PROJECT PAPER

ON A

PROPOSED ADDITIONAL FINANCING CREDIT

IN THE AMOUNT OF SDR 3.7 MILLION
(US$6.0 MILLION EQUIVALENT)

TO

THE REPUBLIC OF MOLDOVA

FOR THE

RURAL INVESTMENT AND SERVICES PROJECT II

April 17, 2008

Sustainable Development Department
Ukraine, Belarus and Moldova Country Unit
Europe and Central Asia Region

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CURRENCY EQUIVALENTS
(Exchange Rate Effective March 31, 2008)

Currency Unit = Moldova Leu
MDL 11.00 = US$1
US$ 1.64664 = SDR 1

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ACSA National Rural Development Agency
APL Adaptable Lending Program
CAPMU Consolidated Agriculture Project Management Unit
CAS Country Assistant Strategy
CLD Credit Line Directorate
DA Designated Account
DAs Development Agencies
DAAS Drought Adaptation Advisory Services
DAC Drought Adaptation Component
DO Development Objective
EIA Environmental Impact Assessment
EMP Environmental Management Plan
ERR Economic Rate of Return
FAO Food and Agriculture Organization
FM Financial Management
FMM Financial Management Manual
FMR Financial Management Report
FMS Financial Management Specialist
GoM Government of Moldova
IDA International Development Association
IFAD International Fund for Agricultural Development
IFRs Interim Financial Reports
IFS Irrigation Finance Services
ILO International Labour Organization
IP Implementation Progress
MCC Millennium Challenge Corporation
MAFI Ministry of Agriculture and Food Industry
MoF Ministry of Finance
OP Operational Procedure
PDO Project Development Objective
PFI Participating Financial Institutions
# CONTENTS

A. Introduction .................................................................................................................. 1
B. Background and Rationale for additional financing .................................................. 2
   Sector Background ...................................................................................................... 2
   The Drought of 2007 ............................................................................................... 2
   Irrigation in Moldova ............................................................................................... 3
   The Rural Investment and Services Project II (RISP II) ............................................ 4
C. Proposed Changes ....................................................................................................... 5
D. Consistency with Country Assistance Strategy ............................................................ 6
E. Appraisal of New Activities .......................................................................................... 6
   General ..................................................................................................................... 6
   Economic Assessment ............................................................................................... 7
   Technical .................................................................................................................. 7
   Fiduciary ................................................................................................................... 8
   Procurement ........................................................................................................... 8
   Financial Management ............................................................................................. 9
   Environmental ......................................................................................................... 10
   Social ....................................................................................................................... 10
F. Expected Outcomes ....................................................................................................... 10
G. Benefits and Risks ....................................................................................................... 11
H. Financial Terms and Conditions for the Additional Financing .................................... 12
   Annex 1: Procurement Plan ...................................................................................... 13
   Annex 2: Economic Assessment ............................................................................. 14
   Annex 3: Technical Review ..................................................................................... 15
REPUBLIC OF MOLDOVA
Additional Financing for the Rural Investment and Services Project
PROJECT PAPER DATA SHEET

Date: April 17, 2008
Country: Moldova
Project Name: Rural Investment and Services
Project II (APL2) – Additional Financing
Project ID: P110421
Recipient: Republic of Moldova
Responsible agency: Ministry of Agriculture and Food Industry, Ministry of Finance

Team Leader: Pierre-Olivier Colleye
Sector Manager: Maninder Gill
Country Director: Paul Bermingham
Environmental Category: FI

Revised estimated disbursements (Bank FY/US$m)

<table>
<thead>
<tr>
<th>FY</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual</td>
<td>5.6</td>
<td>3.0</td>
<td>4.6</td>
<td>7.8</td>
</tr>
<tr>
<td>Cumulative</td>
<td>5.6</td>
<td>8.6</td>
<td>13.2</td>
<td>21.0</td>
</tr>
</tbody>
</table>

Current closing date: June 30, 2010
Revised closing date [if applicable]:

Does the restructured or scaled-up project require any exceptions from Bank policies? ○ Yes X No
Have these been approved by Bank management? ○ Yes ○ No
Is approval for any policy exception sought from the Board? ○ Yes X No

Revised project development objectives/outcomes [If applicable]

Does the scaled-up or restructured project trigger any new safeguard policies? YES If so, click here to indicate which one(s)
Projects on International Waterways (OP/BP 7.50)

For Additional Financing

[ ] Loan [X] Credit [ ] Grant

For Loans/Credits/Grants:
Total Bank financing: SDR 3.7 million (US$6 million equivalent)
Proposed terms: Standard IDA terms.

Financing Plan (US$m.)

<table>
<thead>
<tr>
<th>Source</th>
<th>Local</th>
<th>Foreign</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recipient</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>IDA</td>
<td>6.00</td>
<td></td>
<td>6.00</td>
</tr>
<tr>
<td>Others (Beneficiaries and participating banks)</td>
<td>2.35</td>
<td></td>
<td>2.35</td>
</tr>
<tr>
<td>Total</td>
<td>8.35</td>
<td></td>
<td>8.35</td>
</tr>
</tbody>
</table>
A. Introduction

1. In 2007, Moldova suffered a catastrophic drought of unprecedented severity with precipitation levels up to 75% lower than normal, and peak summer temperatures at 3-4°C above normal. The drought resulted in losses of up to 75% for major crops such as wheat, maize and sunflower. The tremendous negative impacts on rural livelihoods threaten to curtail or even reverse recent development gains and affect growth prospects. The problem is exacerbated by the fact that drought is becoming endemic in large parts of the country. Without adequate response measures, agricultural production may fall permanently, leading to increased poverty in rural areas.

