I. Introduction and Context

Country Context

Armenia is a small (29,800 km²) landlocked lower-middle income country with a population of about 3.1 million, a large diaspora population of around 7 million, and an average per capita GNI of $3,360 in 2011. Real GDP growth was more than 10% for most of the last decade, strongly fueled by remittances, but there was a substantial contraction in 2009 due to the global economic and financial crisis. Growth has since resumed, although at a slower pace, reaching 4.6% in 2011. Services including construction and tourism (46%), industry including mining and energy (37%) and agriculture (17%) are the largest components of GDP. Inflation has dropped to about 5% at present from a high of 9% in 2010, but was less than 5% throughout most of the last decade.
Major exports include mining products and a limited range of foodstuffs and beverages, but are outweighed by imports of manufactured goods and food, resulting in a substantial trade deficit of around US$2.5 billion annually. Remittances from the Armenian diaspora of more than US$1 billion, foreign direct investment of more than US$600 million, and donor funding help to close the gap. Armenia joined the WTO in January 2003 and has put in place a favorable trade environment with low tariffs and some improvements in tax and customs administration. It is ranked 39th in the Index of Economic Freedom and 55th in the 2012 Doing Business index, with a major constraint being connection to the electricity grid. The population has remained stable in recent years, with about 65% living in urban areas. In the 1990s, more than 50% were classified as poor. This figure was reduced to 27% in 2008, but increased to around 36% in 2010 due to the economic and financial crises. Similar percentages of poor live in urban and rural areas.

Overall, Armenia has reduced poverty, kept inflation at a manageable level, maintained a stable currency, and privatized most small and medium-sized enterprises during the transition period. Nevertheless, it is particularly vulnerable to external events and the global economic situation due to its geographic isolation, narrow export base, reliance on a single transport corridor through Georgia, substantial linkages with the Russian economy, susceptibility of agriculture to weather conditions, potential for regional instability, and high dependence on remittances. Among the major pillars of the government’s strategy are reducing poverty, ensuring human development, deepening economic growth and improving public administration as indicated in the 2011-2013 Medium-Term Expenditure Framework.

Sectoral and Institutional Context

Agriculture remains vital to the Armenian economy and in 2011 together with the associated agro-processing accounted for about 17% of GDP, 17% of the export earnings and about 44% of employment. The fast economic growth over the last decade has generated new opportunities for the agriculture sector, which has grown at a robust rate averaging more than 6% annually since 1997 despite the downturn in 2009-10. Exports of agricultural products have doubled since 2005, mostly beverages and to a lesser extent fruit and vegetable products, although there was a significant but proportionally quite small increase in export of live animals in 2011. However, the sector has not been able to fully take advantage of the opportunities, with expanding consumer demand partly met by a substantial increase in imported products, which has outweighed exports and resulted in a steadily increasing gap between imports and exports and a widening of the agro-food deficit. Overall, Armenia is a net importer of agricultural products with agricultural imports of US$700 million in 2011 compared with exports of about US$230 million.

Productivity has grown substantially in the agriculture sector in the last decade. The Crop Production Index more than doubled from 2002 to 2009 although there was a substantial drop in 2010 due to inclement weather conditions. During the same period the Livestock Production Index increased by about 60%. Crop production typically accounts for about two thirds of the Gross Agricultural Output (GAO), while livestock accounts for one-third. However, about 60% of the agricultural land in Armenia is pasture and grassland in the country’s mountainous areas, where livestock production is the most important economic activity. Productivity increases have been supported by increases in availability of inputs, improved availability of finance, some foreign investment, improved market linkages, and an increase in farmers’ knowledge and skills. Nevertheless, yields are a long way from potential, with cereals averaging only 2.5 tons per hectare (t/ha) and cow milk yields around 2,000 liters per head based on official statistics, although these
figures are substantial improvements over the 1990s figures of 2 t/ha and 1,400 liters/head, respectively. Uncontrolled exploitation of grazing lands in many upland villages has resulted in clearly visible degradation, especially on nearby pastures, and along with animal health problems, can severely constrain livestock productivity. Livestock productivity could be increased by 40% with improved animal husbandry, feeding and veterinary care while crop yield increases of 60% are quite feasible in the medium term with better varieties and improved management including soil fertility.

