Russia North Caucasus Agricultural Development Project (ADP)

FINAL REPORT: March 1, 2011 – December 31, 2012

SUBMITTED TO:
Donella J. Russell
Agreement Officer
Office of International Development Affairs
U.S. Embassy Moscow, Russia

SUBMITTED BY:
ACDI/VOCA
Robert Fries
Managing Director, Financial Services
50 F St., NW, Suite 1000
Washington, DC 20001
T: +1 202 469 6000
F: +1 202 469 6257
E-mail: bfries@acdivoca.org

May 31, 2013

This report covers activities under USAID Cooperative Agreement No. AID-118-A-11-00002-00
<table>
<thead>
<tr>
<th>Table of Contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>1</td>
</tr>
<tr>
<td>Project Results at a Glance</td>
<td>2</td>
</tr>
<tr>
<td>ADP ACTIVITIES &amp; RESULTS</td>
<td>3</td>
</tr>
<tr>
<td>Value Chain Strategy</td>
<td>3</td>
</tr>
<tr>
<td>Objectives 1 &amp; 2: Increase Capacity and Improve Market Linkages in Specific Value Chains</td>
<td>3</td>
</tr>
<tr>
<td>Cucumber Value Chain Y1 (Republic of Kabardino-Balkaria)</td>
<td>3</td>
</tr>
<tr>
<td>Beef Value Chain Y1 (Republic of Ingushetia)</td>
<td>6</td>
</tr>
<tr>
<td>Garlic Value Chain Y1 (Republic of Chechnya)</td>
<td>9</td>
</tr>
<tr>
<td>Rabbit Meat Value Chain Y1 (Republic of Dagestan)</td>
<td>12</td>
</tr>
<tr>
<td>Dairy Value Chain Y2 (Republic of Dagestan)</td>
<td>14</td>
</tr>
<tr>
<td>Cucumber Value Chain Y2 (Republic of Chechnya)</td>
<td>16</td>
</tr>
<tr>
<td>Objective 3: Increased Access to Finance</td>
<td>17</td>
</tr>
<tr>
<td>Overall summary of Outputs and Results for Objective 3</td>
<td>18</td>
</tr>
<tr>
<td>Objective 4: Strengthen Educational &amp; Extension Services</td>
<td>19</td>
</tr>
<tr>
<td>Training and Upgrading Extension Service Staff</td>
<td>20</td>
</tr>
<tr>
<td>Support Outreach through Various Mass Media</td>
<td>20</td>
</tr>
<tr>
<td>ADP Support of Demonstration Sites</td>
<td>21</td>
</tr>
<tr>
<td>Objective 5: Key Regional Partner Capacity Building</td>
<td>24</td>
</tr>
<tr>
<td>Cross-Cutting Elements</td>
<td>25</td>
</tr>
<tr>
<td>Reducing Isolation</td>
<td>25</td>
</tr>
<tr>
<td>Engaging Youth and Marginalized Groups</td>
<td>25</td>
</tr>
<tr>
<td>Working in Partnership with Communities</td>
<td>26</td>
</tr>
<tr>
<td>Addressing Gender Issues</td>
<td>26</td>
</tr>
<tr>
<td>Exploring Prospects for Sustainability of Programming</td>
<td>27</td>
</tr>
<tr>
<td>Mitigating Potential Environmental Impacts</td>
<td>27</td>
</tr>
<tr>
<td>Collaboration with Russian Authorities</td>
<td>27</td>
</tr>
<tr>
<td>PROJECT MANAGEMENT &amp; EVALUATION</td>
<td>28</td>
</tr>
<tr>
<td>CHALLENGES &amp; RESPONSES</td>
<td>28</td>
</tr>
<tr>
<td>Adjusted PMP Project Targets</td>
<td>31</td>
</tr>
<tr>
<td>ATTACHMENT 01 Performance Monitoring Plan (PMP)</td>
<td>33</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

The objective of the North Caucasus Agricultural Development Project (ADP) was to improve production practices and expand the marketing of products within specific value chains in the North Caucasus region. The ADP began in March 2011. Originally scheduled to be a four-year activity, when USAID/Russia ceased operations on October 1, 2012, ACDI/VOCA’s cooperative agreement was modified to terminate the NC-ADP by December 31, 2012.

The ADP sought to increase the capacity of agricultural producers, processors, wholesalers and retailers; foster market linkages among value chain actors; expand access to finance for farmers and other value chain actors and support educational and extension services that help farmers enhance their business capacity. Overall, these improvements served to promote the competitiveness and productivity of targeted value chains, resulting in increased economic well-being and employment in the North Caucasus region.

Four republics were selected for project implementation: the Republics of Chechnya, Ingushetia, Dagestan and Kabardino-Balkaria (KBR). The project sought to integrate the value chains not only within the North Caucasus regional markets but throughout Russia. Accordingly, some value chain actors (processors, wholesalers, retailers) were from other areas in Russia. The project tapped other regions as locations for site visits or other program activities.

Over the life of the ADP, ACDI/VOCA completed comprehensive value chain analyses in each target region in each of the first two years. These analyses were used to select specific VCs for project interventions. Two were selected in each republic: dairy and rabbit (Dagestan), beef and lamb (Ingushetia), cucumbers and cattle feed (KBR), garlic and cucumbers (Chechnya).

Based on assessment findings, grants and technical assistance were used to promote market opportunities in each value chain. ADP awarded ten grants throughout the life of the project, including five to key regional partners (KRPs), four to VC actors and one to a modern milk processing demonstration site at the Dagestan State Agrarian University (DSAU). Because of infrequent opportunities to transport their milk to facilities with adequate cold storage, Dagestan’s dairy producers lose more than 10 percent of gross product due to Brucella contamination, a major health problem in the mountain regions of Dagestan. Grant funds allowed the university to acquire a milk processing unit for its training and demonstration center. By testing and demonstrating the equipment, local processors and producers were introduced to technology that could increase the quality and safety of their product.

When notified of early project termination by USAID, ADP was in the process of finalizing grants to four VC actors for Y2. Two were dairy VC actors in Dagestan selected to build on the demonstration effect of the DGAU grant, and two were cucumber VC actors in Chechnya. Given the expedited project closeout, the grants were not disbursed.

ADP cooperated with the Russian Microfinance Center (RMC) under Objective 3, Increased Access to Finance, to improve financial literacy of farmers. Many small-scale agricultural producers, cooperatives, traders and processors lack knowledge of how to apply for a loan and then properly use that credit once it is obtained. Lack of financial literacy is one of the biggest challenges in lending to farmers who have no experience working with financial institutions. (See Objective 3 “Increased Access to Finance”)
Project Results at a Glance

Participants in Educational and Training Events

The ADP project reached conducted 86,507 people directly and indirectly through its activities and facilitated 307 training events that reached 4,518 project participants (see Table 1).

Table 1: Project Activities by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Total number of participants</th>
<th>Training Seminars</th>
<th>Workshops/ Field days</th>
<th>Round tables</th>
<th>Study Tours</th>
<th>Mission Trips</th>
<th>Travel to Exhibitions</th>
<th>Consultations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chechnya</td>
<td>917</td>
<td>221</td>
<td>32</td>
<td>145</td>
<td>29</td>
<td>7</td>
<td>13</td>
<td>470</td>
</tr>
<tr>
<td>Ingushetia</td>
<td>741</td>
<td>119</td>
<td>35</td>
<td>105</td>
<td>46</td>
<td>7</td>
<td>16</td>
<td>413</td>
</tr>
<tr>
<td>Dagestan</td>
<td>1432</td>
<td>456</td>
<td>88</td>
<td>139</td>
<td>24</td>
<td>11</td>
<td>28</td>
<td>686</td>
</tr>
<tr>
<td>Kabardino-Balkaria</td>
<td>1428</td>
<td>227</td>
<td>94</td>
<td>137</td>
<td>82</td>
<td>8</td>
<td>31</td>
<td>849</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4518</strong></td>
<td><strong>1023</strong></td>
<td><strong>249</strong></td>
<td><strong>526</strong></td>
<td><strong>181</strong></td>
<td><strong>33</strong></td>
<td><strong>88</strong></td>
<td><strong>2418</strong></td>
</tr>
</tbody>
</table>

Increased Income, Investment and Sales

During the life of project, 25,718 jobs were created and 1,964 agricultural enterprises substantially improved their capacity. Thirty-one percent of agricultural enterprises strengthened invested in improved technologies and practices and increased their sales by 22 percent. To support these investments, 1,717 potential borrowers were consulted and 610 borrowers received loans valuing approximately $9 million.

At–Risk Groups

The project facilitated 307 events geared towards strengthening understanding and mitigating conflict. Project funds reached 57,390 individuals through conflict mitigation activities, with 1,806 individuals attending these events.
Value Chain Strategy

A key challenge for Russia’s agricultural industry is to improve the competitiveness of producers. Challenges to competitiveness in the North Caucasus include a lack of arable land, low levels of mechanization of agricultural labor, and other issues related to complex economic and social dynamics of the regional economy.

To identify value chains with better opportunities for development, ACDI/VOCA conducted two value chain analyses, one in 2011 and one in 2012. Each was a two-stage process characterized by a collection and review of primary and secondary data.

The secondary data, which was gathered first, was available from publicly accessible sources—Internet websites, official statistics and republican ministries of agriculture. In analyzing the secondary data, ADP strongly relied on the insights and recommendations of the KRPs due to their broad experience in agriculture. Primary data was collected directly from surveys and interviews with VC actors, i.e., producers, processors, wholesalers and end market wholesalers.

According to the secondary and primary data analysis the North Caucasus value chains were not market oriented. The long-standing practice of selling on spot markets resulted in few linkages built within the value chains and/or limited information going to value chain actors based on specifics demanded by end markets. The lack of adequate packaging and branding were found to be main impediments to VC development. This helped to account for producers’ failures to establish connections with end buyers, even on such occasions when the marketing efforts were undertaken. VC analysis revealed that all ADP-selected value chains faced the same major challenge: each VC was in need of significant improvement and strengthening of its end links, suggesting the need to address branding and marketing, including produce shelf attractiveness through better packaging.

ACDI/VOCA created a value chain analysis electronic book (VC analysis E-book) to combine all materials developed through the course of the analyses that were completed over the life of the project. It incorporates recommendations of VC actors and KRPs, who are crucial stakeholders in the VC development process, one-pagers, presentations of local VC consultants, etc.

Objectives 1 & 2: Increase Capacity and Improve Market Linkages in Specific Value Chains

Cucumber Value Chain Y1 (Republic of Kabardino-Balkaria)

Market Opportunity/Strategy

The 2011 value chain analysis for cucumbers in Kabardino-Balkaria identified a market opportunity for improving the production and processing capacity of local VC actors. Upgrades needed to pursue this opportunity included access to new agricultural machinery, cucumber growing technologies to enhance production; improved aggregating, sorting, and grading
procedures, as well as advanced processing technologies to better target various end markets. The strategy for cucumber VC development in Kabardino-Balkaria was to increase the production of cucumbers to ensure a stable year-round supply of fresh and processed produce at local (regional and inter-regional) markets. Such a stable supply is required to upgrade the efficiency and competitiveness of both cucumber producers and processors.

**Key Upgrades to Pursue Strategy**

ADP interventions helped to:

- Establish market linkages between VC actors and processing factories in Kabardino-Balkaria and other regions of Russia.
- Upgrade cucumber processing by providing technical consultations on installation of the cucumber canning line previously purchased by local cucumber VC actors.
- Improve cucumber growing technologies resulting in boosting the yield and quality of the end product. Specifically facilitate knowledge transfer through technical consultations on advanced espalier cucumber production. (The espalier method is based on tying the vines to a trellis structure allowing faster growth of the plant and better conditions for watering.)
- Establish links with large and reputable suppliers of seeds and agricultural machinery (especially, drip irrigation systems) by organizing business trips for local cucumber VC actors.