2. This Project Paper (PP) seeks the approval of the Executive Directors to provide additional financing in the amount of SDR3.7 million (US$6.0 million equivalent) to the Republic of Moldova (RoM) for the restructuring of the Rural Investment and Services Project II (RISPII: P090673, IDA Credit 4157-MD, US$7.5 million; IDA Grant H211 MD, US$7.5 million). The proposed additional financing would restructure RISP II by adding a Drought Adaptation Component focused on providing targeted investments for small-scale on-farm irrigation rehabilitation and the provision of technical assistance to farmers.

3. Financial support for investments in small-scale irrigation rehabilitation will be provided to eligible beneficiaries through the existing RISP II credit line mechanism, employing the same procedures and institutional set-up that exist under RISP II (approximately 87% of proposed additional financing proceeds). The difference under the proposed Component will be the availability of a small concessionary term (20% of the value of a loan will be forgiven upon timely repayment of the first 80%), in order to alleviate borrowing costs to beneficiaries who are struggling financially in the aftermath of the 2007 catastrophic drought. Technical assistance for promoting drought adaptation agronomic techniques and practices will be provided to farmers under the framework of the RISP II Rural Advisory Component (RAC) via the National Rural Development Agency (ACSA) (11% of proposed additional financing proceeds). Project management will continue to be handled through the existing RISP II set-up, which uses the Ministry of Agriculture and Food Industry (MAFI) and the Ministry of Finance (MoF) as implementing agencies and the Consolidated Agriculture Project Management Unit (CAPMU) as a fiduciary support agency (approximately 2% of proposed additional financing proceeds).

4. The proposed activities are fully consistent with the Development Objective of the overall RISP APL ("to provide long-term support to accelerate agricultural recovery and growth, so that Moldova’s agricultural and rural sector can play their full role in providing the underpinnings for future income growth and poverty reduction") and the specific PDO of the second phase ("to continue to foster the post-privatization growth in the agricultural and rural sectors of Moldova by improving access of farmers and rural entrepreneurs to know-how, knowledge and financial services, while building the capacity of the private and public institutions to ensure the sustainability of these activities"). Specifically, the proposed Drought Adaptation Component (DAC) will support RISP II PDO’s by ensuring that farmers have the resources and knowledge necessary to adapt to and minimize losses from severe weather phenomena such as drought, in order to ensure the long-term viability of the country’s
agricultural sector. The activities proposed under the new component will enhance the impact of RISP II.

B. Background and Rationale for additional financing

Sector Background

The Drought of 2007

5. Since the 1990s, Moldova’s climate has registered a steady trend towards drier conditions, with the 2007 drought representing the most severe and extreme manifestation of this trend. Nine significant dry periods or droughts have been recorded since 1990, with the most severe ones before 2007 registered in 1990, 1992, 2000 and 2003. The length of dry spells in 2007 was 30 days in the central-northern part of the country and 35 days in the southern part, with localized extremes of 60 days. Only four northern rayons in the country were not affected by the drought. Throughout most of the country, rainfall in the spring fell below the critical levels necessary to support crop development and negatively affected grain development for winter crops, mainly wheat, barley and rye. In addition, the sustained lack of precipitation into the summer led to the deterioration of important summer crops such as maize, sunflower, sugar beet and vegetables, as well as perennial crops. The situation was exacerbated by air temperatures which were on average 3-5 degrees higher than both the long-term average and temperatures recorded in 2005 and 2006, increasing demand for water for crop. The combination of dry and hot weather resulted in a situation perceived as reminiscent of 1946, when cases of starvation were registered in Moldova as a result of drought and the ensuing loss of livestock and crops. Presently, the threat of malnutrition, including starvation, has been reduced, mitigated inter alia by government and donor-funded social programs which have supplied food aid to the most vulnerable groups.

6. From an economic perspective, the country’s agricultural sector has sustained significant direct and indirect losses in the primary agricultural production and food processing sub-sectors, amounting to several billion Moldovan Lei. Official government statistics quantify aggregate losses at some MDL 12 billion, or US$ 1.2 billion, with a particularly devastating effect on the livelihoods of the rural population, and more importantly the small independent private farmers, which are the backbone of the country’s agricultural sector, producing around 72% of the agricultural GDP.

