**mTian regionebSi xelovnuri wyalsacavebis agebis efeqturobis**

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reziume

saqarTvelos energetikis ganviTarebisaTvis didi potenciali gaaCnia. qveyanas aqvs rogorc hidroenergetikuli, aseve mzisa da qaris energiis ganviTarebis resursebi.

hidrosadgurebis mSenebloba Zviri jdeba da saeqspluatacio xarjebs iTxoven. magram is garemoeba, rom isini ufaso „sawvavze“ muSaoben, romelsac araviTari inflacia ar emuqreba, Zalzed mimzidvels xdis maT mSeneblobas. magram maTi Seqmnis da eqspluataciis ekologiuri Sedegebi dakavSirebulia iseT negatiur movlenebTan, rogoricaa: – wyalsacavebis negatiuri zemoqmedeba mimdebare teritoriis mikroklimatze; - hidrologiuri reJimis gauareseba; - didi teritoriebis gariyva da noyieri miwebisa da tyis masivebis datborva, florisa da faunis gauaresebiT, rac mSobliuri mxaredan adgilobrivi - aborigen mosaxleTa gadasaxlebas iwvevs.

vake raionebSi sanapiro miwis nakveTebs SeuZliaT baris biotopebis danaklisis nawilobrivi kompensireba moaxdinon. mTian regionebSi ki, aseTi danaklisi, ZiriTadad, aunazRaurebeli rCeba. amis Sedegad mTis wyalsacavebis destruqciuli gavlena ekosistemaze metad saSiS zomebs Rebulobs, romelsac xSirad katastrofuli xasiaTi gaaCnia.

hidroenergetikis aRniSnuli naklovanebebi, saqarTvelos, rogorc mTiani qveynis pirobebSi, hes - is da sxva alternatiuli wyaroebis mSeneblobis variantebis yovelmxrivi ekologiuri Sepirispirebis auciloblobaze miuTiTeben. amasTan, aRsaniSnavia, rom miuxedavad hidroresursebis daxmarebiT miRebuli energiis SedarebiT dabali fasisa, maTi wili msoflios energetikul balansSi TandaTanobiT mcirdeba. es dakavSirebulia rogorc SedarebiT iafi resursebis amowurvasTan, ise wyalsacavebis didi teritoriuli moculobasTan.

Tvlian, rom perspeqtivaSi hes–ebze energiis gamomuSaveba msoflioSi ar gadaaWarbebs misi mTeli wilis 5%–s.

kaSxlebis msoflio komisiis (The World Commission on Dams) 2000 wlis noembris angariSSi gamoqveynebuli masalis Tanaxmad, didi hidroeleqtrosadgurebis kaSxlebis uaryofiTi zemoqmedeba bunebriv da socialur garemoze imdenad Zlieria, rom isini ganaxlebadi energowyaros nawilad ukve aRar ganixilebian.

aseve, Cvenma kvlevebmac engurhesis magaliTze daadastura, rom didi hidrokaSxlebi ar SeiZleba ganxiluli iyos, rogorc mdgradi, ganaxlebadi energowyaroebi. maTi mSenebloba ar Seesabameba mdgradi ganviTarebis principebs, vinaidan SeuZliaT moaxdinon mniSvnelovani uaryofiTi zegavlena garemoze da dramatulad Secvalon socialuri, kulturuli da demografiuli mdgomareoba.

sakvanZo sityvebi: hidroeleqtrokaSxlebi; ganaxlebadi energowyaro;

ekologiuri riskebi.

**Eco-economic assessment of effectiveness construction of artificial reservoirs**

**in mountain regions**

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Summary

As showed the researches, Georgia possesses high potential for development of power. The country has hydropower, solar and wind energy resources.

Construction of hydrostations costs much and demand operational expenses. But they work at free "fuel" to which no inflations threaten.

However ecological consequences of their creation and operation are connected with such phenomena, as:

- adverse effect of reservoirs on a microclimate of adjacent territories; - deterioration of the hydrological regime; - exclusion of large territories and flooding valuable land and woodlands, with deterioration of the species composition their flora and fauna and the gradual transformation of the reservoirs in the storage of hazardous and toxic substances, that causes the migration of the local Aboriginal population from their native historical areas.

On plains coastal sites of reservoirs can partially compensate loss of valley biotopes. In mountainous areas such loss is often irreplaceable and destructive influences of mountain reservoirs on an ecosystem accept the dangerous sizes which often have catastrophic character.

In the conditions of Georgia as highland, the specified shortcomings of hydropower cause the necessity of comprehensive ecological comparison of options of construction of hydroelectric power stations and other alternative energy sources.

It is connected, both with exhaustion of rather cheap resources, and with large territorial volumes of reservoirs. Consider that in the long term development of energy of hydroelectric power station won't exceed 5% of their world values.

According to the material published in November, 2000 in the report of the World commission on dams (The World Commission on Dams), negative impact of big dams of hydroelectric power stations on the natural and social environment is so great that they can't be considered as part of renewable energy resources.

Our research on the example of the Inguri hydroelectric power station also confirmed that large hydroelectrodams not be regarded as sustainable, renewable energy.

Their construction is not consistent with the principles of sustainable development, so as they can have a significant negative impact on the environment and dramatically change the social, cultural and demographic situation.

Keywords: large hydroelectric dam; renewable energy; environmental risks.