**Project Activities**

**Objective 1: Increase Capacity of Value Chain Actors**

**Capital Investments**

Through a grant to the Chegem (cucumber VC actor) cooperative located in Chegemsky district of Kabardino-Balkaria, a tractor, disk harrow, pin planter, cultivator and sprayer were acquired to be used by co-op members on a rotating basis. The cooperative leased the tractor and the pin planter to farmers at an affordable cost. It also provided custom tractor services for its members. This capital investment allowed producers not only to cost effectively use improved seed but also increase the number of planted hectares. Prior production was mainly by hand labor in smaller plots. Mechanization allowed farmers to significantly reduce time and costs associated with land preparation and cultivation. Lower volumes of seed, using the pin planter along with improved production practices, resulted in higher yields on increased acreage. As a result, the Chegem farmers significantly minimized production expenses and increased the volume of produce leading to the reported increase in net disposable income.

**Training**

Ten trainings and 14 consultations took place over the life of the project for the VC actors of Chegemsky district. There were two types of trainings: (1) technological seminars in specific areas of agriculture and (2) roundtable discussions for cucumber growers that served as a platform to find solutions to VC challenges and to strengthen interaction between producers and processors to access markets. These events facilitated cooperation between VC actors and promoted a common vision on cucumber VC development in the Republic.
While ADP arranged trainings in technological aspects of cucumber growing for local VC actors in Y1, the Republican Agricultural Credit Consumers' Cooperative Nalchik-Agro (ADP KRP in Kabardino-Balkaria) took over this function in Y2 and organized training activities at its own expense. Trainings covered such topics as (1) types of seeds compatible with local soils and climate; (2) best seed suppliers; (3) disease prevention; (4) treatment of cucumber seedlings to increase yields.

**Organization & Management Support to Chegem**

A number of consultations were provided to the management and members of Chegem on technical requirements of new equipment, as well as agricultural methods and techniques to ensure optimum results. The goal of the consultations was to provide all required support to enable farmers to improve planting methods and carry out timely soil cultivation.

The grant provided to Chegem covered part of the operating and personnel costs of the cooperative including the salary of the chairman, and allowed Chegem to arrange several events including a roundtable, a seminar and marketing trips to promote cucumber sales. Most management support was provided by Nalchik-Agro, through consultations aimed at assisting Chegem to establish business relations with partners from neighboring regions. Nalchik-Agro shared its broad experience in conducting negotiations on future sales of cucumbers to external markets.

Having gained access to mechanized services (tractor, disc-harrow and pin-planter) the members of Chegem significantly reduced expenses related to seasonal soil preparation.

**Consultations**

In addition to capital investments, value chain trainings and consultations on organizational development, ADP arranged 16 hands-on consultations for the VC actors of the Chegem district of Kabardino-Balkaria. These lasted one to two days and exposed farmers to modern agricultural equipment. To ensure a broader impact, each consultant developed a summary of practical recommendations for sharing with value chain actors in other project republics.

The consultations also covered other aspects of crop production based on cucumber farmers' requests: soil preparation for planting cucumbers (April 2012), post-planting treatment of cucumbers (May 2012), crop improvement through additional fertilization of cucumbers (June 2012). Consultations were hosted by the Chegem cooperative and delivered by professors of the Kabardino-Balkarian Agricultural Academy, Mr. Khushtov and Mr. Bzheumykhov.

**Objective 2: Improve Market linkages**

The analysis of the cucumber VC conducted by ACDI/VOCA in 2011 determined that one of the major opportunities for increasing competitiveness is to improve market linkages, both horizontal (between similar actors), and vertical (between buyers and sellers within the VC). Under the ADP grant Chegem cooperative purchased needed machinery (pin planter, disc harrow and tractor), which the cooperative leaders selected while visiting a program-sponsored agricultural exhibition. The cooperative flourished as local farmers joined to obtain access to mechanized services and other improved technologies. As a result, horizontal linkages were improved on the level of local cucumber producers.
To establish new and improve current links among the VC actors ADP arranged visits for the cucumber VC actors to attend agricultural exhibitions, take marketing trips and participate in study tours and roundtables. These activities also facilitated strengthening of vertical and horizontal links in the cucumber VC.

Other Activities (study tours, exhibition trips, field days)

Over the life of the Project, ADP organized a number of marketing trips, study tours and visits to major agricultural exhibitions to enable representatives of Chegem cooperative to establish business contacts and promote farmers’ produce at regional and interregional markets. Highlights included:

- Trip to the Agro Universal 2012 agricultural exhibition (Stavropol, March 2012), which resulted in VC actors contracting for supply of cucumber seeds.

- Chegem trip to the annual Agro Rus exhibition (Saint Petersburg, August 2012) which resulted in the Chegem cooperative initiating a grant application process to access grant funds under the Federal Agricultural Development program 2013-2025 that was announced at the event. Due to the early termination of the ADP in Russia ACDI/VOCA does not have access to information on the success of this application.

Co-op participation in these activities promoted the establishment of vertical links with input suppliers, agriculture machinery vendors, plants protections services, etc. These enabled KBR farmers to move beyond local markets and purchase quality machinery and/or input supplies from reputable companies offering quality products.

Summary of Outputs and Results for Cucumbers VC

- Chegem cooperative membership has increased from 150 to 300.

- Use of the pin planter has enabled Chegem members to save on the volume of seed purchased, and to purchase higher-quality seeds instead. According to KRP estimates, savings on seeds totals 10,000,000 RR (ten million rubles).

- 500 seasonal jobs were created/sustained with the use of the granted pin-planter and the tractor

- Cucumbers planting increased by 70 hectares (from 180 to 250).

- Cucumbers yields expanded to over 5,000 tons in the Chegemosky district, with an average of 20 tons per hectare as compared to 17 prior to ADP’s intervention.

Beef Value Chain Y1 (Republic of Ingushetia)

Market opportunity/strategy
The 2011 value chain analysis for cattle in Ingushetia identified a market opportunity for improving the production of high quality finished beef and increasing the meat cutting and packaging capacities of local VC actors. While meat processing and distribution have already been established in the beef VC, premium finished beef and beef carcasses are in short supply. The Republic has to rely on imported supplies to satisfy demand. Upgrades needed to pursue this opportunity included access to new meat packaging and processing equipment, advanced cattle feeding and other animal husbandry practices to upgrade volume and quality of cattle produced by VC actors.

The strategy for beef VC development in Ingushetia focused on increasing the production of beef to ensure stable supply of premium quality meat to regional and interregional markets. A regular supply of beef is required to upgrade the efficiency and competitiveness of meat production in the Republic.

**Key upgrades to pursue strategy**

To pursue the above strategy ADP interventions helped to:

- Upgrade beef processing and packaging to meet growing demand.
- Develop butchering, sorting and grading to add value.
- Establish market links between the private sector, e.g., M.I. Gandaloyev, and interregional retailers to increase access to new markets.
- Introduce intensive cattle feeding to upgrade volume and quality of meat production. Ingush cattle growers traditionally raise to simple maturity (2-3 years of age) using open grazing on grass with limited supplements or high-protein feeds. This constrains the quality of their end product and profit. ADP introduced high-protein rations formulated from locally grown feeds to establish a new best practice. A core group of seven farmers from the villages of Yandare and Djeyrakh received feeder calves for confined feeding using highly nutritional rations. Cattle were projected to be finished and ready for slaughter within six months. Proceeds of the sales would be used to restock the same farmers with their input of investment to increase the number of feeder cattle.
- Organize business trips to enable Ingush VC actors to establish relations with supply companies locally and in other regions.

**Project Activities**

**Objective 1: Increase the Capacity of Value Chain Actors**

**Organization and Management Support to M.I. Gandaloyev**

M.I Gandaloyev is the main marketing channel for over 1,000 small-scale agricultural producers (private farms and personal subsidiary plots) in the Republic of Ingushetia. It provides a regular and stable market for beef. The Gandaloyev processing facility is a ready outlet for scattered
small-scale cattle growers who can sell livestock at a market price. There is no need to resort to intermediaries who buy the meat at low prices and/or irregularly.

With the support of ADP, Gandaloyev had the potential to act as an integrating market force in the beef VC in Ingushetia.

Though a young firm, M.I. Gandaloyev is growing rapidly and established has a highly professional management team, obviating certain ADP organizational and management support roles. An ADP grant covered 30 percent of costs for an accountant and for a consultant on intensive cattle feeding, a leading cattle nutrition specialist from the Republic of Kabardino-Balkaria, who advised Gandaloyev on confined cattle feeding operations.

**Capital Investments (circular saw, packaging equipment and livestock)**

Under a grant to Gandaloyev acquired a circular saw and packaging equipment to implement improved beef processing and increase meat cutting and packaging capacity. Gandaloyev also purchased 27 feeder cattle for intensive feeding and production of quality finished beef for sale.

**Training Events**

Gandaloyev specialists delivered five trainings on best meat cutting and processing practices over the life of the project. One was a 30-day course on modern meat cutting practices held in July 2012. Seven young people received professional training in meat processing and later were employed in the meat processing industry.

**Objective 2: Improve Market Linkages**

The beef VC analysis revealed that a major opportunity for enhanced competitiveness is to improve market linkages, both horizontal between similar actors, and vertical between buyers and sellers.

M.I. Gandaloyev’s market channels were once narrow. It did not have a stable and reliable supply of beef carcasses to process, so to supply high-quality meat to premium buyers, namely restaurants, banquet halls and VIP clients, it had to devote resources to sourcing supply.

**Marketing trips**

Over the life of the project ADP organized a marketing trips and visits to agricultural exhibitions for representatives of Gandaloyev who learned about new meat processing techniques and equipment and engaged in promotion.

For example, during the trip to the HoReCa (hotels, restaurants, cafes) exhibition in Moscow (August 2012) Gandaloyev made contact with a potential British buyer. Also, several verbal agreements were concluded between Gandaloyev and representative of the Guild of Professional Restaurant Managers of Russia, who showed interest in the quality meat that was exhibited. At a meeting with Mr. Askhabov, chief food supply and logistics manager of the Kremlin restaurant, a supply agreement was reached.
Gandaloyev traveled to Dagestan, Stavropol and Krasnodar Krai to promote meat produce and establish relations with buyers. These regions have large markets and unmet demand for quality meat products. Gandaloyev also created and aired a TV ad and published a marketing brochure, which was widely distributed within Ingushetia and neighboring regions.

These efforts resulted in opening of a meat mini-market and café in the capital of Ingushetia where premium meat processed by the Gandaloyev is served. Currently, the company is in the process of registering its logo and brand identity.

**Overall Summary of Outputs and Results for Cattle Meat VC**

- Processing equipment provided by ADP enabled the grantee to increase production by 30 percent.

- At the beginning of the Gandaloyev grant, fewer than 8-10 full-time cattle farmers were active in the Ingushetia region. By the end of the program, more than 30 additional ones had joined the advanced cattle growing and feeding program of Gandaloyev.

- Gandaloyev had 5-8 agreements with meat buyers at the beginning of the project. By the end, the number of regular clients had reached 15 and included restaurants, cafes and public institutions.

- According to the final grant report submitted by Gandaloyev, their products now constitute a recognized brand in Ingushetia and neighboring regions.

- 129 young people between the ages of 15-30, and 85 women were engaged in the training conducted by Gandaloyev.