7. In addition to mitigation measures, the Government of Moldova has fully embraced the need to promote an adaptation agenda which would enable the sector to become more resilient in the face of future drought-related shocks. At the end of 2007, the Government approved a Strategy for the Development of the Agricultural Sector. The document recognizes the vulnerability of agriculture in Moldova to drought and other climate related hazards, particularly its technical ability to cope with weather related shocks, farmer awareness about various adaptation technologies, varieties and cultivation methods, and the availability of financial and insurance mechanisms that can reduce losses to the sector. One of the most important themes of this strategy is support for the rehabilitation of old irrigation systems and the construction of new ones.
Irrigation in Moldova

8. Substantial investments (about US$1 billion) were made in the large-scale irrigation sub-sector during the 1960s and early 1980s. Irrigable land (i.e. land developed for irrigation with irrigation facilities) covers about 12% of the total agricultural land. Most of the irrigation schemes are in the vicinity of the Prut and Nistru rivers, which are the main sources of irrigation water, although tributaries of these rivers are also important sources. The greatest concentration of irrigable land lies to the west of the Nistru river. The total area of irrigable land is about 309,000 ha with about 200,000 hectares between the Nistru and Prut rivers, and the remaining 110,000 hectares in Transnistria. Additionally, there are 36,000 hectares that are identified as potentially irrigable land from inland lakes and ponds\(^1\). As the private agribusiness started to grow, the water supply from inland lakes and ponds became very popular and more convenient to access. There are now several thousand hectares irrigated from small lakes in Moldova.

9. Since 1991 the irrigation sector has slipped into a downward spiral for several reasons, but mainly due to economic factors and the unfit structure of old irrigation systems for the newly emerging pattern of private farming. As a result, only about 16% of the irrigable land actually received irrigation in 2007, and the amount of water applied on this irrigated land met only about 50% of the irrigation requirements. This resulted in yields much below the irrigated yield potential.

The attached table shows the command areas and the actually irrigated areas in Moldova over the past 13 years:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Command Area (ha)</td>
<td>196,000</td>
<td>198,000</td>
<td>199,000</td>
<td>199,000</td>
<td>199,000</td>
</tr>
<tr>
<td>Actually Irrigated (ha)</td>
<td>130,000</td>
<td>96,400</td>
<td>60,000</td>
<td>9,950</td>
<td>32,000</td>
</tr>
<tr>
<td>Actually Irrigated %</td>
<td>67</td>
<td>49</td>
<td>30</td>
<td>5</td>
<td>16</td>
</tr>
</tbody>
</table>

* Source: The State Water Concern “Apele Moldovei”

10. As mentioned above, the Government intends to embark on a major rehabilitation effort of deteriorated infrastructure at priority irrigation schemes where irrigation has been found to be economically viable, and where farmers are committed to developing Water User Associations (WUAs) and utilizing irrigation facilities. In order for this plan to have a real and durable impact, a number of conditions must be met, including: (i) the availability of credit to finance annual inputs and to invest in future on-farm irrigation equipment (i.e. to replicate technologies demonstrated by the project); (ii) access to market for high value crops produced on the land

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\(^1\) There are approximately 2000 inland lakes and ponds, of which about 400 lakes and ponds are suitable for irrigation and can cover an area of approximately 36,000 hectares. The remaining approximately 1600 lakes and ponds are highly mineralized (high salinization), or have limited water resources.
irrigated; (iii) a solid organization of farmers to form WUAs.

**The Rural Investment and Services Project II (RISP II)**

11. RISP II has been a fully successful project. To date, about 48% of the original IDA credit (US$15 million equivalent) has been disbursed. Since its launch in 2006, RISP II has been at the forefront of the Government’s investment and technical support initiatives for rural areas in the country. The institutions and initiatives built under RISP II are recognized by farmers, the Government and donors alike, as some of the most important and relevant for a sound and long-lasting recovery of the agricultural and rural sectors in the country. RISP II comprehensively covers a wide range of themes such as: rural advisory services, rural business development, rural finance (including microfinance), and land re-parceling. The following are but a few highlights of activities successfully implemented under RISP II:

- **Rural Advisory Services (RAS)** Established during the first stage of the RISP API, ACSA has continued to provide extension and training services to farmers under RISP II. To date, ACSA constitutes a network of 35 regional extension offices with a staff of 423 regional and village based consultants, which have provided roughly 190,000 consultations to some 352,000 farmers.

- **Rural Business Development** A number of so-called Development Agencies (DAs) operate in rural areas to support the development of small agricultural and non-agricultural businesses, providing tailor-made advice (business plans, loan brokerage, post-creation support) to proponents of commercially viable business ideas for setting up rural-based enterprises. To date, there are more than 300 Service Provision Contracts in the DA pipeline, for which 283 business plans were already developed and 257 loan applications were filed. The effort has led to about US$ 6.6 million dollars of rural investments.

- **Rural Finance Component** Disbursements from the RISP II supported credit line have been moving at a brisk pace, with 58.5% either disbursed or approved for disbursement by RISP II Participating Financial Institutions (PFIs), laying the foundation for a diversified rural economy. The rate of delinquency on RISP II supported loans is minimal, reflecting a rigorous selection of commercially viable projects by the PFIs, as well as the added-value of the services provided by DAs.

- **Land Re-Parceling Pilots** RISP II is supporting the implementation of pilot land re-parceling projects in six Moldovan villages to showcase lessons and experience from concerted efforts to reduce land fragmentation. Official selection of participating villages was successfully completed towards the end of 2007 and the implementation of pilots formally launched in October.

