

Aral Sea Basin: Conditions and Living Standards

Gender Aspect in Socio-ecological Situation in Priaralie

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The Aral Sea disaster and ecological crisis in the region has caused huge economic losses, affected living standards and health of population in the Republic of Karakalpakstan and in the Aral Sea basin as a whole. The socially vulnerable groups (women and children) were the first who have been affected by the ecological disaster. In the epicenter of ecological disaster attention should be focused on reproductive health, maternal mortality, and social status and role of women in the rural community, as well as on women's employment in the rural area because it has reached 90%. ("Reclamation of dried Aral Sea bottom and situation in agriculture and economy of the Republic of Karakalpakstan", GTZ, 2004). Unemployment rate in Karakalpakstan is two times higher than that of on average in Uzbekistan with its highest level in Muinak region. There is also a significant proportion of population in Priaralie with part-time employment. Such situation leads to increase in number of households with quite low income, population impoverishment and decrease of living standards.

Priaralie is the zone with the most difficult socio-economic conditions in Central Asia. By the purchasing power parity the gross national product per capita here is less by 40%, and the average monthly salary is 1.3 times less than that of on average in Uzbekistan. Amongst human development indices identified by the oblasts and zones of the Republic of Uzbekistan the lowest one is in the Republic of Karakalpakstan.

Population migration has led to the significant losses in mental and qualified workers. Provided that working capacity coefficient of each family is 3.0, loss of workers is estimated as 5.5 thousand of the most qualified specialists. Taking into account that education cost per capita is USD10 thousand, the total losses of the intellectual capacity in Priaralie is estimated in the amount of USD55 million.

Population migration from the littoral districts of Karakalpakstan (especially from Muinak district) reached its peak in 1970-1980, when highly productive fishery, fish processing industry and navigation have lost their economic significance. During this period some 14.5 thousand people, (including 3.2 thousand of qualified specialists, German, Russian, Ukrainian with their families who from everlasting have worked as sailors, fishermen, in fish processing industry) moved out from Priaralie.

After 1996, migration (from Priaralie, in particular) was stabilized to some extent. However, population number is decreasing in some districts. Population migrates mostly from rural areas to cities, causing problems associated with overpopulation of the latter. Dwellers of such settlements as Muinak are mainly women and schoolchildren.

Population diseases in the region are first of all associated with deterioration of drinking water quality, climate change, and malnutrition due to low households income. As a result, infant mortality rate as well as population in general is higher in this region.

Comparison of food pattern and nutrition standards has indicated that over the period 1994-1996, consumption of meat and milk products was sharply reduced in Karakalpakstan, while consumption of bakery foods and pastry increased. Overall foodstuff consumption in Karakalpakstan is lower than that of on average in Uzbekistan. The main reasons for this are decrease of households' income and growing difference between foodstuff availability and purchasing capacity of population.

There is no considerable difference in age structure of population in Priaralie as well as in the level of education. However, variation in employment pattern and income distribution is wide.

Review and analysis of trends in the current situation, and identification of problems to be addressed in the Khorezm Oblast (Uzbekistan), Dashoguz Veloyat (Turkmenistan), the Republic of Karakalpakstan

(Uzbekistan), and Kzylorda Oblast (Kazakhstan) completed by SIC ICWC within the framework of preparation of preliminary feasibility for transition to the “Integrated Water Resources Management in the lower reaches and deltas of Amudarya and Syrdarya”, have revealed that the primary destabilizing factors here are instability of water supply and drainage operation, and growing water shortages aggravated by uneven water distribution, especially in dry years. Another problem in these areas is poor attention to, and very often disregard of environmental requirements that caused desertification and degradation of natural conditions in deltas.

Change of rivers hydrological regime has caused significant deterioration of river flow quality. Increased content of highly mineralized drainage water has led to significant growth of river water mineralization and deterioration of its sanitary conditions. Ecological changes associated with reduced water inflow to deltas has in turn caused deterioration of drinking water quality due to increased mineralization and reduced ground water inflow.

There were never such acute problems here with drinking water supply as now. Only about 56.8% of Karakalpakstan’s population has access to water pipe system. Quality of tap water in 24 to 100% cases does not comply with requirements to drinking water standard (ASBP-2, 2004). Woman is the one of the most affected water users in the region. Many spheres of rural woman life are associated with water. She uses it in housekeeping and for crop irrigation. She knows where to find and how to keep water when it is in a short supply, as well as how good its quality for drinking purposes. Although, there is a reduction of infant and population mortality rate due to initiatives in developing drinking water supply, controlling over water, air and soil pollution, and developing public health services undertaken over the recent years the problem is still awaiting its solution. So, there is an acute problem in this region with such diseases as diffuse goiter, anemia, renal diseases, especially amongst fertile age women and children. In terms of percentage, anemia occupies the first place (around 30%) with the ocular diseases on the second one (15%). Growing climate aridity and desertification of the Aral Sea bottom have led to frequent occurrence of dust storms (Figure 1) that spread in the Muinak direction.

Decline of economic and ecological situation in the lower reaches of Amudarya has led to deterioration of population health not only within Priaralie, but also along the entire lower reaches of river. This is due to the following reasons:

- deterioration of river water and ground water quality, first of all due to increased content of pesticides, herbicides and salts;
- adverse climate change and increased desertification in Priaralie;
- overall decline of economy development paces in this region, including Priaralie.

Figure 1. Dust Storm at the Dried Aral Sea Bottom



Any economic activity (fishery, livestock breeding, agriculture, etc.) has practically dropped to nothing in many regions of Priaralie.

Critical situation with water supply in the lower reaches of Amudarya in 2000-2001, with water shortage of 23-27% on average, was provoked by wrong water allocation, when Khorezm Oblast and Karakalpakistan (Uzbekistan) received 45 and 58% of their limits, Tashauz Veloyat (Turkmenistan) - 50%, and Amu-Darya delta got only 22 % of limit!!! As a result, according to our estimation these parts of Karakalpakstan made losses in the amount of USD45 -50 million/year

and the national income here falls down to USD150-180/capita. At the same time fish, muskrat and bird population were completely destroyed and some recovery of these species was observed only in 2003.

There are people behind these figures. Lack of ecological water releases to the Priaralie’s wetlands (Muinak and Rybachiy gulfs) in 2006, bereft local population of fishery (fishing for men and fish

processing for women) and therefore, the main source of income. Drought caused fires and destroyed wild life.

Irrigated crop yields have reduced and cropping pattern changed. If in Uzbekistan area of arable land had been reduced by 11%, that of in Karakalpakstan was 15%. Since 1990, rice growing area, the main food crop in Priaralie, was reduced by 51%.

Gender problems are closely related with living standards of both women and population in general, as well as with water use problems and employment.

The main reasons for contraposition of man and woman's roles are the social ones. The latter are aggravated by economic difficulties that in turn restrict achievement of financial stability for people, moreover, limit woman's control over her own money within the family. Women are especially vulnerable because they either are unemployed or have low income and part time job.

There are Committee of Uzbekistan's Women, Business Women Association, "Orient Women" foundation and a number of other non-governmental organizations studying gender issues in Uzbekistan. There is also a variety of informational Internet portals devoted to the gender aspect.

All this allowed to stress high degree of public involvement in study of the gender problems, and women in particular. The Government of the Republic of Uzbekistan also increasingly more takes into account outputs of gender analysis in strategic decision-making and management. There is no doubt that special attention should be paid to the region with ecological problems, gene pool conservation, women's health and future generations.

References:

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