**Garlic Value Chain Y1 (Republic of Chechnya)**

**Market Opportunity/Strategy**

The 2011 value chain analysis for garlic in Chechnya identified a market opportunity for improving the production capacity of local VC actors. Upgrades needed to pursue this opportunity included access to modern agricultural equipment, garlic cultivation technologies to increase production as well as new storage practices to reduce crop loss. The strategy for garlic VC development in Chechnya focused on enhancing garlic production to ensure a stable year-round supply of fresh garlic to the local (regional and interregional markets). The stable year-round supply is required to upgrade the efficiency and competitiveness of garlic producers to replace the imported product from Turkey and China.

**Key Upgrades to Pursue Strategy**

To pursue this strategy, ADP interventions:

- Provided technical consultations on improved growing practices to members of Indira Cooperative to boost yield and income.
- Provided local VC actors with access to high-quality garlic seeds through a revolving seed fund. The fund is maintained by distributing a portion of the harvested bulbs to members of Indira Cooperative, an approach that helps ensure sustainability of capacity-building activities.

- Improved packaging technology by providing such upgrades as vacuum packaging technology. This improved general marketability and in particular made it possible to access external markets including Moscow.

- Established a marketing channel that resulted in an agreement between the Indira Cooperative and two Moscow-based companies, Zelenaya Marka and Bio Market, that specialize in “green” products.

- Reduced crop losses through the use of modern warehouses rented by the cooperative.

Project Activities

Objective 1: Increase the Capacity of Value Chain Actors

Organization & Management Support to Indira

Garlic VC actors used to be an unorganized group of smallholders. Indira was a driving force in reviving garlic production in Chechnya and integrating VC actors. By joining the cooperative local farmers could lease land for growing garlic from the Chechen State Agricultural Research Institution. This opportunity was facilitated by ADP KRP and the Chechen Chamber of Commerce and Industry who together struck an agreement with the Institution. As part of management support to Indira, an ADP grant covered 50 percent of the chairman’s salary and 30 percent of the accountant’s.

Training

Under the ADP grant Indira conducted nine trainings on soil preparation, growing practices and planting methods. Most were delivered by Mr. Terekbayev, a vegetable farming specialist from the Chechen State Agricultural Science and Research Institute.

Another was conducted by Mr. Abbasov, head of the Chechen Extension Services, for 15 farmers on garlic fertilizing, soil preparation and recommended varieties of garlic.

In addition to the training events, ADP and the Chechen Chamber of Commerce provided advice to Indira leadership on stakeholder meetings, ADP reporting requirements and other.

The impact of project interventions was that winter garlic planted earlier was successfully harvested and used mostly for seeds. The remaining crop was sold on the local market. Most seminars and consultations conducted by the project were later replicated by the Chamber at their own expense for farmers from remote Chechnyan regions.

Capital Investments

Through a grant to Indira, the co-op acquired a mini tractor with accessories, harvester, and packaging equipment to be used by members on a rotating basis.
Capital investments and technical consultations allowed producers to increase the volume of garlic production; 2) improve practices of production, aggregation and marketing; and 3) create a Chechen garlic brand in the region. In addition, the cooperative purchased quality winter garlic seeds that were disbursed among members.

**Objective 2: Improve Market Linkages**

The garlic value chain analysis conducted by ACDI/VOCA in 2011 determined that improved horizontal and vertical market linkages provided an opportunity to increase competitiveness. Under the ADP grant Indira Cooperative purchased seeds and equipment for garlic production. The latter was selected during project-sponsored visits to agricultural exhibitions. Cooperative membership increased because local farmers were incentivized to join to gain access to quality seeds and modern machinery. Thus, horizontal linkages were improved among local garlic producers.

To establish new and improve existing links among the VC actors, ADP arranged marketing trips and visits to exhibitions and conferences, and provided consultations to the KRP and VC actors. In addition, Indira organized a marketing trip without support of ADP to the Nalchik processing plant (Kabardino-Balkaria) to reach a garlic-pickling agreement. So far the Indira’s volume was insufficient to supply the processing plant, so agreements are pending production increases. Travelers gained knowledge of pickling garlic, however.

**Overall Summary of Outputs and Results for Garlic VC**

- The garlic seed bank, kicked off with an initial purchase through ADP, grew from 4,500 to 10,500 kilograms.

- Indira Cooperative membership increased from 15 initial members to more than 75 full-time garlic farmers by the end of the first year.

- The volume of garlic production in Chechnya increased 5-6 times.

- By the end of Y1 the area under garlic cultivation by Indira Cooperative members had increased 60 percent to a total of 22 hectares. Each member farms approximately 0.3 hectares on average.

- Total number of direct beneficiaries exceeded 175 (including seasonal labor), and indirect beneficiaries exceeded 2,000 (including participants of trainings from the neighboring districts).

- In Chechnya overall, the land under garlic cultivation increased from an estimated 100 hectares to a total of 390 hectares, because the farmers from neighboring districts started planting garlic following the Indira Cooperative’s positive example.

- Indira Cooperative reached agreements with two Moscow-based companies retailing “green” products.
Rabbit Meat Value Chain Y1 (Republic of Dagestan)

Market Opportunity/Strategy

The 2011 value chain analysis for rabbit meat in Dagestan determined an opportunity to enhance production. Upgrades needed to pursue this opportunity included access to pedigree stock of rabbits, an advanced breeding facility and a refrigerated vehicle to deliver carcasses to the market. Therefore the development strategy concentrated on increasing production and improving marketing to satisfy the demand for the high-quality rabbit meat at local (regional and interregional) markets.

Key Upgrades to Pursue Strategy

To facilitate this strategy ADP:

- Introduced advanced rabbit husbandry practices to increase yields and income of VC actors through access to pedigree stock, use of new technology (i.e., breeding cages), and a mini granulator to produce high-quality feeds.

- Established regular long-term sales contracts between rabbit producers and a new retail store at one of the biggest market places in Makhachkala established by the Uzdan Cooperative.

- Improved aggregation by collecting carcasses from farmers with the refrigerated vehicle acquired by Uzdan through the ADP grant.

- Promoted marketing and consumption by making available a wide range of rabbit products; establishing regular collection of rabbit carcasses and deliveries to the retail store and markets inside and outside of Dagestan; and freezing fresh rabbit meat for market to wholesalers outside the republic.

Project Activities

Objective 1: Increase Capacity of Value Chain Actors

Organization and Management Support to UZDAN

During Y2 the project continued providing management support, covering part of the operating and management costs of Uzdan, including the salary of the implementing director. It provided
organizational support to the cooperative through the donation of office furniture in January 2012 following the close-out of the NC-RCC&AD project. Management consulting support to Uzdan was provided by AFCOD (ADP KRP in Dagestan) specialists.

Training

ADP conducted a total of 18 trainings, consultations and study trips to increase capacity of local rabbit-breeders. An example was a June 2012 Uzdan Cooperative seminar on cooperative development strategy delivered by Mrs. Smirnova, specialist in cooperative law. She provided recommendations on compliance with Russian tax regulations.

Consultations

Throughout the report period AFCOD specialists provided consulting and technical support to Uzdan management in the specifics of the rabbit business, mostly on veterinary and rabbit maintenance requirements. With the support of ADP and its regional partner, the Association of Private Farmers and Agricultural Cooperatives of Dagestan (AFCOD), Uzdan members received training and consultations that enabled them to face technological and marketing challenges. Most of the consultations were delivered by specialists from the Dagestan State Agrarian University.

Capital Investments

Under the ADP grant Uzdan Cooperative purchased pedigree rabbit breeding stock, modern rabbit breeding cages, a mini-granulator, vending equipment for the Uzdan-owned shop and a vehicle for transportation of rabbits’ carcasses. These capital investments covered three linkages in the VC: production, marketing and processing. All three were needed to be upgraded simultaneously to provide the basis for Uzdan members to maintain a stable supply of rabbit meat to the consumer at local and regional markets.

This intervention and grant took longer to initiate than originally expected due to vendor delays in supplying key equipment. For example, the rabbit cage vendor’s bank accounts were temporarily closed. That delay caused a delay in the purchase of breeding stock. These issues affected the overall grant implementation process.

Objective 2: Improve Market linkages

The rabbit meat value chain analysis identified that one of the major opportunities for increasing production and marketing is to improve horizontal and vertical market linkages The horizontal links were significantly strengthened through the creation of the Uzdan Cooperative that united Dagestan rabbit breeders previously unaffiliated throughout the republic. This was a major accomplishment given the lack of cooperation among Dagestan farmers due to financial mistrust, not to mention the misunderstanding of cooperation principles fostered in the Soviet times.

AFCOD took the lead in unifying local farmers and initiated the creation of a cooperative. Under an ADP grant Uzdan Cooperative purchased modern equipment (see above) which was selected at the exhibition Agrouniversal 2012 at project expense. Cooperative membership was significantly strengthened through access to improved technologies and marketing opportunity. Thus, horizontal linkages were enhanced among rabbit producers in the region.
Other Activities

In addition to the rabbit production activities, Uzdan concluded an agreement with a marketing firm in Makhachkala to develop a logo and signage for its refrigerated truck. When the project closed out, the design works were still in process.

Overall summary of Outputs and Results for Rabbit VC

The number of rabbit growers interested in cooperation with Uzdan rose from 100 to nearly 200.

- Over 100 rabbit VC actors enhanced their knowledge on veterinary care and feeding through participation in ADP-supported seminars, consultations and field trips.

- The strengthening of the rabbit meat VC in Y1 geographically started in the Makhachkala region. Due to the expansion of Uzdan Cooperative operations in the Y2 the VC grew to include the neighboring Kizil-Yurt district of Dagestan.

- Uzdan members created a store in the capital market which provided them with a stable marketing and sales channel for rabbit meat.

Dairy Value Chain Y2 (Republic of Dagestan)

Market Opportunity/Strategy

The 2011 value chain analysis for dairy in Dagestan identified an opportunity to improve production and processing capacity of local VC actors. Upgrades required to pursue this opportunity included access to new agricultural equipment and more efficient dairy processing technologies that would boost production and better target end markets. The dairy VC development strategy for Dagestan focused on enhancing milk processing to improve dairy quality and the processing capacity of the local VC actors. High-quality processed dairy products are necessary to increase Dagestan dairy farmer competitiveness.

Key Upgrades to Pursue Strategy

ADP interventions helped to:

- Establish a processing channel for local dairy producers via procurement of special milk processing units;

- Reduce losses through production of market-efficient size batches and optimization of transportation costs;
- Improve dairy technologies by introducing new milk processing equipment to produce high-quality cheeses, cottage cheese and other dairy products. The ADP grant provided equipment and training that helped to minimize loss of product and exposure to health risk. The above milk processing unit enabled dairy farmers to increase milk processing by approximately 10 percent and contributed to the reduction of health problems related to Brucella.

**Project Activities**

*Objective 1: Increase Capacity of Value Chain Actors*

**Consultations**

In Y2 the project initiated a range of activities aimed at strengthening the dairy value chain. These included a total of 11 consultations, seminars and study trips. An example is VC actors’ trips to exhibitions (Food-Industry 2012 and AgroRus 2012) where they learned about the range of dairy products and modern packaging technologies.

The consultation conducted in July 2012 was on the subject of biotechnology in the production of various kinds of “salt cheeses” that are traditional in the North Caucasus: Dagestansky cheese, Tarki-Tau, Erpelinsky, Brynza “ovechnya.” The specialists of the Dagestan State Agrarian University improved these traditional cheese recipes and production technology to comply with modern quality and shelf-life standards. The farmers received tailored consultation in the production of each of these specific types of cheese.