- The ISR ratings from the Project’s start, including the most recent 12-month period, have always been “satisfactory” or better, for both Implementation Progress (IP) and Development Objective (DO).
• The project has no unresolved fiduciary, environmental or any other safeguard problems. While procurement was temporarily downgraded to Moderately Satisfactory due to weaknesses of the selection committee under the Ministry of Agriculture and Food Industry, the Government has taken appropriate steps to reinforce this committee and the rating should be upgraded back to Satisfactory by the next mission.

C. Proposed Changes

12. **Supported activities and the PDO.** The additional financing would allow the implementation of a new Drought Adaptation Component with two Sub-Components: (i) Irrigation Finance Services; and (ii) Drought Adaptation Advisory Services. Additionally, a small allocation will be made for additional project management costs related to the management of the Drought Adaptation Component. No changes in the scope of the Project Development Objective are envisaged. Some changes are clearly expected at the outcome level.

**Drought Adaptation Component**

• **Sub-Component 1: Irrigation Finance Services (US$ 5.2 million equivalent).** In respect to investments for small-scale on-farm irrigation rehabilitation, the proposed activities would rely on the experience and institutions of the original RISP II Rural Finance Component, using the same implementation set-up and eligible PFIs. PFIs will charge real interest rates and apply the same prudence standards towards potential borrowers as they do for other RISP II supported sub-loans. PFIs will continue to co-finance 20% of the sub-loans with their own resources, as they have done under RISP I and RISP II. The only proposed change to the current credit line set-up is the availability of a small grant portion (20%), financed by the additional financing, to match the loans, in order to alleviate borrowing costs for beneficiaries. Under the scheme, the Beneficiaries’ last 20% sub-loan repayments will be forgiven, conditional of all previous payments having been made on time. The proposed approach is in compliance with the Bank’s Operational Procedure 8.30 (OP8.30).

• **Sub-Component 2: Drought Adaptation Advisory Services (US$ 0.64 million equivalent).** In respect to advisory services, the proposed activities would also rely on the experience and institutions of the original RISP II Rural Advisory Services Component, using the same implementation set-up and approaches. ACSA would engage in a series of activities aimed at raising awareness, knowledge and management capacity of small farmers to cope with the challenges posed by drought.

**Project Management Component**

• An additional **US$ 0.16 million** equivalent will be allocated for additional Project Management costs incurred by CAPMU. This funding will cover expenses such as additional audit, the hiring of an additional environmental specialist for sub-project screening, training and monitoring and evaluation.
13. **Implementation period.** The implementation of the proposed activities is not expected to last beyond the original closing date of RISP II (June 30, 2010); therefore, no extension of the closing date is being requested.

14. **Implementation entity.** All current institutional arrangements will remain in place. Project implementation will be the responsibility of the MAFI and the MoF (Credit Line Directorate – (CLD)), which will be backstopped on management and fiduciary issues by the existing competent and effective Consolidated Agriculture Project Management Unit (CAPMU), in charge not only of RISP II, but also a number of other Bank financed projects.

**D. Consistency with Country Assistance Strategy**

15. The 2005-2008 Country Assistance Strategy (CAS), approved by the Board on December 14, 2004, was designed in alignment with the priorities of the Economic Growth and Poverty Reduction Strategy Paper – Moldova’s version of the Poverty Reduction Strategy Paper. The CAS places a strong emphasis on promoting sustainable growth and reducing the country’s high levels of poverty by (a) promoting conditions for sustaining growth and employment creation; (b) improving access to social capital and services, and community infrastructure; and (c) improving public sector governance and combating corruption. It emphasizes interventions at the local/community levels in rural areas and small cities - the two areas with the highest concentration of poverty. The additional activities will contribute to the CAS objectives and proposed approaches.

**E. Appraisal of New Activities**

*General*

16. The proposed restructuring would add a Drought Adaptation Component focused on providing investments for small on-farm irrigation equipment; and providing advisory services to farmers on agronomic adaptation techniques for drought. Incremental costs related to the management of the proposed activities would also be financed.

**Allocation of Credit Proceeds**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount of Financing Allocated (SDR)</th>
<th>Percentage of Expenditures to be Financed</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Goods, Works and Consultants’ Services,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incremental Operating Costs and Training</td>
<td>SDR500,000</td>
<td>100%</td>
</tr>
<tr>
<td>(2) Sub-Loans</td>
<td>SDR3,200,000</td>
<td>80%</td>
</tr>
</tbody>
</table>

17. **Irrigation Finance Services Sub-Component.** The Sub-Component will finance investment needs for irrigation rehabilitation equipment in the form of sub-loans through PFIs, with a specific focus on small to medium-scale sub-projects. RISP II eligible PFIs will be responsible for identifying prospective sub-borrowers, will have full autonomy in sub-project approval and determination of lending terms (within a set of eligibility and environmental guidelines, set in the Rural Investment Guidelines), and will bear the lending risks. The intended beneficiaries are those with a commercially viable and bankable business proposal, adequate collateral, satisfactory projections for rates of returns, and demonstrated repayment capacity. DAs will be involved in supporting potential beneficiaries to prepare irrigation specific business plans and loan applications. Credit resources will be open to all sizes of farm and all types of farm ownership. However, in order to avoid high rates of absorption by a few beneficiaries, a cap of US$ 2,000 per hectare and US$ 100,000 per farm will be applied.