The sector is dominated by smallholders, with some 335,000 households with an average landholding of around 1.4 hectares and a generally diversified production system involving both crops and livestock. Only a relatively small proportion can be considered truly commercial, and many farmers, especially those in more remote areas, are among the most vulnerable with about one-third still living in poverty. However, a shift towards increased commercialization in the sector has been evident in recent years. Some farmers (around 15%) now cultivate leased land, although a third of farmers do not cultivate all their land, mainly due to poor land quality, lack of water or distance from the farm. New agro-processors and small rural businesses are appearing, an increasing number of contractual arrangements between processors and producers are in place, and producer associations and cooperatives are helping to consolidate production and markets. Nevertheless, the links between the food processing industry and agricultural producers remain weak, and many rural enterprises lack technology and know-how that could improve their competitiveness.

Key constraints limiting the sector’s full potential could be overcome by improving market access, supporting the commercialization process, and enhancing employment opportunities in rural areas while protecting the natural environment. Further development of rural enterprises including cooperatives and associations, and strengthening the links between agricultural producers and the food processing industry are critical. This is especially true for those products where Armenia has a comparative advantage such as fodder-based dairy and meat production, fruits and vegetables, and niche products such as honey. Food safety and food quality standards are becoming increasingly relevant to the competitiveness of Armenia’s agro-food industry and, along with inconsistent supply, are major barriers for increasing exports and offsetting imports to meet domestic demand for fresh and processed products.

Relationship to CAS
The objective of the proposed Community Agricultural Resource Management and Competitiveness II (CARMAC II) Project targeting improved productivity and market access is consistent with and is in full support of the second pillar “strengthening the foundations for medium-term competitiveness and growth” of the Country Partnership Strategy (CPS) for FY09-12 which was recently extended to 2013. The project would also address the first pillar of the CPS “addressing vulnerability and mitigating the adverse poverty effects of the 2009 global economic crisis”.

The project would be aligned with the government’s agriculture sector objectives to promote sustainable agricultural development, to ensure greater food security, and to increase rural incomes, as specified in their Agricultural Sustainable Development Strategy. Key priorities are to: (a) continue and deepen agrarian reform; (b) ensure food safety and improve food security; (c) promote the application of advanced agricultural technologies; (d) improve animal health; and (e) promote agri-processing and the supply and service infrastructure. In addition, the Sustainable Development Program approved in October 2008 is the government’s second poverty reduction strategy paper and
presents its socio-economic program. The program aims to further reduce poverty, ensure human
development, deepen economic growth and accelerate the development of lagging regions. The
government is committed to developing the rural areas and has placed a high priority on increasing
agricultural competitiveness. It has specifically requested a follow-up to the ongoing Bank-funded
Community Agricultural Resource Management and Competitiveness (CARMAC) Project including
extending the sustainable development of pasture-based livestock systems, improving market access
including strengthening links between producers and processors, promoting food safety and
supporting producers associations.

The proposed project would follow on from the Bank-funded projects in the agriculture sector,
particularly the CARMAC project and the previous Rural Enterprise and Small-scale Agricultural
Development (RESCAD) project. These projects included community development activities,
support for the development of an effective agriculture advisory system, and veterinary and food
safety support.. In particular, the CARMAC project is successfully improving livestock and
pastures systems in 54 of the planned 55 communities to date, while both the RESCAD and
CARMAC projects included Competitive Grants Programs that have supported some 70 rural
businesses to date to introduce technical innovations and improve business practices. Lessons
learned from these projects suggest the need to widen the number of communities implementing
improved pasture/livestock systems (there are a total of 866 rural communities in Armenia);
increase the emphasis on community participation and decision-making; modify the approach to the
counterpart contribution in the pasture community grants as required; introduce a broader food
safety and quality approach to enhance competitiveness; and further develop the matching grant
approach for development of specific value chains. The project would also be fully aligned with the
Bank’s draft 2012 Agriculture and Rural Development Policy Note. Four of its seven policy
recommendations are addressed: a) value chain and market integration; b) food safety; c) structural
transformation and rural employment, including development of small and medium sized rural
enterprises; and d) agricultural practices, including development of a Code of Good Agricultural
Practices and combating over-exploitation of natural resources. Lessons would also be drawn from
the previous Avian Influenza Preparedness Project, and possible synergies with the irrigation project
under preparation and rural roads improvement activities in the Lifeline Roads Improvement Project
will be assessed. The project will also take into account the recommendations of other studies such
as the Climate Change and Agriculture Country Note.