**Capital Investment**

When ACDI/VOCA was informed of the ADP closeout, the project was in the process of finalizing the selection of grant winners for Y2 VC interventions. Therefore ADP did not make capital investments to develop the dairy VC. However, the two dairy VC actors who were provisional winners of the grant competition were recommended to the DSAU as possible subrecipients of grant funds provided earlier by ADP to DSAU.

*Objective 2: Improve Market linkages*

Since the project activities within this value chain started in September 2012 (in the middle of the Y2 of project implementation), there was no opportunity to see whether stronger horizontal linkages were established. All potential grantees claimed that their ACDI/VOCA-funded projects would involve informal cooperation between milk producers. We conclude that particular work in this regard is important.

The most compelling area for cooperation could be milk collection and transportation to processing facilities. Another area is collective veterinary services. These entail linking cross-cutting providers (transportation service) and sector specific providers (veterinary service) with the producers.

The strengthening of vertical linkages among VC actors was facilitated by their ADP-sponsored participation in the agricultural exhibitions Yug-Agro, AgroRus. Dairy VC actors established business contacts with such companies as Multivac Ltd., Rosagroleasing and Russian vendors of milk production and processing equipment.
Overall Summary of Outputs and Results for Dairy VC

- 280-300 dairy VC actors enhanced knowledge and skills on dairy herd management, veterinary issues and dairy cattle feeding by participating in ADP-supported seminars, onsite consultations and study tours.

- Marketing trips organized by ADP and DSAU led VC actors to discuss and negotiate contracts to supply dairy products, such as suluguni cheese, to the national METRO retail chain and Radisson-Slavianskaya hotels. Due to the unexpected termination of the program ACDIVOCA could not determine how many contracts were concluded.

- A new field of DSAU extension services was developed to support dairy farmers with special attention to the dairy farmers located in the vulnerable mountainous regions.

Cucumber Value Chain Y2 (Republic of Chechnya)

Market Opportunity/Strategy

The 2012 value chain analysis for cucumbers in Chechnya determined an opportunity for improving the production and processing capacity of local VC actors. Upgrades needed to pursue this opportunity included access to new agricultural machinery, cucumber-growing technologies to boost production, and modern processing technologies to efficiently target various end markets. The strategy for cucumber VC development in the Chechen Republic focused on increasing production of cucumbers to ensure stable year-round supply of fresh and canned produce to local (regional and interregional) markets. Sustainable year-round supply is required to upgrade the efficiency and competitiveness of the VC.

Key Upgrades to Pursue Strategy

ADP interventions helped to:

- Establish market linkages between VC actors and processing facilities in Chechnya and other regions of Russia

- Improve general condition and marketing characteristics of the produce

- Upgrade cucumber growing practices to increase yield and quality, particularly through the introduction of espalier technology. This includes providing high-quality seeds, machinery, and a drip irrigation system to the major cucumber value chain actor.

Project Activities

Objective 1: Increase the Capacity of Value Chain Actors

In Y2 of ADP implementation a range of activities lay the groundwork for strengthened cucumber production. These included series of seminars, consultations and study tours
organized to provide initial support and technical assistance to VC actors to enable them to benefit from future project interventions.

**Capital Investments**

Through grants to cucumber VC actors ADP planned to introduce espalier technology by providing farmers with access to agricultural machinery such as a mini tractor, seedling machine and drip irrigation system. ADP determined that the equipment combined with various training oriented to the new technology would focus on Gudermes and Shelkovskoy districts, the largest ones in Chechnya.

ADP envisaged that the new technology would enable farmers to increase production to a per hectare average of 15-20 tons, while the traditional method yields only 8-10 tons. Increased yields would in turn have led to growth in net income. While at the time of closeout grant applications were being considered, no capital investments to the cucumber VC actors were made.

**Consultations and Trainings**

ADP provided four hands-on consultations on the espalier method of growing cucumbers conducted by Mr. Terekbayev a specialist of the Chechen State Agricultural Research Institute. Participants were the farmers of the Gudermessky district of Chechnya, the most densely populated region of the Republic.

**Objective 2: Improve Market linkages**

The VC analysis determined that an opportunity for increasing competitiveness is to improve both horizontal and vertical market linkages. To establish new and improve current links among VC actors the project arranged marketing trips, consultations and visits to agricultural exhibitions and seminar. It also provided contacts with peers in Kabardino-Balkaria who were more advanced in cucumbers growing.

With regards to horizontal linkages, a key actor, private farm Zhovret, established links with the wholesale market in Moscow for delivery of cucumbers, but discovered that it could not produce the necessary volume. ADP entertained pooling by groups of at least three farmers to meet demand. Before these linkages could be finalized ADP was terminated.

Vertical links were significantly improved through an informal agreement with vegetable processor Tsentoroevsky. It was agreed that while the value chain actors would increase volumes to meet the firm’s capacity and quality requirements. Potentially Tsentoroyevsky may contract cucumber production and start processing next season.

**Objective 3: Increased Access to Finance**

The value chain analysis revealed a number of opportunities for project interventions. One of the more significant is the unsatisfied demand for credit needed to develop agricultural businesses. At the core of this problem are the barriers including a lack of knowledge in
financial planning, unfamiliarity with the loan application process and little or no relationships with financial institutions.

It quickly became evident that in the targeted republics (Dagestan, Ingushetia, Chechnya, Karbardino-Balkaria) producers lacked access to financing other than what was conventionally available through commercial banks. This situation hindered access to credit for small-scale businesses and farmers who are the major VC actors.

Based on these findings, ACDI/VOCA adopted a twofold approach to increase access to finance. First, it increased the financial literacy of VC actors in financial planning, loan application processing (how to prepare a package of documents) and awareness of alternatives to banks. Second, it established a dialogue between local financial institutions (banks) and VC actors on how to build up effective relationships.

To implement this twofold approach, the following key upgrades were used:

- Training seminars on improvement of financial literacy” and preparation of loan applications.
- Roundtable discussions between VC actors and representative of financial institutions to establish mutual understanding and trust.
- Assistance to VC actors engaged in credit applications to develop business plans, calculate cash-flow and prepare a loan documents.
- Design of a simplified financial model for family VC actors and training on this model.

ACDI/VOCA collaborated with the Russian Microfinance Center (RMC) to target small-scale businesses (households) and cooperatives to achieve financing through education, hands-on experience and onsite consultations. The grant agreement with the RMC was signed on September 1, 2011, and was valid until September 30, 2012.

ACDI/VOCA’s key regional partners were involved in every stage of the work with RMC, enabling them to further develop their skills and contribute to the success of these events.

**Overall summary of Outputs and Results for Objective 3**

ADP efforts to increase access to financial resources for VC actors brought substantial results in achieving the project targets for Year I and II.

- 170 small-scale agricultural producers were provided training during two-day practical seminars on "Improvement of Financial Literacy" and "Preparation of Loan Applications."
- 122 VC actors and financial institution representatives participated in the roundtable discussions organized to establish commonality and cooperation between lenders and borrowers.
• 1,717 VC actors received consultations regarding the development of business plans and loan applications. These included 190 who participated in group consultations, 1,133 who received special bulletins or manuals, and 394 who received consultations via e-mail or telephone.

• 30 seminar participants, including both VC actors and professors from DSAU, were introduced to the financial model developed by ACDI/VOCA. In this particular seminar cheese production was used as the example. The model and training continue to be used as part of the dairy curriculum at the DSAU demonstration site.

• Comparison of baseline and impact surveys demonstrated that in the course of the project VC actors received 610 loans for the ruble equivalent of $9 million.

Additional results achieved through the ACDI/VOCA and RMC collaboration:

• A manual entitled Improvement of Financial Literacy and Preparation of Loan Applications was developed.

• Seven two-day seminars on improvement of financial literacy and preparation of loan applications were conducted. The seminars on improving the management of financial resources, developing cash flows and improving repayment capacity, did in fact strengthen their abilities to obtain and use credit.

• Five roundtable discussions with participation of both VC actors and financial institutions helped establish cooperation between lenders and borrowers.

• Eleven group and 324 individual consultations were given to VC actors on how to develop a business plan, calculate cash flow and prepare a loan application. This improved the financial literacy of small-scale producers and processors, thus facilitating access to finance from rural credit cooperatives, microfinance funds and commercial banks such as the Savings Bank or Rosselkhozbank that have special lending programs for small-scale businesses and co-ops.

• A financial model, implemented at the DSAU demonstration site, was developed that allows a farmer to plan the volume of production and expenses for a variety of dairy products, build budgets taking into account possible sources of financing, and calculate cash-flow and economic efficiency indicators. A manual developed for the financial model allows a farmer to easily adjust content to other VCs.

Objective 4: Strengthen Educational & Extension Services

The success of sustainable VC development mostly depends on the quality and timeliness of assistance provided by extension services to local VC actors, especially producers. Initially ACDI/VOCA found extension service leaders to be lacking in vision and orientation to results-oriented management. Further, extension agents provided producers with deficient consultation and support. In most cases extension agents simply did not have adequate equipment, materials and supplies (computers, copiers, etc.) to be effective.
ADP strengthened regional educational and extension services with the aim of fostering sustainability of VD development. The project identified six key elements outlined below.

**Training and Upgrading Extension Service Staff**

To upgrade management and planning skills of extension agents ADP arranged two seminars in Pyatigorsk (February and September 2012) and one in Nalchik (May 2012). They focused on strategic planning; formats, methods and tools; and management and human resource development.

In addition, two series of consultations were provided to extension service agents intended to develop a more professional approach in consultations and management. Training was arranged for each project republic: the Association of Farmers and Agricultural Cooperatives of Dagestan (AFCOD), the Extension Center of the Dagestan Ministry of Agriculture, the Dagestan State Agrarian University, the Extension Centers of the Republics of Chechnya and Kabardino-Balkaria, and the Nalchik-Agro Consultation Center.

**Support Outreach through Various Mass Media**

Extension was supported through publication of two manuals: (1) Strategic Planning and Drafting of the Development Plans for Regional Extension Services, and (2) Market Demands—Knowledge and Consultations. These were designed to upgrade agents’ capacity in planning, budgeting and evaluation as well as improving their effectiveness in providing assistance to farmers.

ADP sponsored the development and publication of six manuals to help broaden the knowledge of farmers in in the following areas:

1. Modern Technology and Methods of Growing Garlic in the Chechen Republic
2. Beef in the Republic of Ingushetia
3. Modern Technology and Methods of Cultivation of Cucumbers in Kabardino-Balkaria Republic
5. Modern Technology and Methods of Growing Cucumbers on trellis in the Chechen Republic
6. Modern Technologies of Milk Processing in Republic of Dagestan
Encouraged by ADP’s activities extension organizations became more active in providing information to farmers through publications in scientific journals. Three publications on milk processing were published supporting dairy producers in Dagestan. At least 37 articles were published in local/regional press of the various republics. The Extension Center of Nalchik-Agro Cooperative also entered into an agreement with a local TV station to provide information spots to help local farmers access markets and technology.

**ADP Support of Demonstration Sites:**

Rather than develop standalone demonstrations, it was beneficial to combine demonstration plots with VC actor grants. This increased effect and sustainability effect of a grant by adding extensive long-term technical assistance increasing the capacity of VC actors.

Examples of combining VC actor grants with demonstration facility activities are given here:

**Indira Cooperative Demonstration Site (Republic of Chechnya)**

The extension service in Chechnya operates under the Chechen Science Research Institute. It has created a pool of qualified freelance consultants, some of whom are professors at the Grozny State University and others are employees of the Institute.