18. **Drought Adaptation Advisory Services Sub-Component.** The following areas of advisory support have been identified: crop patterns and crop mix; land cultivation techniques; introduction and adoption of drought resistant varieties; extension of knowledge on irrigation, conservation of water; community involvement in drought mitigation; and facilitation of formation of Water Users Associations (WUAs). The main vehicle for delivery of knowledge will be the farmer-owned demonstration plots supported by ACSA, and the ensuing training courses, seminars and publications showcasing the experience gained at these demonstration plots. In addition, ACSA will support stand-alone workshops and publications on a variety of subjects of interest pertinent to the drought adaptation agenda. ACSA will also play an important role in providing necessary linkages between farmers interested in acquiring irrigation equipment and the proposed dedicated credit resources, by carrying out a national information campaign in order to raise awareness about the availability of credit resources for investments in irrigation.

**Economic Assessment**

19. An economic analysis is not needed since: (i) it is widely accepted that rural advisory services carry positive cost-benefit ratios; and (ii) investments in irrigation will be implemented through a dedicated line of credit mechanism for a multitude of economically differing projects. However, the proposed Additional Financing will finance a technical specialist who will train the staff of the DAs, the CLD of the MoF and ACSA on reviewing the economic and technical feasibility of the irrigation investment proposals put forward by potential beneficiaries. The review process would include the steps in annex 2.

**Technical**

20. The existing on-farm irrigation equipment (mainly sprinkler irrigation equipment) is old, dilapidated, inefficient and difficult to operate. Very little equipment is operational at present and farmers would like to replace it with modern sprinkler and drip irrigation systems. In addition, drip irrigation is being used more and more by small farmers, plastic greenhouses and commercial operations. A specialist will review the economic, as well as technical feasibility of the irrigation investment proposals put forward by potential credit beneficiaries. A technical review should be performed on the types of irrigation equipment, size of equipment,
productivity, water pressure, affordability, and terms and conditions for sale. The eligibility criteria for any proposal submitted by the beneficiaries may include the following:

- Availability of adequate and reliable water supply to the farm
- Head at the source of water does not exceed 70 meters
- Cost/hectare does not exceed US$ 1,500 for sprinkler equipment and US$ 2,500 for drip irrigation.

**Fiduciary**

**Procurement**

21. **Procurement Capacity.** The existing Procurement Officer (PO) from CAPMU who was trained at the International Labour Organization (ILO) in 2006 will continue to work in the same capacity. The system for the procurement monitoring by the CLD of the MoF for the sub-loans under RISP II was assessed during pre-appraisal and found to be adequate. The following actions will be taken to further strengthen the procurement capacity of the borrower for project implementation: (a) a procurement assistant to the PO shall be hired in CAPMU and receive procurement training in a Bank’s regional workshop; (b) CLD shall further conduct its post-review including procurement under credit lines; and (c) periodic ex-post review by the Bank of 1 in 5 contracts signed by CAPMU, and random post-review sampling of the contracts under financing lines shall be conducted during supervision missions.

22. Procurement shall be carried out in accordance with the requirements set forth in the procurement and consultants guidelines published by the Bank in May 2004 and revised in October 2006. Furthermore, the Project shall be carried out in accordance with the provisions of the Anti-Corruption guidelines, dated October 15, 2006. The Procurement Plan as prepared by the borrower shall be updated from time to time in accordance with paragraph 1.16 of the Procurement Guidelines and paragraph 1.24 of the Consultant Guidelines (“Procurement Plan”), based on the following agreed arrangement and the attached Procurement Plan (Annex 1):

(i). **Goods and Works and non consulting services Procurement:** Decisions subject to Prior Review by Bank are as stated in Appendix 1 to the Guidelines for Procurement:

<table>
<thead>
<tr>
<th>Procurement Method</th>
<th>Procurement Threshold</th>
<th>Prior/post Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ICB</td>
<td>&gt; US$100,000</td>
<td>All subject to prior review</td>
</tr>
<tr>
<td>2. Shopping (Goods)</td>
<td>&lt; US$100,000</td>
<td>All subject to post review</td>
</tr>
<tr>
<td>3. Direct Contracting*</td>
<td>Any amount</td>
<td>All subject to prior review</td>
</tr>
<tr>
<td>4. Commercial Practices</td>
<td>&lt; US$100,000</td>
<td>All subject to post review</td>
</tr>
</tbody>
</table>

(ii). **Selection of Consultants Selection:** Decisions subject to Prior Review by Bank are as stated in Appendix 1 to the Guidelines Selection and Employment of Consultants. Short-list of consultants for services, estimated to cost less than $100,000 equivalent per contract, may
comprise entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

<table>
<thead>
<tr>
<th>Selection Method</th>
<th>Procurement Threshold</th>
<th>Prior/post Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Competitive Methods (Firms) QCBS</td>
<td>&gt; US$100,000</td>
<td>All subject to prior review</td>
</tr>
<tr>
<td>2. Competitive Methods (Firms) LCS, CQ</td>
<td>&lt;$100,000</td>
<td>All subject to post review</td>
</tr>
<tr>
<td>3. Individual Consultants (IC)</td>
<td>Any amount</td>
<td>All subject to post review</td>
</tr>
<tr>
<td>4. Single Source (Firms and Individuals)</td>
<td>Any amount</td>
<td>All subject to prior review</td>
</tr>
</tbody>
</table>

(iii). Commercial Practice in Procurement under Credit Lines: Components for sub-loans to be carried out with PFIs shall be conducted in accordance with para 3.12 of the Procurement Guidelines with the procurement procedures defined in the Rural Investment Guidelines for RISP II.