II. Proposed Development Objective(s)

Proposed Development Objective(s) (From PCN)
The proposed Project Development Objective (PDO) is to (i) further improve productivity and
sustainability of pasture and livestock systems in targeted communities and (ii) increase the
marketed production of selected livestock and high value agri-food value chains. This will be
achieved through: (i) developing and implementing participatory management plans to improve
productivity and sustainability of pasture and livestock systems in targeted communities in upland
areas; (ii) linking producers and processors to markets, focusing on selected livestock production
(milk and meat) and high value produce (fruit and vegetables); and (iii) supporting development of
specific public sector institutions that are essential to increase the marketed production from these
products.

Key Results (From PCN)
The project is anticipated to produce the following key results in the project areas:
(i) Increased livestock productivity measured by annual milk production per animal and average daily animal weight gain;
(ii) Improved pasture and livestock system management effectiveness;
(iii) Increased marketed production of milk, meat, fruits and vegetables;
(iv) Regulatory measures improved that affect marketed production.

III. Preliminary Description

Concept Description

The proposed project would consist of four components with provisional World Bank funding of US$30 million over five years. The design incorporates lessons based on experiences under the ongoing CARMAC project and recommendations from the Bank’s 2012 Policy Note. The project’s geographical coverage would focus on similar areas as defined in the CARMAC project, namely selected communities where livestock is a main source of livelihood, and would use a demand-driven approach and similar criteria for selection of specific sites. The project would also address the government’s major areas of concern and key issues and constraints in the agriculture sector. First, the project would extend the coverage of the pasture-based livestock system component by including more communities, primarily those adjacent to the villages already included in CARMAC, and would fine-tune the CARMAC program based on lessons learned and to emphasize community participation and decision-making. Second, the project would support the development of selected value chains by strengthening links between producers and processors, promoting food safety and supporting producers’ associations, including provision of matching grants. Third, the project would provide support to public sector institutions and development of regulatory frameworks in support of improved market access. In this way, the project will support the overall goals of increasing competitiveness and market access of Armenian produce. Moreover, the project would seek to address gender and social inclusion issues primarily through its use of participatory processes. Efforts will be made to ensure participation of all community members, including women, in the pasture/livestock management planning process and in the value chain activities including the proposed matching grant program through extensive awareness campaigns and establishment of appropriate selection criteria. Other means such as formation of women’s groups or change in practices to improve access by women to services will also be explored.

Component 1: Community/Pasture Livestock Management System. In line with the government request to expand and strengthen similar activities of CARMAC, the objective of this component would be to continue the implementation of an efficient and sustainable community managed pasture/fodder based livestock production system in selected communities where livestock is a primary source for livelihood and where communities have a strong interest to improve their pasture production. The component would be strengthened based on lessons learned during the on-going CARMAC project including increased emphasis on community participation and decision-making. The component would fund two main activities:

a) Development of Sustainable Pasture/ Livestock Management Plans. Pasture User Associations (PUAs), comprising all community pasture users, would be mobilized at the village level. The PUAs would be responsible for developing and implementing the pasture/livestock management plans (PLMP), with the participatory process being supported by Marz Support Teams (MSTs) and technical experts. Comprehensive pasture and fodder assessments would be carried out including soil tests, plant assessments, evaluations of productivity and quality, and assessments of feed/fodder balances. The participatory plan would define: (a) measures to improve pasture productivity, such
as rotational grazing, protecting areas for regeneration, pasture rehabilitation, improving access to remote pastures, and needs for supplementary fodder production; (b) grazing utilization levels; (c) animal health requirements and breed improvement measures; (d) investment needs; and (e) responsibilities for implementation of the planned activities, targets and indicators. Implementation of the plans would be further supported through mobilization of community veterinarians to provide animal health services and technical assistance.