The demo site, established on Indira Cooperative member plots, embodied the concept of business incubator. Here there is a background of the crop being cultivated, but skills have been lost either due to migration or drastic generation change precluding skills being transferred to youth.

In the Chechen Republic, garlic was grown during the Soviet period, but the breakup of the USSR led to the collapse of many republican economies including Chechnya’s. In addition to this the Chechen wars which followed the dissolution of the Soviet Union created a younger generation of farmers unaware of the garlic growing tradition unable to effectively inherit the skills to cultivate the crop. That is why demo site training activities were useful to provide farmers with information on modern technologies and skills to reestablish this “lost” industry.

A grant to the Indira Cooperative enabled the acquisition of quality garlic seed and modern agricultural equipment. Working with the co-op a demonstration site was arranged with the support of the Extension Center and Research Institute who provided consultancies to farmers on advanced technologies of growing garlic, plant care and protection. The demonstration plot itself is within the same fields farmed by cooperative members. This became a win-win for garlic farmers, leading to the replication of this demo model in other VC interventions.

The demonstration site accomplished three main goals:

- Crop promotion. The farmers learned new technologies and gained skills in garlic
production, and helped restore the crop in Chechnya.

- Building appreciation for learning and best practice. The farmers who had extension assistance showed better results in the field than those who used their own methods for growing their garlic.

- Raising the esteem and value of the extension service. Comparison of the results in different plots located in the same field encouraged farmers to seek consultations from the Extension Center and Research Institute.

Chegem Cooperative Demonstration Site (the Republic of Kabardino-Balkaria)

The extension service in the Republic of Kabardino-Balkaria did not have an Extension Services Center until 2011. When it was founded in April, ACDI/VOCA approached its leadership to propose cooperation, but the effort did not succeed given the political environment. In order to get support and extension services to VC actors ADP retained consultants from the key regional partner in Kabardino-Balkaria, Nalchik-Agro Cooperative. It had already established a Consultation Center for its members fulfilling the functions of a local extension service.

To strengthen the Nalchik-Agro Extension Service ADP facilitated installed a cucumber demonstration site in conjunction with the Chegem Cooperative. The purpose of the site was to familiarize local cucumber producers with advanced growing technologies and new varieties of cucumbers. During soil preparation the demo site was used to demonstrate a pin planter, disc harrow and cultivator, and otherwise teach modern cucumber-growing techniques. Three field days were conducted at the demonstration site for 33 participants.

Gandaloyev Demonstration Site (Republic of Ingushetia)

During late 2011 and early 2012 the Extension Service of the Republic of Ingushetia was closed down by order of the government. (See Program Challenges section.) Given the success of Chegem and Indira demonstration sites supporting extension in their respective republics, it was decided to include extension service support to VC actors in Ingushetia through a grant awarded to the company Gandaloyev.

Since there is a significant shortage of high-quality finished beef cattle as well as meat carcasses, Gandaloyev was interested in attempting to fulfill the functions of the extension service.

The extension services program in Ingushetia included creation of a cattle feeding demonstration site. Under this component of the grant ACDI/VOCA provided funding to purchase 27 feeder cattle to demonstrate the techniques and advantages of improved feeding/growing of quality finished meat. The feeder cattle were distributed among small-scale meat producers who agreed to raise the cattle to the desired weight, then sell them to Gandaloyev on contract for slaughter and processing into cuts for retail sale. The demonstration exemplified how adding intensive cattle feeding maximizes profits.

Uzdan Demonstration Site (Republic of Dagestan)

AFCOD has been among the major extension centers in the Republic of Dagestan since 2000. Its main role is to facilitate knowledge exchange and dissemination of best practices among
farmers. Under the ADP, AFCOD provided training and consultation to the rabbit VC actors and farmers engaged in rabbit breeding.

To improve the quality and outreach of extension services ADP supported the creation of a rabbit breeding farm which would also serve as a demonstration site for rabbit VC actors.

The farm was established at the premises of the ADP grantee Uzdan. This site provided farmers an open forum to exchange experience, learn new technologies in rabbit husbandry and share information on feeding.

The demonstration site has been operated by AFCOD and the cooperative Uzdan to host training events for farmers engaged in rabbit breeding. Moreover, the demo site is a consultation center, open to any rabbit grower in need of professional training and advice.

Over the life of the project 20 consultations have been conducted for approximately 150 farmers.

**Chechen Extension Service Micro-Demonstration site (Republic of Chechnya)**

In 2012 ACDIVOCA identified cucumber VC development activities as Y2 interventions. ADP, working with VC Actor ‘Laura’, created a micro demonstration site at the premises of the Chechen Extension Service. Laura used their equipment and seeds to plant three rows of cucumbers on trellis to demonstrate advanced espalier technology and its specific requirements. Interested farmers could receive consultation and advice on implementation of the trellis technology any time during the growing season. Field days were conducted on a regular basis. One, organized by the local KRP, resulted in a technical literacy upgrade of 30 cucumber farmers on advanced cucumber technology.

**Dagestan State Agrarian University Demonstration Site (Republic of Dagestan)**

While the republic has a well-established extension service that provides qualified consultations on most aspects of agriculture, there were no specialists on dairy production. The republic needed a dairy extension center as there were a significant number of dairy VC actors scattered in the remote mountain regions.

Thus, ADP provided financial support to its KRP DSAU and created a dairy demo site at the training and demonstration center of the University. Through a demo grant DSAU acquired modern milk processing equipment and created the opportunity to train dairy farmers to operate the machinery. The university also used the above milk processing unit to train operators employed with dairy cooperatives from the mountain regions who may receive this kind of equipment through the government- and municipality-supported programs. This equipment not only allows production of new dairy products but it also provides treatment for Brucellosis-infected milk, hence increasing significantly the volume of production which can be marketed.

In coordination with the demonstration facility supplementary awards were given to two rural dairy farmers for the purchase and installation of two like processing units. It was envisioned that successful use of the equipment would serve as an attraction to other dairy farmers.

Due to the early termination of ADP we were unable to complete the grants to the farmers, but the DSAU demonstration facility continues the promotion of this new approach and has taken upon itself the continued trainings and dairy development.
Objective 5: Key Regional Partner Capacity Building

Over the life of the project, ACDI/VOCA collaborated closely with the ADP key regional partners to upgrade their capacity and capability. To accomplish this goal we needed to engage KRPs in hands-on implementation with ACDI/VOCA guidance to ensure quality. The ADP strategy was based on five elements.

- Participation in value chain analysis and mapping
- Deliverance of program activities and strengthening of linkages between VC actors
- Reporting on project implementation progress, including monitoring and evaluation
- Coordination of trainings and on-site consultations
- Monitoring VC interventions to ensure maximum program impact

The ADP focused on developing KRPs internal capacity so they would become stronger organizations capable of independently implementing VC development in their native republics. ADP provided subgrants that initially maintained strict elements of coordination and control. Over the life of the project, the capacity of these organizations was strengthened through ADP trainings as they gained more and more control over technical activities and implementation. This empowered the KRPs to provide ongoing and sustainable services to the agricultural sector in their respective republics.

ADP organized training programs to increase partner knowledge in fields such as budgeting, FOGs, procurement and M&E. While attending ADP trainings seminars, the KRPs learned how to develop a work plan and budget, and familiarized themselves with requirements of implementing FOGs and their logic. As part of the FOG milestones in Y1 the KPRs were required to submit for ACDI/VOCA approval procurement packages for office equipment to be acquired under the ADP grants. This necessitated following USAID procurement regulations. In Y2 ADP expected KRPs to provide guidance and assistance to VC actors in procurement in conjunction with ADP. Moreover, the KRPs were required to watch for problems that might occur in the implementation of VC actors’ grants and notify ACDI/VOCA in advance.

Having involved the KRPs, ADP made sure they understood the complete grant application process: formal announcements, applications’ submission requirements and how the selection is made. In assisting VC actors to complete grant applications ADP trained KRPs in international standards of writing proposals. As part of the KRPs capacity-building strategy, ADP engaged the KRPs in facilitating training events such as seminars, consultations, stakeholder meetings, which included identification of target audience, handling logistics, and other organizational issues. KRPs learned M&E requirements by assisting ADP in conducting baseline and impact assessment surveys and regularly gathering project progress data through M&E questionnaires. Over the life of the project, KRP organizations matured through comprehensive training and assistance in project implementation. As a result, they gained control over technical activities of their own entities.
Cross-Cutting Elements

Reducing Isolation

Isolation of the ADP target regions not only from Russia in general but between the republics themselves hinders value chains development. In order to reduce this isolation, ACDI/VOCA promoted integration of participants not only within the North Caucasus region but throughout Russia. Under Objective 2, Improve market linkages, ADP included 32 marketing trips, 46 trips to exhibitions and trade fairs, 21 study tours, and 22 advanced-level round-tables and conferences.

Among the activities that helped reduce isolation were the trips taken by VC actors to all-Russia agricultural exhibitions and trade fairs. (See the description under Objective 2.) Educational events for diverse groups of NC VC actors paired with trainers/consultants from greater Russia fostered a national mind set within the republics. ADP’s efforts to economically link regional value chains with like value chains in other NC regions helped reduce isolation of both individuals and communities, and in many cases establish long-term partnerships.

Engaging Youth and Marginalized Groups:

ACDI/VOCA determined that young people between the ages of 15-30 constitute the largest and most dynamic portion of the population of project republics, especially in Ingushetia, Chechnya and Dagestan. High unemployment encourages criminal activities which contribute to conflict environment in the North Caucasus. To mitigate conflict in the region, ADP facilitated outreach to youth through educational activities in vocational schools and universities in project focus republics. ADP organized seven seminars for youth in the area of small business development, one student contest writing business proposals and one seminar on business presentations. The events attracted 53 participants with approximately 23 percent of them being young people from marginalized groups. Due to the ADP-supported seminars young people gained skills in production and marketing that open career opportunities.

In addition to the above ADP activities, the firm M.I. Gandaloyev promoted employment opportunities for the Ingush youth that suffer the highest unemployment rate in the Russian Federation. As the main strategy, Gandaloyev has consistently traveled to other regions of Russia to discuss opportunities for propagating and transferring modern meat processing technology to large meat processors. The business scheme proposed by Gandaloyev was based on seconding teams of young people from Ingushetia (instructed by Gandaloyev on meat-cutting techniques) to work part-time with meat producers in other regions of Russia who supply hotels and restaurants.
Working in Partnership with Communities:

While community development was not a primary goal of ADP, project implementation activities had an indirect impact on this cross-cutting element. Formal or informal cooperation among farmers and their relations with businessmen such as bankers inevitably influenced community development in the region. New farming machinery obtained through the ADP grants served as a driving force for better services and improved business relations among farmers from various communities. Seminars and other training activities developed closer relations within the local communities which were elaborated on by the KRPs in the focus republics. An excellent example is in the Chechen Republic where the number of garlic producers, many of whom are women, grew into a tight, supportive organization due to value chain promotion waged through seminars, consultations, demonstrations and interactive activity.

Addressing Gender Issues:

Over the life of the project ADP supported improvements in women’s traditional roles. In the Chechen Republic garlic VC development activities engaged women in business activities and created additional jobs for women. In another example the head of the firm Abubakarova, Ms. Abubakarova, was selected as the garlic seed vendor for the value chain producers. Also in Chechnya a strong player in the cucumber value chain, Agricultural Cooperative Laura 2002, is headed by a woman. This cooperative was nominated as a potential grant recipient in 2012.

