

Page 1

Approved: Minister of Nature Protection V. Ayvazyan
28.10.2005

Ministry of Nature Protection
"State Environmental Expertise" SNCO
ENVIRONMENTAL IMPACT ASSESSMENT
CONCLUSION
EE-119

Issued to: Ministry of Finance and Economy
#1 Melik-Adamyán str., Yerevan, Armenia

Activity: About Environmental Impact Assessment of the Armenian Proposal to
the Millennium Challenge Account Assistance

Attached: Conclusion 3 pages

Director: A. Santrosyan

Page 2

Ministry of Nature Protection
"State Environmental Expertise" SNCO
ENVIRONMENTAL IMPACT ASSESSMENT
CONCLUSION No EE-119
28.10.2005

About Environmental Impact Assessment (EIA) of the Armenian Proposal to the
Millennium Challenge Account Assistance

This Proposal, presented by the Government of the Republic of Armenia, seeks financial assistance from the Millennium Challenge Account (MCA) to support a five year program of strategic investments in irrigation and community roads, aimed at increasing agricultural production in poor rural areas of the country.

There are two important preconditions for productive agriculture in Armenia:

- investment in irrigation,
- investment in a rural roads network.

Project envisages rehabilitation, reconstruction and construction of 23 irrigation schemes.

Scheme No: 01, Artashat scheme, where the following works are envisaged:

- rehabilitation of 21km stretches of the Artashat main canal
- rehabilitation of 14 pumping stations
- construction of Aigezard gravity scheme
- rehabilitation of tertiary system on 4600 ha

Scheme No: 02, Low Hrazdan scheme, where the following works are envisaged:

- reconstruction of 24.9 km of Low-Hrazdan main canal
- rehabilitation of 11 pumping stations
- rehabilitation of tertiary irrigation system on 3500 ha.

Scheme No: 03, Armavir scheme, where the following works are envisaged:

- lining 32.47 km of Armavir main canal;
- rehabilitation of 7 pumping stations;
- rehabilitation of tertiary system on around 6,000 ha.

Scheme No: 04, Talin scheme, where the following works are envisaged:

- rehabilitation of 40,89 km stretches of the Talin main canal;
- rehabilitation of 6 pumping stations;
- construction of Shenik gravity scheme
- construction of Sasnashen reservoir.

Scheme No: 05, Arzni-Shamiram scheme, where the following works are envisaged:

- rehabilitation of 34,15 km of Arzni-Shamiram canal
- rehabilitation of 5 pumping stations;
- construction of Ashtarak gravity scheme
- construction of Apna, Orgov and Lernarot reservoirs
- rehabilitation of tertiary system on 4,200 ha.

Scheme No: 06, Shirak scheme, where the following works are envisaged:

- rehabilitation of 40 km stretches of Shirak main canal;

Page 3

- construction of Kaps gravity scheme;
- construction of Tavshut gravity scheme will;
- construction of Kaps Reservoir
- rehabilitation of tertiary system on 2300 ha.

Scheme No: 07, Gegharkunik scheme, where the following works are envisaged:

- construction of Agrija gravity scheme
- construction of Vardenis gravity scheme
- construction of Agrija Reservoir.
- rehabilitation of 4 pumping stations
- rehabilitation of tertiary system on 980.

Scheme No: 08, Vayots Dzor scheme, where the following works are envisaged:

- construction of Khndzorut gravity scheme
- construction of Khndzorut Reservoir
- rehabilitation of tertiary system on 1,500 ha.

Scheme No: 09, Aparani scheme, where the following works are envisaged:

- construction of a 12 km pipeline from the Halavar reservoir
- construction of Vardenut reservoir
- rehabilitation of tertiary system on 500 ha of lands.

Scheme No: 10, Geghardalich scheme, where the following works are envisaged:

- construction of Geghardalich gravity scheme
- rehabilitation of 2 pumping stations
- rehabilitation of tertiary system on 350 ha.