b) Community Fund for Implementation of Plans. Grants would then be provided for each PUA to implement their PLMP; grant amounts would depend on pasture area and existing number of livestock units with beneficiaries contributing a percentage of the costs. Investments could include: (a) infrastructure to access and use remote pastures, such as spot road improvements, stock watering points, shelters and stock-pens, and milk cooling equipment; (b) machinery to produce and harvest fodder; (c) costs of rehabilitation measures for degraded areas such as fencing, weed and shrub control, and re-seeding; (d) inputs for supplementary fodder production such as seeds; (e) community-based disease control programs including for market-limiting diseases, zoonoses and parasite control; (f) artificial insemination; (g) training and advisory services supplied by both public and/or private service providers; (h) veterinary support through community veterinarians; and (i) PUA support, such as office equipment and furnishings.

Component 2: Value Chain Development. The objective of this component would be to increase quantity and quality of Armenian agricultural produce to meet domestic and international demand by developing enhanced linkages between producers and processors, creating new and improving existing business opportunities, and raising product quality and food safety practices along the entire chain of production and consumption. This would encompass on-farm quality assurance and good agricultural practices, good management practices and Hazard Analysis and Critical Control Points (HACCP) or other certification for food business operators (FBO) to comply with market standards and expectations. The component would finance activities aimed at improving productivity and market integration along selected supply chains and promoting linkages among stakeholders including processors, traders, cooperatives, associations and rural enterprises. The component would fund two main activities:

a) Facilitation and Training. Activities would include: (i) Strengthening and establishment of producers’ associations and cooperatives; (ii) Provision of business management advice and training to stakeholders along the value chain; (iii) Promotion of food safety and quality improvements through training and technical assistance aligned with appropriate national or international standards and the Deep and Comprehensive Free Trade Agreement (DCFTA) with the European Union; and (iv) Market facilitation such as exchange visits, trade fairs, test marketing and promotion of products for both export and domestic markets.

b) Matching Grant funding for sub-projects along the value chain that would: (i) introduce and test technology innovations; (ii) add value such as improved storage, processing, marketing, and quality improvements, (iii) develop business linkages and partnerships between producers and processors; and (iv) incorporate food safety practices and compliance (such as introduction of HACCP) by registered businesses, cooperatives and associations. Grants would be provided in response to proposals from various rural business enterprises, and thus would be market-led and demand-driven. Applicants will need to demonstrate that the sub-projects address critical constraints in the value chain and will be required to contribute at least 30% of the investment cost.
Component 3: Enhancing Agricultural Regulatory and Institutional Framework. The objective of the component would be to help modernize the agricultural sector through support to public sector institutions and development of regulatory frameworks that are important requirements to increase the marketed production from the selected products. Examples are: (i) Introduction of a Code of Good Agricultural Practice; (ii) Regulatory and Institutional Framework for Certification and Labeling of Organic Produce; (iii) Development of a legal framework for cooperatives and producer associations; (iv) Support to Food Safety Institutions to enhance their capacity for inspection and regulation of food safety requirements through training and technical assistance. The project would cooperate with the on-going IDF Grant for Food safety capacity Building in the public sector and related institutional reform to align with the EU Free Trade Agreement. The project would also cooperate with the Global Food Safety Capacity Building Partnership to access support for a comprehensive national food safety capacity building needs assessment and subsequent training resources to address specific project constraints in this area.

Component 4: Project Coordination and Management. The project would continue to be coordinated by the existing Agriculture Projects Implementation Unit State Agency (APIU) of the Ministry of Agriculture. The project would use the present CARMAC structure for financial management, procurement, monitoring and evaluation, and environmental safeguards. The project would provide incremental project management costs in these areas, additional technical specialists as identified during project preparation, costs of transport and field visits, and consulting for impact assessments including baseline survey, interim and final project evaluations; and audit.

IV. Safeguard Policies that might apply

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V. Financing (in USD Million)

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