A gender assessment conducted by ACDI/VOCA that covered the project period found that the percentage of both men and women involved in ADP varied significantly among project focus regions. Women participation in four target republics has reached approximately 25 percent. The highest female rate was found in the Republic of Dagestan, where approximately 38.4 percent of women were engaged in project activities such as trainings, study trips, group consultations to VC actors, conferences, and competitions. However, men are playing a more active role in the Republics of Chechnya and Ingushetia accounting for 80 and 85 percent participation respectively.

Participation of men and women also differs within the eight VCs selected by ACDI/VOCA for project interventions. Collected data indicates
that men continue to be more engaged in beef VC in Ingushetia and rabbit VC in Dagestan, whereas the highest rates of women are recorded in the garlic VC in Chechnya and dairy VC in Dagestan.

**Exploring Prospects for Sustainability of Programming:**

Sustainability of programming is ensured due to KRP capacity building activities. It is envisioned that after ADP closure, the knowledge and experience obtained during the project life, though brief, will serve to sustain the interventions established, especially the following:

- Support of the cucumber value chain in the Chechen Republic was partially grounded in crosslinking Chechen farmers with like farmers and consultants in Kabardino-Balkaria. Production of cucumbers in Kabardino-Balkaria is so advanced that the markets in Chechnya in summer are filled with the produce from this republic. Under the project these erstwhile competitors, farmers from the Chechen Republic and Kabardino-Balkaria, became partners in training and experience sharing. Established links built foundation for further exchange and interregional cooperation for exploring wider markets.

- A special focus is given to the equipment provided by grants to support milk processing in Dagestan. Since this technology is affordable for small and middle-sized dairy farmers and promises excellent outcome, the sustainability of this program is very high.

- The creation of a sustainable demonstration facility within the Dagestan State Agrarian University may become a cornerstone for future growth and development of the dairy value chain.

- Links between North Caucasus program participants and enterprises, organizations and entities from other parts of Russia will serve as a basis for continued improvement of the farmers and their image and help bridge the communications gap.

- Contacts with qualified trainers, consultants and experts established a pool of outsourced specialists that are known and available for further development of the value chains.

**Mitigating Potential Environmental Impacts:**

ADP worked diligently in the area of environmental protection to perform environmental assessments prior to every subgrant award. Two ADP personnel were trained to prepare environmental assessments and submit the environmental determination review checklist to USAID.

**Collaboration with Russian Authorities:**

ADP maintained collaborative relationships with local authorities wherever possible. Meetings with representatives of Republican ministries of agriculture in Dagestan, Ingushetia, Chechnya and Kabardino-Balkaria were held prior to initiating any project activity in the republics. In the early stages of project implementation we received positive support and responses of key
organizations in the republics. However as the project expanded and work became more intense, some organizations such as the Ministry of Agriculture did not always support the project openly. (See Project Challenges below.)

Collaboration with Russian authorities varied significantly among republics. The Republic of Ingushetia, which is very sensitive to federal political pressure, closed the KRP offices and activities at the end of the first year. On the other hand the Kabardino-Balkaria KRP regularly and openly reported on ADP operations, interventions and success. Though it didn’t result in local ministry cooperation with ADP, we were allowed to operate there without hindrance.

PROJECT MANAGEMENT & EVALUATION

CHALLENGES & RESPONSES

Security

Security remained unstable throughout the course of the project and differed from one republic to another. While Chechnya is noted for its security issues, we found this republic to be the most reliable while Ingushetia and KBR continuously had security problems.

Collaboration with the key regional partners proved to be the best way of ensuring stable outreach to project beneficiaries in the NC republics. While the threat of terrorist activities at times prevented access to some regions, specifically those located in Ingushetia, by and large program implementation was not hampered in this respect.

A significant challenge to implementation was the political adversity of the federal government towards a foreign NGO operating within the North Caucasus region. Although the ADP had support from a number of local entities such as Ministries of Agriculture and universities, few were willing to acknowledge this publicly for fear of political reprisals.

Monitoring and Evaluation

Another challenge was monitoring and evaluation, especially gathering of data, due to restrictions imposed by the Law on Personal Data. While the legislation did not affect overall data collection for project indicators, it did impact the ability to retroactively verify accuracy of certain information. All primary data collected was entered into the database depersonalized. Surveys used to conduct baseline studies could not carry names of respondents. They were instead numerically identified, and only the entity contracted to complete the survey (key regional partners) maintained links to names of participants. The KRPs maintained the links between survey form numbers and respondents but did not retain the actual data on the respondents. Thus, ADP insured that the same individuals would be surveyed during the impact assessment. According to the law ACDI/VOCA was not permitted to have the list of names with links to the numeric ID survey, and the KRPs did not keep copies of the surveys upon delivering them to ACDI/VOCA. Both ACDI/VOCA and the KRPs were required by law to keep the data separate. Thus, there will be no way for ACDI/VOCA to determine that the information contained in the survey is accurate as it relates specifically to the individuals surveyed.
During the 2nd half of 2012 ACDI/VOCA encountered problems taking field trips to Ingushetia. For reasons still unknown, certain areas were restricted to those living within the region. This made it almost impossible to inspect livestock and equipment or monitor grant programs such as intense cattle feeding in Ingushetia.

In September 2012 ADP was preparing a seminar for extension agents but suddenly faced a withdrawal by those agents of the ministerial extension services. Directors of these institutions in Dagestan and Kabardino-Balkaria reported that ministerial management recommended the agents withdraw from the activities of the project.

ADP’s target was to develop twelve value chains in four North Caucasus republics. Multiple indicators were required to evaluate project impact on participants and the VCs in general. M&E specialists were challenged to develop a system that would be user-friendly yet scientific.

Overall the development of the ADP M&E system included:

- unified forms for M&E data collection
- methodology for collecting information, completing baseline studies and impact surveys
- Methodology to calculate project indicators and algorithms to generate a PMP matrix
- Development of a monitoring and evaluation manual
- Development of a database with options to generate the PMP matrix automatically
- Development of a database manual

In addition to USAIDs regulatory requirements for M&E ADP’s M&E system was revised within year 1 to comply with new Russian legislation related to collection and use of personal data. This required adjustments in the initial plan of the project M&E system. Russian legislation allows the collection of personal data without registration at the appropriate required government agency only if the data concerns hired employees and individuals contracted to provide services.

**Key upgrades to pursue M&E strategy.**

ACDIVOCA developed an M&E system that included the following components:

- *Unified forms to collect M&E data*

Four simplified and unified forms developed to collect M&E data are available as attachments to the Monitoring and Evaluation Manual. Enactment of the Law on Personal Data had a material impact on data collection. (See above discussion under Security in Project and Management Challenges)

- *Data collection, Baseline study and Impact Survey Methodology*

To survey selected VC actors ADP interviewed respondents during visits to their farms and personal meetings. Telephone interviews were used when it was difficult to meet respondents
personally. Only actual or potential VC actors were selected as respondents. This approach made it difficult to find cross relationships and extrapolate trends on selected VCs. The Student’s t-test methodology described in the Monitoring and Evaluation Manual supported this approach.

A core group of 50 actors in each of the selected VCs was surveyed to evaluate the impact of ADP interventions. The 50 respondents were chosen based on the deterministic approach. Independent of ACDIVOCA the KRPs conducted surveys of 7 value chains as selected for YI and YII of Project activities. A comparative analysis of baseline study and the impact survey provided the conclusions which support the achieved results of YI and YII. ADP completed impact assessment surveys only for four YI VCs because surveillance by the federal authorities made a follow-up impact survey for Yr. II impossible.

**M&E Database**

The database comprised data from 307 activities (3,876 participants), in addition to 7 baseline and 4 impact surveys (550 questionnaires).

- **Methods to calculate project indicators and generate a PMP matrix**

Methods to calculate indicators of specific project objectives were developed with the information coming through the unified forms for data collection. Indicators of particular objectives were used to calculate complex project performance (Standard F peace and security indicators). All project indicators are calculated and displayed in a PMP matrix for any specific period of time.

- **Monitoring and Evaluation (M&E) Manual**

An M&E manual was developed that includes: a) unified forms to collect M&E data, b) data collection, baseline and impact survey methodology, c) methods to calculate project indicators, d) M&E policies and procedures.

- **Database with option to generate PMP matrix for selected period of time**

The M&E database was developed on the MySQL platform, using the PHP5 programming language. The database offers a number of options that were important for ADP M&E purposes such as remote access, access to multiple authorized users and bilingual (Russian/English) interface. The database allows the user to generate a PMP matrix for any specific period of time by regions and/or VCs.

- **The Database Manual**

The database manual consists of basic instructions on how to use the database.

**M&E Training & Capacity Building Activities**

ADP M&E specialists together with key regional partners (KRPs) monitored and evaluated project activities on a regular basis. KRP staff members conducted the majority of the surveys and data collection. These individuals were trained and regularly instructed on how to conduct surveys and submit appropriate data for the M&E system.
Likewise staff members of extension and educational institutions, with whom the ADP collaborated during the project, were also provided instruction in data collection.

**Adjusted PMP Project Targets**

The ADP Project was originally programmed for four years (48 months) and the projected targets were identified as cumulative for the same period. Year II targets were projected in the approved year II workplan and were to be cumulative for years one and two. Due to the early termination order, ADP only had 19 months of programmatic operation (March 1, 2011 – September 30, 2012) with limited operations in the Republic of Ingushetia for the entire year two due to political reasons.

In order to provide meaningful comparisons between planned results (targets) and actual results achieved by the Project, ACDI/VOCA adjusted the Year 2 and life of project targets in the PMP Matrix (Attachment 1). The adjusted Year 2 Values are provided as well as the adjusted life of project cumulative totals. The explanation of the adjustment for each indicator is provided as well.

**Adjustments Based on Scheduled Events**

For those activities planned for the second year that were terminated, ADP was able to determine the impact that the early termination had target indicators. These activities included training and grants which would have materialized but were cancelled due to ADP termination and had projected number of beneficiaries. The planned indicators (targets) for Y2 were therefore reduced by the number of cancelled events and participants.

For indicator 4.5, the Year 2 Target is maintained at the Year 1 level because all Year 2 events were canceled. This is validated by the fact that the most impact planned marketing trips and extension services were scheduled to take place in the months of October through February.

**Adjustments Based on Number of Months.**

For those indicators that could not be adjusted based the Schedule of Events, the Year 2 Targets were reduced to 7/12ths or 58 percent of the original Year 2 targets. Indicators IR1, IR 1.1, IR1.2, 1.1, 1.2, 2.5, 2.6, 3.1, 3.2, 4.1, 4.2, 4.6 and 4.7 were adjusted in this manner. Indicator 5.3 was maintained at Year 1 levels as reducing to 58% would bring it below the Year 1 Target. No adjustment was made to indicator 5.1.

ADP had planned to complete an impact survey once a year to compare the achieved results to the baseline. The Year 2 survey was scheduled for February until the Project termination was announced on October 1, requiring the December 31 final date of ADP activities. It was not possible for ACDI/VOCA to complete a survey before December 31, 2013 due to USAID orders and the political context. The project conducted a second baseline in Year 2 when it added additional value chains. Indicators IR1, IR 1.1, 1.1, 1.2, 3.2, and 4.7 are reporting Year 2 baseline data in place of the impact survey data.
Demo Plot Results

Indicators 4.2 and 4.3 are lower than targeted because the value chain grants included the demonstration activities and the figures could not be distinguished. Only one separate demo plot grant was disbursed.