Scheme No: 11, Meghri scheme, where the following works are envisaged:

- construction of Meghri gravity scheme, including Lichk reservoir
- rehabilitation of tertiary system on 585 ha.

Scheme No: 12, Artik scheme, where the following works are envisaged:

- construction of Mantash gravity scheme;
- reconstruction of Artik reservoir
- construction of Bagravan reservoir
- rehabilitation of tertiary system on 370 ha.

Scheme No: 13, Spandaryan scheme, where the following works are envisaged:

- construction of Spandaryan gravity scheme
- rehabilitation of tertiary system on 160 ha.

Scheme No: 14, Kapan scheme, where the following works are envisaged:

- construction of Tsav-Shikahogh and Norashenik gravity schemes
- rehabilitation of tertiary system on 120 ha.

Scheme No: 15, Goris scheme, where the following works are envisaged:

- rehabilitation of 4 pumping stations
- rehabilitation of tertiary system on 240 ha.

Scheme No: 16, Lori scheme, where the following works are envisaged:

- construction of Amrakits gravity scheme
- rehabilitation of tertiary system on 400 ha.

Scheme No: 17, Getik scheme, where the following works are envisaged:

- construction of Spitak gravity scheme
- rehabilitation of tertiary system on 370 ha.

Scheme No: 18, Noyemberyan scheme, where the following works are envisaged:

- rehabilitation of 6 pumping stations
- rehabilitation of tertiary system on 314 ha.

Scheme No: 19, Berd scheme, where the following works are envisaged:

- construction of Berd gravity scheme
- rehabilitation of tertiary system on 130 ha.

Scheme No: 20, Ijevan scheme, where the following works are envisaged:

- construction of Getahovit-Lusadzor gravity scheme
 - rehabilitation of 5 pumping stations
 - rehabilitation of tertiary system on 170.
-

Scheme No: 21, Kotayk scheme, where the following works are envisaged:

- construction of Ptghni gravity scheme
- rehabilitation of 4 pumping stations;
- rehabilitation of tertiary system on 450 ha.

Scheme No: 22 include rehabilitation of tertiary system for those WUAs that are not covered by abovementioned 21 Schemes. These are Gavar, Khndzorut, Hakhum, Vorotan, Tolors, Dzorer, Brnakot and Hrazdan-Jour WUAs

Scheme No: 23 include rehabilitation of drainage in Ararat valley

The second precondition for poverty reduction and productive agriculture is the improvement of rural roads; the investments will upgrade the condition of 1072 km of rural roads from 'very poor', or 'poor', to 'good'.

The report presents potential impacts likely to appear as a result of project activities; it is expected that majority of roads included in the project will have short-term and localized, short-term and minor impacts.

The positive impacts will greatly prevail among those expected from rehabilitation and reconstruction of irrigation schemes.

Relatively significant environmental impacts are possible due to implementation of new construction; some prevention and mitigation measures are designed in this respect. The "No Action" alternative with its negative consequences also is discussed. The analyses apparently evidences that the potential negative consequences greatly overweight the environmental risks associated with the Proposal implementation.

The project implementation will result in reliable irrigation of 131629 ha of lands, enlargement of irrigated area by 38770 ha, improvement of amelioration state of 30000 ha lands in Ararat valley and reduction of water losses by 166.28 M m³ annually.

EXPERTISE REQUIREMENT

According to the Law on "Environmental Impact Assessment" the design documentation should be submitted to the Ministry of Nature Protection in compliance with established procedures for environmental examination prior to construction of new structures or reconstruction of existing structures included in the project.

CONCLUSION

"State Environmental expertise" SNCO is issuing positive conclusion to the "Environmental Impact Assessment" of the "Armenian Proposal to the Millennium Challenge Account Assistance" subject to fulfilment of the above requirement.

Expert: A. Drnoyan