Financial Management

23. *Institutional and Implementation Arrangements.* Financial Management (FM) functions will continue to be handled by CAPMU. The existing audit Terms of Reference will be expanded to cover the additional activities. The financial management arrangements of RISP II have been reviewed periodically as part of regular project supervision. According to the latest financial management supervision carried out in August 2007 the project FM arrangements have been found to be Satisfactory (S), highlighting several minor recommendations which were subsequently implemented.

24. Credit proceeds will be disbursed either using direct payments, issuance of Special Commitments or through advances to a designated account (DA) to be opened in an acceptable financial institution. The ceiling for the Designated Account is set at US$700,000. Withdrawal applications documenting eligible expenditures utilized from the Designated Account will be sent to the Bank monthly. Eligible expenditures relating to contracts for goods, works and services above $100,000 equivalent will be fully documented. Expenditures against contracts below these limits would be made on Statement of Expenditures. Supporting documentation for all transactions, including completion reports, goods received notes and acceptance certificates, will be retained by the implementing entities and made available to the Bank during supervision.

25. *Procedures.* Currently, the procedure manuals developed for RISP II, including the FM manual are acceptable to the Bank. However, in order to properly reflect procedures for the proposed Component, some changes/amendments are needed, as follows: (i) description of additional activities to be undertaken under the Drought Adaptation Advisory Sub-Component; and (ii) adjustments to the Rural Investment Guidelines to reflect particularities of lending for irrigation equipment, including the concessionary term mechanism.
Environmental

26. RISP II is rated as a Category FI project. The Sector Environmental Review (SER) and General Guidelines for Determining and Addressing Potential Environmental Impacts of Loan Activities (Guidelines), prepared for the RISP I project, were updated for RISP II. The review provided an update on: (i) the adequacy of the legal framework for environmental assessment; (ii) the institutions that are responsible for sub-project Environmental Impact Assessments (EIA); (iii) technical assistance and training needs for these institutions to adequately implement the EIA requirements for subprojects; and (iv) proposals for improving procedures for environmental screening, EIA preparation and implementation, possible mitigation measures for certain sub-project types, and monitoring and evaluation of implementation of EIA requirements. The revised documents include a framework for the assessment of potential impacts of the proposed works and the likely significance of such impacts, recommended mitigation measures, and an outline of a monitoring plan and organizations responsible for implementation of mitigation measures. A public consultation and disclosure process was undertaken in accordance with World Bank policy and guidelines. The SER and Guidelines were publicly disclosed in March 2005. The same set of documents will be used for the activities supported under the new Component, together with specifically proposed measures for on-farm irrigation sub-projects. These documents were updated to reflect the specific nature of investments in irrigation sub-projects and will be made available to the broad public in the country. Although the credit line will only finance irrigation investments and no pesticides, the project will disseminate information to its beneficiaries on the appropriate use of pesticides.

27. International Waterways (OP 7.50). The proposed additional financing will finance investments solely in on-farm irrigation equipment for the rehabilitation and modernization of existing irrigation systems, and systems that are fed from inland water reservoirs and basins. Therefore, the activities will not adversely change the quality, or the quantity of water flows in the riparian zones of the Nistru and Prut rivers. Inversely, the activities of the proposed financing will not be adversely affected by water usage by other members of these riparian zones. The team therefore received an exemption from the notification requirement of OP 7.50 from ECAVP on March 26, 2008.

Social

28. The overall RISP II assists Moldovan farmers – the poorest and most vulnerable social group in Moldova. It will attempt to protect their income and nutrition needs from adverse impact of drought. The information campaign that will be implemented by MAFI with technical assistance from ACSA will ensure fair and transparent access to information about the project activities. There is no evidence that any of the proposed activities could lead to any kind of conflict or social tension, or could generate phenomena of social exclusion. Acquisition of land is not anticipated.

F. Expected Outcomes

29. In the context of a drought adaptation agenda, the activities supported under the additional Component are expected to lead to an increased state of preparedness by the country’s
farmers to face future drought related economic and social shocks. This feeds plausibly into the RISP II PDO of “continuing to foster the post-privatization growth in the agricultural and rural sectors of Moldova by improving access of farmers and rural entrepreneurs to know-how, knowledge and financial services, while building the capacity of the private and public institutions to ensure the sustainability of the activities”. To this end, the Project Outcome Indicators (POIs) for RISP II remain unchanged.