Political Impact in Ingushetia

At the beginning of Year two, ADP operations in Ingushetia were severely impacted by the order of the local Ministry of Agriculture to close the offices of our Key Regional Partner in the Republic. While not addressing ACDI/VOCA directly, the local VC Actor were required to limit its cooperation with the ADP project. The majority of project activities were designed to be implemented through local partners and the Lamb Meat VC selected for Year two interventions in this Republic was dropped. Although the project did continue to work with the VC Actors of the Year 1 VC, the ADP impact in the Republic of Ingushetia was drastically curtailed. In response to the situation in Ingushetia, the ADP project expanded the training events with local partners in neighboring republics such as KBR and Dagestan.
<table>
<thead>
<tr>
<th>Indicators</th>
<th>Definition/Description</th>
<th>Disaggregation</th>
<th>Data collection method</th>
<th>Frequency of Reporting</th>
<th>Baseline</th>
<th>Adjusted</th>
<th>Justification for Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-1 Number of people attending USA-assisted facilitated meetings in rural regions</td>
<td>This indicator is designed to measure the direct beneficiaries of the project – participants of trainings, study trips, grants, group consultations to VC actors, competitions, publications.</td>
<td>gender, age and region</td>
<td>semi-annually</td>
<td>Subtotal: 97,272,780</td>
<td>56%</td>
<td>54%</td>
<td>100%</td>
</tr>
<tr>
<td>F-2 Number of people from “at-risk” groups reached through USG-supported conflict mitigation activities</td>
<td>This indicator is designed to measure both direct and indirect beneficiaries of the project – participants in training activities and recipients of training, conferences, competitions, publications.</td>
<td>gender, age and region</td>
<td>semi-annually</td>
<td>Subtotal: 111,601,900</td>
<td>58%</td>
<td>56%</td>
<td>100%</td>
</tr>
<tr>
<td>I.1 Number of jobs created/sustained in targeted geographical areas</td>
<td>This indicator is designed to measure both direct and indirect beneficiaries of the project – participants and project supported institutions.</td>
<td>gender, age and region</td>
<td>semi-annually</td>
<td>Subtotal: 97,272,780</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>I.2 Number of direct and indirect beneficiaries reached</td>
<td>This indicator is designed to measure both direct and indirect beneficiaries of the project – participants and project supported institutions.</td>
<td>gender, age and region</td>
<td>semi-annually</td>
<td>Subtotal: 111,601,900</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>I.3 Number of USA-assisted facilitated meetings in rural regions towards strengthening and mitigating conflict</td>
<td>This indicator requires information on the number of meetings, conferences, round tables, study trips, grants, group consultations, and project supported institutions.</td>
<td>region</td>
<td>semi-annually</td>
<td>Subtotal: 1,808,931</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>IR.1 Number of direct and indirect beneficiaries reached</td>
<td>This indicator requires information on the number of direct and indirect beneficiaries of the project – participants and project supported institutions.</td>
<td>gender, age and region</td>
<td>semi-annually</td>
<td>Subtotal: 111,601,900</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>IR.1.1 Number of direct and indirect beneficiaries reached</td>
<td>This indicator requires information on the number of direct and indirect beneficiaries of the project – participants and project supported institutions.</td>
<td>gender, age and region</td>
<td>semi-annually</td>
<td>Subtotal: 111,601,900</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>IR.1.2 Number of agriculture and rural development organizations substantially improved their capacity as VS actors</td>
<td>This indicator requires information on the number of agriculture and rural development organizations substantially improved their capacity as VS actors.</td>
<td>region</td>
<td>semi-annually</td>
<td>Subtotal: 111,601,900</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
### Award Monitoring Plan Indicator Matrix

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Definition/Description</th>
<th>Objective</th>
<th>Unit of measurement</th>
<th>Data collection method</th>
<th>Frequency of Reporting</th>
<th>Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Number of VCs selected for assistance</td>
<td>The indicator indicates VCs selected by the project</td>
<td>region</td>
<td>VC</td>
<td>Register of educational/training events maintained ACDI/VOCA; select 100%</td>
<td>since a project</td>
<td>1 2</td>
</tr>
<tr>
<td>1.1 Number of VCs strengthened</td>
<td>This is an &quot;out&quot; indicator which encompasses all indicators, adhering the same methodology for data collection and presentation on the status of event and project.</td>
<td>region</td>
<td>VC</td>
<td>The methodology for collecting data on the status of the selected VCs is broadcast responsibly in appropriated cells.</td>
<td>since a project</td>
<td>1 2</td>
</tr>
</tbody>
</table>

#### Objective 1. Increased capacity of value chain actors

1. Percent of agriculture enterprises strengthened by improved techniques and practices

- This indicator is designed to measure the percent of small-scale U. S. firms producing agriculture or foods products in the region that have adopted innovative techniques and practices as a result of project activities. By technique or practice is defined as a method or series of actions that improve or enhance specific aspects of the production, production process, or output. This includes, but is not limited to, adoption of new agricultural techniques, improved techniques and practices, ACDI/VOCA will understand any adoption of new techniques and practices or any other adoption of improved techniques and practices that is measurable and that contributes to improved VCs. The methodology for data collection is the same in all regions.

<table>
<thead>
<tr>
<th>Percentage of beneficiaries</th>
<th>region</th>
<th>value chain</th>
<th>data source</th>
<th>data collection method</th>
<th>anticipated value</th>
<th>expected value</th>
<th>adjusted value</th>
</tr>
</thead>
<tbody>
<tr>
<td>26%</td>
<td>region</td>
<td>VC</td>
<td>ACDI/VOCA</td>
<td>register of events</td>
<td>58%</td>
<td>58%</td>
<td>58%</td>
</tr>
<tr>
<td>34%</td>
<td>region</td>
<td>VC</td>
<td>ACDI/VOCA</td>
<td>register of events</td>
<td>58%</td>
<td>58%</td>
<td>58%</td>
</tr>
<tr>
<td>46%</td>
<td>region</td>
<td>VC</td>
<td>ACDI/VOCA</td>
<td>register of events</td>
<td>58%</td>
<td>58%</td>
<td>58%</td>
</tr>
</tbody>
</table>

2. Increased volume of agriculture enterprise production in selected VCs

- This indicator reflects increased volume of agriculture enterprise production as a result of the project activities. The methodology for data collection is the same in all regions.

<table>
<thead>
<tr>
<th>Percentage of beneficiaries</th>
<th>region</th>
<th>value chain</th>
<th>data source</th>
<th>data collection method</th>
<th>anticipated value</th>
<th>expected value</th>
<th>adjusted value</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>region</td>
<td>VC</td>
<td>ACDI/VOCA</td>
<td>register of events</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>25%</td>
<td>region</td>
<td>VC</td>
<td>ACDI/VOCA</td>
<td>register of events</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>40%</td>
<td>region</td>
<td>VC</td>
<td>ACDI/VOCA</td>
<td>register of events</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>

3. Number of educational and training events conducted to strengthen capacity of VC actors

- This indicator indicates the number of educational and training events conducted in the region to strengthen capacity of VC actors. The methodology for data collection is the same in all regions.

<table>
<thead>
<tr>
<th>Number of beneficiaries</th>
<th>region</th>
<th>value chain</th>
<th>data source</th>
<th>data collection method</th>
<th>anticipated value</th>
<th>expected value</th>
<th>adjusted value</th>
</tr>
</thead>
<tbody>
<tr>
<td>115</td>
<td>region</td>
<td>VC</td>
<td>ACDI/VOCA</td>
<td>register of events</td>
<td>115</td>
<td>115</td>
<td>115</td>
</tr>
<tr>
<td>230</td>
<td>region</td>
<td>VC</td>
<td>ACDI/VOCA</td>
<td>register of events</td>
<td>230</td>
<td>230</td>
<td>230</td>
</tr>
<tr>
<td>130</td>
<td>region</td>
<td>VC</td>
<td>ACDI/VOCA</td>
<td>register of events</td>
<td>130</td>
<td>130</td>
<td>130</td>
</tr>
</tbody>
</table>

4. Number of beneficiaries attending educational and training events to strengthen capacity of VC actors

- This indicator indicates to measure the direct beneficiaries of the project from small-scale agricultural and food processing businesses, rural laborers, group members, women, and the other participants who will be identified as beneficiaries.

<table>
<thead>
<tr>
<th>Number of beneficiaries</th>
<th>region</th>
<th>gender and region</th>
<th>data source</th>
<th>data collection method</th>
<th>anticipated value</th>
<th>expected value</th>
<th>adjusted value</th>
</tr>
</thead>
<tbody>
<tr>
<td>140</td>
<td>region</td>
<td>gender and region</td>
<td>ACDI/VOCA</td>
<td>register of events</td>
<td>140</td>
<td>140</td>
<td>140</td>
</tr>
<tr>
<td>50</td>
<td>region</td>
<td>gender and region</td>
<td>ACDI/VOCA</td>
<td>register of events</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>
## Award Monitoring Plan Indicator Matrix

<table>
<thead>
<tr>
<th>Region</th>
<th>Year</th>
<th>Value chains / Partners</th>
<th>Subtotal</th>
<th>Inc. women</th>
<th>Inc. youth 15-30 of age</th>
<th>Baseline - Value chains / Partners</th>
<th>Adjusted - Value chains / Partners</th>
<th>Total - Value chains / Partners</th>
<th>Justification for Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dagestan</td>
<td>1st Year</td>
<td>55</td>
<td>230</td>
<td>280</td>
<td>Dec 29 2012</td>
<td>Data collection method Frequency of Reporting</td>
<td>Baseline</td>
<td>Adjusted</td>
<td>Total</td>
</tr>
<tr>
<td>Kabardino-Balkaria</td>
<td>1st Year</td>
<td>73</td>
<td>22</td>
<td>20</td>
<td>Semi-annual</td>
<td>Region</td>
<td>Event or VC</td>
<td>Value chains / Partners</td>
<td>Subtotal</td>
</tr>
<tr>
<td>Ingushetya</td>
<td>1st Year</td>
<td>58</td>
<td>9</td>
<td>7</td>
<td>Semi-annual</td>
<td>Region</td>
<td>Event or VC</td>
<td>Value chains / Partners</td>
<td>Subtotal</td>
</tr>
<tr>
<td>Chechnya</td>
<td>1st Year</td>
<td>13</td>
<td>7</td>
<td>3</td>
<td>Semi-annual</td>
<td>Region</td>
<td>Event or VC</td>
<td>Value chains / Partners</td>
<td>Subtotal</td>
</tr>
</tbody>
</table>

### Objective 2 - Improved market linkages among value chain actors

#### 2.1 Number of marketing linkages established for VC actors

This indicator measures the number of linkages established for VC actors. This includes agreements (of any legal format) between market actors (wholesalers, processors, buyers, suppliers) and/or KRP.

<table>
<thead>
<tr>
<th>Region</th>
<th>Value chains / Partners</th>
<th>Baseline</th>
<th>Adjusted</th>
<th>Total</th>
<th>Justification for Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dagestan</td>
<td>Feed production</td>
<td>13</td>
<td>20</td>
<td>35</td>
<td>Increase by 5% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Kabardino-Balkaria</td>
<td>Milk</td>
<td>86</td>
<td>70</td>
<td>110</td>
<td>Increase by 5% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Ingushetya</td>
<td>Cucumber</td>
<td>221</td>
<td>80</td>
<td>200</td>
<td>Increase by 5% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Chechnya</td>
<td>Garlic</td>
<td>73</td>
<td>22</td>
<td>20</td>
<td>Increase by 5% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
</tbody>
</table>

#### 2.2 Number of participants in marketing linkages established for VC actors

This indicator measures the number of participants in marketing linkages established for VC actors. This includes participants of any age and gender attending new linkages or strengthening existing linkages.

