proposals; mentors; research Initiatives (proposal submissions, challenges, post-mortems, opportunities, CDP linkages, status). Leverage? Progress?

VI. Training & Technical Assistance

- Peru — mentors
- FarmMark — interns and mentors
- Webinars
- Foundation Seminars
- Study Groups
- Communications — *Tell me about the cultural considerations regarding how training is conducted: simplicity, storytelling, retention/ residual value of materials, direct/ indirect*
- *Discuss Q&A and discussion at training programs vs. lectures and PowerPoint presentations*
- *Does African- and Peru-centric vs. American-centric approach in training conducted by Americans make a difference? How and Why?*
- *Impact of reduction of in-person events?*
- *What kind of training and technical assistance is most effective; sustainable?*

VII. Local Cooperative Partners & Stakeholders

- Local co-op partners' strategic/ business plans — their vision.
- Co-op Survey
- Farm Survey
- Local stakeholders — buyers, input suppliers, lenders, government, tribal leaders?
- COVID-19 relief funds impact on donor dependency?

VIII. Progress on Anticipated Outcomes

- **Cooperatives Are Commercially Sustainable.**
Improved business planning and execution; management and member services, business organizational structure and agricultural know-how result in higher profitability and increased participation in value chains as suppliers to local and regional processors and as buyers of inputs from local and regional firms; stronger data analyses and reporting is regularized; expanded market linkages with buyers, investors and lenders; financially sustainable, relevant, viable member services are provided; farmers assume real ownership of their cooperatives.
- **Members and Cooperatives Are Accessing Affordable Financing.**
With business plans, technical guidance and networking, cooperatives will find avenues to financing and credit that were previously outside their capacity to access.
- **Donor Dependency Is Reduced or Eliminated.**
Cooperatives and farmers increase, improve and diversify their products; become more engaged in the commercial market; and operate profitable businesses; the need for on-going donor support is diminished.

- **Sound Co-op Governance Is Practiced.**
Stronger cooperative structure and governance; more robust leadership; sound board structure codified and practiced; co-ops are legally compliant; transparent and accurate financial, farming and cooperative data is collected.
- **Farm Productivity and Profits Have Risen; Farmers Are Market/ Cooperative-Ready.**
Through agricultural training and mentorship, cooperative members will have improved their production capacity to produce to meet quality standards in the volume required to supply market demands; increased cooperative know-how in animal husbandry and value-added production.
- **Women and Youth Fully Participate in their Cooperatives.**
Leadership diversity and the number of young farmers expand.

IX. Final Thoughts

- Overall, what are the biggest member/ co-op needs?
- To what extent do farmers have diversified operations (e.g., livestock, crops, etc.) and what is the impact of this for them and their cooperative or association?
- What do you think the local co-ops would like me to know as I report on their progress in this project?
- Are there any areas in which you would like more training, such as cooperatives, governance, forage/ feed, etc.?
- Is there anything I forgot that you would like to add?

F. Cooperative and Farm-Level Survey Key Questions

- Are cooperative sales and other income rising?
- Is profitability increasing?
- Are members are earning, saving and spending more money?
- Is access to affordable financing expanding — government/ donor grants, commercial and government loans, value chain financing, and joint ventures.
- Is management and agricultural/ technical know-how more valued? — co-op- and farm-level data is collected, analyzed and managed; procedures and policies are in place; co-op is retaining professional managers; farm productivity is up; farmers are employing best practices.
- Is member patronage rising? — revenue that result from member patronage is growing.

- Is member equity is growing? — member savings up, co-op capital reserves are growing; collateral securitization up, patronage up; offsets business setbacks; side-selling is down; co-op capital base is up and used to self-finance operations and infrastructure needs.
- Are co-ops offer and members are utilizing farm and marketing services? — As more members benefit from services and resources, cooperative's business is improving; patronage by members is growing; number of new resources or services provided is growing and used by members.
- Is sound governance practiced? — financial and managerial transparency, honesty, experience and open communication is resulting in members' trust of board members and management.
- Is farm productivity is improving — best practices are taking hold?
- Are business and farm resilience and mitigation measures in place and practiced?
- Do the cooperatives pay outside professions to conduct independent financial audits each year?
- If there were one or two questions that I should ask of the cooperatives themselves what would you suggest it be?

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