30. The following indicators will be added to the Project’s results framework:

**RISP II – Additional Key Performance Indicators**

<table>
<thead>
<tr>
<th>Intermediate Outcome Indicators</th>
<th>Baseline</th>
<th>Target values</th>
<th>Data Collection and Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YR1 06/30/2009</td>
<td>YR2 06/30/2010</td>
<td>Frequency and Reports</td>
</tr>
<tr>
<td><strong>Drought Adaptation Component</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Irrigation Finance Services Sub-Component:</strong></td>
<td>0</td>
<td>1,000</td>
<td>3,000</td>
</tr>
<tr>
<td>1. Number of rehabilitated hectares irrigated (cumulative)</td>
<td>0</td>
<td>1,000</td>
<td>3,000</td>
</tr>
<tr>
<td>2. Size of investments in irrigation (cumulative)</td>
<td>0</td>
<td>US$2 million</td>
<td>US$6 million</td>
</tr>
<tr>
<td><strong>Drought Adaptation Advisory Services Sub-Component:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Number of beneficiaries on topics related to irrigation</td>
<td>-</td>
<td>25 000</td>
<td>35 000</td>
</tr>
<tr>
<td>2. Adoption rates of drought adaptation agronomics (as % of number of beneficiaries)</td>
<td>0</td>
<td>15%</td>
<td>30%</td>
</tr>
</tbody>
</table>

G. Benefits and Risks

31. Cumulative benefits from the additional activities should lead to increases in farm productivity, increases in rural incomes, and a subsequent reduction of rural poverty. More specifically, the additional financing would yield the following benefits:
• **Increase in Irrigated Area.** It is expected that the new activities would serve the demand to replace old on-farm irrigation equipment with modern and efficient systems, and assist farmers to mitigate the impact of frequent droughts that affect the country. The proceeds of the additional financing would provide on-farm irrigation equipment for approximately 3,000 hectares over the course of implementation.

• **Introduction of Participatory Approaches.** Project activities will promote participatory approaches to irrigation management and water use by facilitating the establishment of WUAs in project areas where there is sufficient demonstrated demand and social cohesion for such community-based institutions. This would result in increased ability of farmers to access otherwise unaffordable and uneconomical (given plot size) equipment.

• **Resource and Cost Efficiency.** The project will promote the use of more efficient, lower cost on-farm systems resulting in energy savings and lower operation costs of equipment by farmers.

• **Adoption of Drought Resistant Agronomics.** The activities to be implemented by MAFI (under a technical service contract with ACSA) on dissemination of agronomic knowledge and technology for adaptation to drought related risks will lead to an increase in awareness about, and likely adoption of, techniques that can reduce the economic and social impacts of drought.

32. The risks resulting from restructuring RISP II to add activities are not substantial. RISP II has been implemented satisfactorily and continues to meet its development objective. There are no significant implementation risks that have evolved in the recent past. Risks identified during appraisal are being dealt with accordingly, and no problems related to procurement and financial management have been identified. The same rigorous approach to procurement and financial management issues already being implemented in RISP II would continue to be applied. There is a slight probable risk related to the potential outcomes of the proposed lending for irrigation, in lieu of variable demand for irrigation equipment, which depends on specific climate conditions each year. If demand were to be stunted by improved weather conditions over the next two years, it is conceivable that project funds would not disburse as fast as originally envisaged. The project team will monitor closely the developments over the next year in order to take pro-active and adequate measure to channel the funds to other relevant uses. Another risk relates to WUAs, and the ability of the project counterparts to facilitate a genuine grass-roots organization of WUAs in the limited time available. Again, the project team will monitor closely the implementation progress in order to take necessary corrective actions.

**H. Financial Terms and Conditions for the Additional Financing**

33. The original financing from IDA under RISP II was provided on blend terms with a 50% Grant and a 50% Credit on standard IDA terms (40 years maturity, 10 years grace). The additional financing will be provided fully on standard IDA terms (40 years maturity, 10 years grace). The Credit will be denominated in SDR, and the foreign exchange risk and all repayment obligations would be retained by the Republic of Moldova.
## Annex 1: Procurement Plan

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Description</th>
<th>Type</th>
<th>Est. Cost (US$)*</th>
<th>Method</th>
<th>Review by Bank</th>
<th>Expected Proposals Submission Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Rural Advisory Services (ACSA and Service Providers)</td>
<td>TS</td>
<td>*</td>
<td>Direct Contract</td>
<td>Prior</td>
<td>2008-2009</td>
</tr>
<tr>
<td>2.</td>
<td>Consultant for training in irrigation</td>
<td>CS</td>
<td>*</td>
<td>IC</td>
<td>Post</td>
<td>August 2008</td>
</tr>
<tr>
<td>3.</td>
<td>Environmental specialist</td>
<td>CS</td>
<td>*</td>
<td>IC</td>
<td>Post</td>
<td>August 2008</td>
</tr>
<tr>
<td>4.</td>
<td>Impact assessment</td>
<td>CS</td>
<td>*</td>
<td>CQ</td>
<td>Post</td>
<td>2010</td>
</tr>
<tr>
<td>5.</td>
<td>Training for DAs, ACSA and CLD</td>
<td>CS</td>
<td>*</td>
<td>CQ / agreed budget</td>
<td>Post</td>
<td>August 2008</td>
</tr>
<tr>
<td>6.</td>
<td>Project Audit</td>
<td>CS</td>
<td>*</td>
<td>LCS</td>
<td>Post</td>
<td>January 2009</td>
</tr>
</tbody>
</table>

TS – non-consulting services  
CS – consulting services

* - The amount redacted for procurement process integrity.
Annex 2: Economic Assessment

Economic analysis is not needed since: (i) it is widely accepted that rural advisory services carry positive cost-benefit ratios; and (ii) investments in irrigation will be implemented through a dedicated line of credit mechanism for a multitude of economically differing projects. However, the proposed Additional Financing will finance a technical specialist who will train the staff of the DAs, the Credit Line Directorate (CLD) of the Ministry of Finance and ACSA on reviewing the economic and technical feasibility of the irrigation investment proposals put forward by potential beneficiaries. The review process would include the following steps below.