<table>
<thead>
<tr>
<th>Region</th>
<th>Value chains / Partners</th>
<th>Baseline</th>
<th>Adjusted</th>
<th>Total</th>
<th>Justification for Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dagestan</td>
<td>Feed production</td>
<td>29</td>
<td>2</td>
<td>31</td>
<td>Increase by 2% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Kabardino-Balkaria</td>
<td>Milk</td>
<td>27</td>
<td>0</td>
<td>27</td>
<td>Increase by 2% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Ingushetya</td>
<td>Cucumber</td>
<td>52</td>
<td>0</td>
<td>52</td>
<td>Increase by 2% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Chechnya</td>
<td>Garlic</td>
<td>14</td>
<td>5</td>
<td>19</td>
<td>Increase by 2% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
</tbody>
</table>

#### 2.3 Number of educational and training events conducted to strengthen linkages among VC actors

This indicator includes the number of educational and training events focused on strengthening linkages among VC actors. The events include study tours, seminars, conferences, round tables, study trips, etc.

<table>
<thead>
<tr>
<th>Region</th>
<th>Value chains / Partners</th>
<th>Baseline</th>
<th>Adjusted</th>
<th>Total</th>
<th>Justification for Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dagestan</td>
<td>Feed production</td>
<td>12</td>
<td>6</td>
<td>18</td>
<td>Increase by 3% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Kabardino-Balkaria</td>
<td>Milk</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>Increase by 3% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Ingushetya</td>
<td>Cucumber</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>Increase by 3% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Chechnya</td>
<td>Garlic</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>Increase by 3% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
</tbody>
</table>

#### 2.4 Number of beneficiaries attending events to strengthen linkages between VC actors

This indicator measures the number of beneficiaries attending events to strengthen linkages between VC actors. Both the individuals and the participants of any age and gender attending new linkages or strengthening existing linkages.

<table>
<thead>
<tr>
<th>Region</th>
<th>Value chains / Partners</th>
<th>Baseline</th>
<th>Adjusted</th>
<th>Total</th>
<th>Justification for Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dagestan</td>
<td>Feed production</td>
<td>65</td>
<td>2</td>
<td>67</td>
<td>Increase by 2% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Kabardino-Balkaria</td>
<td>Milk</td>
<td>6</td>
<td>4</td>
<td>10</td>
<td>Increase by 2% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Ingushetya</td>
<td>Cucumber</td>
<td>26</td>
<td>0</td>
<td>26</td>
<td>Increase by 2% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Chechnya</td>
<td>Garlic</td>
<td>32</td>
<td>0</td>
<td>32</td>
<td>Increase by 2% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
</tbody>
</table>

#### 2.5 Linkages established between VC actors (including marketing linkages)

This indicator is designed to measure the number of linkages established between VC actors. This includes an increase in the number of agreements (of any legal format) between market actors (wholesalers, processors, buyers, suppliers) and/or KRP.

<table>
<thead>
<tr>
<th>Region</th>
<th>Value chains / Partners</th>
<th>Baseline</th>
<th>Adjusted</th>
<th>Total</th>
<th>Justification for Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dagestan</td>
<td>Feed production</td>
<td>66</td>
<td>5</td>
<td>71</td>
<td>Increase by 2% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Kabardino-Balkaria</td>
<td>Milk</td>
<td>29</td>
<td>4</td>
<td>33</td>
<td>Increase by 2% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Ingushetya</td>
<td>Cucumber</td>
<td>22</td>
<td>6</td>
<td>28</td>
<td>Increase by 2% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Chechnya</td>
<td>Garlic</td>
<td>52</td>
<td>15</td>
<td>67</td>
<td>Increase by 2% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
</tbody>
</table>

#### 2.6 Increased volume of agriculture sales in selected KCA

This indicator measures the increased volume of agriculture sales in selected KCA. This includes an increase in the volume of agriculture sales at the rayon level. This is the level at which a distinct attribution to project activities can be made.

<table>
<thead>
<tr>
<th>Region</th>
<th>Value chains / Partners</th>
<th>Baseline</th>
<th>Adjusted</th>
<th>Total</th>
<th>Justification for Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dagestan</td>
<td>Feed production</td>
<td>$495,290</td>
<td>$495,290</td>
<td>$990,580</td>
<td>Increase by 3% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Kabardino-Balkaria</td>
<td>Milk</td>
<td>$77,970,790</td>
<td>$77,970,790</td>
<td>$155,941,580</td>
<td>Increase by 3% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Ingushetya</td>
<td>Cucumber</td>
<td>$7,492,600</td>
<td>$7,492,600</td>
<td>$14,985,200</td>
<td>Increase by 3% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
<tr>
<td>Chechnya</td>
<td>Garlic</td>
<td>$1,801,957</td>
<td>$1,801,957</td>
<td>$3,603,914</td>
<td>Increase by 3% to the baseline to (7/12) or 58.33% of the target.</td>
</tr>
</tbody>
</table>
### Award Monitoring Plan Indicator Matrix

<table>
<thead>
<tr>
<th>Objective 3 - Increased access of small agricultural businesses to finance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3.1 Number of borrowers, VC actors, receiving loans</strong></td>
</tr>
<tr>
<td>This indicator is designed to measure the number of borrowers receiving loans from VC actors, and region</td>
</tr>
<tr>
<td>910 174 100%</td>
</tr>
<tr>
<td>830 867 90%</td>
</tr>
<tr>
<td>680 627 97%</td>
</tr>
<tr>
<td>610 607 95%</td>
</tr>
<tr>
<td><strong>3.2 Total volume of loans received by VC actors</strong></td>
</tr>
<tr>
<td>This indicator is designed to measure the volume of loans received by VC actors, and region USD</td>
</tr>
<tr>
<td>9,882,833 8,800,800 3,620,000 3,180,080 1,835,333 2,133,333 421%</td>
</tr>
<tr>
<td><strong>3.3 Total volume of grants received by VC actors</strong></td>
</tr>
<tr>
<td>This indicator is designed to measure the total volume of grants received by VC actors, and region grant</td>
</tr>
<tr>
<td>3,350,000 3,300,000 90%</td>
</tr>
<tr>
<td>2,800,000 2,500,000 425%</td>
</tr>
<tr>
<td>2,133,333 2,000,000 106%</td>
</tr>
<tr>
<td><strong>3.4 Number of opportunities to strengthen business capacity of potential borrowers</strong></td>
</tr>
<tr>
<td>This indicator is designed to measure the number of opportunities to strengthen the business capacity of potential borrowers, and region</td>
</tr>
<tr>
<td>775 117 150%</td>
</tr>
<tr>
<td>780 120 150%</td>
</tr>
<tr>
<td>565 100 176%</td>
</tr>
</tbody>
</table>

### Justification for Adjustment
- Year 2 Target Adjusted (174) or 95% of Original Program Target
- Year 2 Adjusted (100% - 95%) of Original Program Target
- Year 2 Target Adjusted (213,333) or 421% of Original Program Target
- Year 2 Adjusted (100% - 421%) of Original Program Target
- Year 2 Target Adjusted (1,835,333) or 421% of Original Program Target
- Year 2 Adjusted (100% - 95%) of Original Program Target

### Data Collection Method
- Baseline data is required
- Historical data is required
- None

### Frequency of Reporting
- Semi-annually
- Annually

### Baseline
- 2011
- 2012

### Administrative Information
- Data from May 2011 to Dec 2012
- Baseline data is required
- Historical data is required
- None

### Unit of Disaggregation
- Individuals (Participants)
<table>
<thead>
<tr>
<th>Objective 4 - Increased access of small agricultural businesses to educational and extension services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6.1 Number of beneficiaries - VC actorswho received services from agricultural educational and extension services</strong></td>
</tr>
<tr>
<td>Region: semi-annually</td>
</tr>
<tr>
<td>Data: Baseline data is not required</td>
</tr>
<tr>
<td><strong>6.2 Total volume of grants received for demonstration facilities</strong></td>
</tr>
<tr>
<td>Region: semi-annually</td>
</tr>
<tr>
<td>Data: Baseline data is not required</td>
</tr>
<tr>
<td><strong>6.3 Total number of grants received for demonstration facilities</strong></td>
</tr>
<tr>
<td>Region: semi-annually</td>
</tr>
<tr>
<td>Data: Baseline data is not required</td>
</tr>
<tr>
<td><strong>6.4 Number of educational and training events conducted to strengthen the capacity of educational and extension institutions</strong></td>
</tr>
<tr>
<td>Region: semi-annually</td>
</tr>
<tr>
<td>Data: Baseline data is not required</td>
</tr>
<tr>
<td><strong>6.5 Number of beneficiaries attending events to strengthen the capacity of educational and extension institutions</strong></td>
</tr>
<tr>
<td>Region: semi-annually</td>
</tr>
<tr>
<td>Data: Baseline data is not required</td>
</tr>
<tr>
<td><strong>6.6 Number of beneficiaries trained on the basis of demonstration facilities</strong></td>
</tr>
<tr>
<td>Region: semi-annually</td>
</tr>
<tr>
<td>Data: Baseline data is not required</td>
</tr>
</tbody>
</table>
### Award Monitoring Plan Indicator Matrix

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Definition/Description</th>
<th>Disaggregation</th>
<th>Unit of Measurement</th>
<th>Data collection method</th>
<th>Frequency of Reporting</th>
<th>Baseline</th>
<th>Original Program Targets</th>
<th>Revised Program Targets</th>
<th>Adjusted</th>
<th>Year 2 Adjusted</th>
<th>Fiscal Year Target</th>
<th>Justification for Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 Increased percent of beneficiaries, VC actors, who adopt improved techniques and practices</td>
<td>The indicator will measure the percent of beneficiaries and VC actors who adopt improved techniques and practices.</td>
<td>region percentage of business entities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2 Number of publications and outreach activities through mass media</td>
<td>This indicator is designed to measure the number of publications and outreach activities through mass media.</td>
<td>event Number of events managed by UCDP/UC and/or AKF</td>
<td>semi-annual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.3 Number of beneficiaries getting access to informational materials through publications</td>
<td>This indicator is designed to measure the number of beneficiaries getting access to informational materials through publications.</td>
<td>person number of beneficiaries reached as % of target</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Objective 5 - Increased capacity of the Key Regional Partners

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Definition/Description</th>
<th>Disaggregation</th>
<th>Unit of Measurement</th>
<th>Data collection method</th>
<th>Frequency of Reporting</th>
<th>Baseline</th>
<th>Original Program Targets</th>
<th>Revised Program Targets</th>
<th>Adjusted</th>
<th>Year 2 Adjusted</th>
<th>Fiscal Year Target</th>
<th>Justification for Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 Number of partner organizations that improved their internal management and systems</td>
<td>The indicator measures the development of the partner organizations' capacity regarding internal management.</td>
<td>region</td>
<td>Pre-assessment survey conducted by ACDI/VOCA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2 Number of capacity building trainings that support KKPs ability to independently promote the development of VCs</td>
<td>The indicator captures the number of capacity building trainings that support KKPs' ability to independently promote the development of VCs.</td>
<td>event Register of training participants</td>
<td>semi-annual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.3 Increased operational budget of KKPs</td>
<td>The indicator captures the increase of the KKPs' budget.</td>
<td>region</td>
<td>Official budget of KKPs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.4 Project participants are

#### Note

- Objective 5: Increased capacity of the Key Regional Partners
- Indicators are designed to monitor key performance indicators (KPIs) related to increased capacity of the Key Regional Partners (KRP).
- The indicators are measured against baseline targets established at the outset of the project.
- The performance of the indicators is monitored on a regular basis to ensure that the project meets its objectives.

---

Page 6 of 6