Analysis. The incremental costs and returns to be determined and cost benefit to be calculated based on the “with-project” and “without-project” scenarios for the sub-projects.

Methodology. The methodology used for determination of economic feasibility will be based on a comparison of the costs of investments and the benefits of rehabilitation to farmers. The following procedures will be used: (i) Calculation of costs (the main components of the costs are on-farm irrigation equipment costs, water prices and energy costs), and; (ii) Calculation of benefits (expected effects are mainly provision of more timely and efficient irrigation water to the project areas with energy savings and increased crop production).

Main Assumptions. If the current situation is maintained, i.e., “without the project”, there will be annual increases in water losses and electricity consumption. After providing the on-farm irrigation equipment, both water losses and energy consumption will be minimized, and crop yield will increase.

Financial and Economic Prices. The average cost of a cubic meter of water in 2007 was equal to 0.70 lei (US$ .058). The average cost of one Kwh of electricity was 0.96 lei (US$0.08). The exchange rate used in the analysis was US$ 1 equal to 12.1362 MDL (average official exchange rate for 2007).

Operations and Maintenance Expenses after Rehabilitation. Adequate operation and maintenance of the irrigation equipment is expected to require 8 % of the capital expenditure per annum.

Project Benefits. Agriculture production without the new on-farm irrigation equipment is low at present when using old equipment. The expected benefits of rehabilitation works are that: (i) the amount of electricity needed to pump water will be reduced as leakages are reduced, (ii) agricultural productivity and farming incomes will increase, due to the elimination of water supply disruptions and more efficient on-farm systems; (iii) the cost of labor and machinery will decrease as a result of increased water conveyance and application efficiencies, (iv) irrigation water will be distributed more fairly, so conflicts between farmers will be reduced, and; (v) the collection of water fees is expected to improve.
Annex 3: Technical Review

The existing on-farm irrigation equipment (mainly sprinkler irrigation equipment) is old, dilapidated, inefficient and difficult to operate. Very little equipment is operational at present and farmers would like to replace it with modern sprinkler and drip irrigation systems.

**Supply Factors.** Sprinkler irrigation equipment presently used in Moldova is mainly drag hose equipment with a folded boom or big gun which operates at heads from 50-70 meters and can irrigate from 25-60 hectares. There is a very wide range of manufactures for such equipment worldwide. The price of a middle-sized (25 ha) raining machine is around US$18-20 thousand. Drip irrigation equipment presently used in Moldova is fairly standard equipment which operates at 20-25 meters head and requires extensive filtration systems. The cost of such systems is more than US$2,000/hectare. There are sufficient suppliers in the country for both types of irrigation equipment.

**Demand Factors.** According to a survey conducted recently by the Japanese-funded 2KR Project, there is an increasing demand for sprinkler and drip irrigation equipment in Moldova. Farmers want modern and efficient systems to secure irrigation for their land in case of drought and to increase crop production. Large areas of potentially irrigable land in the country (more than 76,000 hectares) can be irrigated just by rehabilitating and upgrading the on-farms systems. Current projects and initiatives in the country, both public and private, lead to the expansion of the irrigated areas only by approximately 3000 hectares a year.

**Technical Assistance Factors.** There is a clear need in the country to promote efficient use of modern on-farm irrigation equipment. Currently, the 2KR Project and local private suppliers implement a number of technology promotion activities, but their support focuses mainly on the equipment they supply, and not necessarily on the promotion of more efficient (lower head requirement) and less costly equipment. The Component will also finance the services of a consultant who will promote more efficient and lower-cost sprinkler and drip irrigation systems. The objective is to expand the use of sprinkler systems with nozzles working at 10-15 meter heads, and drippers working at less than 10 meter heads.

**Water Users Association (WUAs).** Due to the nature of sprinkler irrigation equipment, and the fact that the smallest systems that are used in Moldova can irrigate about 25 ha, the majority of small farmers cannot use these systems on their own, and will need to organize themselves into WUAs. ACSA would facilitate the establishment of WUAs based on the existing law for WUAs.

**Technical Criteria.** As indicated earlier, a specialist will review the economic and technical feasibility of the irrigation investment proposals put forward by potential credit beneficiaries. The focus of a technical review should be placed on the types of irrigation equipment, size of equipment, productivity, water pressure, affordability, and terms and conditions for sale. The eligibility criteria for any proposal submitted by the beneficiaries could include the following:

- Availability of adequate and reliable water supply to the farm
- Head at the source of water does not exceed 70 meters; and,
- Cost/ha. does not exceed US$1,500 for sprinkler equipment and US$2,500 for drip irrigation.