The new old sense of the 'Queen's rule'

2020 will most likely be remembered as the year the mankind became keenly aware of the total fiction of its power over nature. Such apprehensions and warnings that had been voiced by visionaries and thinkers for ages and generations unfortunately came true. Painfully, we had to admit and accept the fact that our knowledge is limited and far from omnipotent, while the man is not external to nature but one of its integral components, albeit an important and weighty one. The impact on nature including the fundamentals of its operation reached such scales and limits that pushed it towards unpredictable alteration threatening the whole mankind.

In a sense this situation resembles the one we faced at the turn of the 60-s and 70-s of the previous century and that was described in the works and apocalyptic forecasts of Club of Rome. At the time, it became obvious that resources we have on this planet are quite limited and their shortage is a threat to us all. However, as time goes on, nothing dramatic has so far happened – some natural resources are superseded by others with more depth and area of access. Meanwhile, as a result, the population of our planet has grown three times and keeps on growing. As a matter of fact, some vital resources remain relatively inaccessible in some parts of the world but the overall situation is not that hopeless and catastrophic as it appeared half a century ago.

The main reason is that the mankind (most countries and peoples of the modern world) in real life has adopted the known 'Queen's rule' from a parable in Lewis Carrol's "Alice in wonderland" – 'in this place it takes all the running you can do, to keep in the same place'. The power that keeps the mankind alive on the planet Earth and prevents a resources catastrophe is the force of reason and upto-date knowledge.

It is the might of reason and knowledge that allowed finding resources in a place nobody looked at or even suspected its presence. And, what is even more important, this changed our perception about the tools of search and approaches to meeting rising demands of the growing humankind. The reason and knowledge looked at the micro-world passing towards manufacture of new substances and transformation of genetic basis of the environment. The answer of nature to such 'intrusion' was quick and largely unexpected. One of its manifestations is COVID-19 – a fast-paced and shifting code of aggressive microorganisms.

What is the answer to this new global challenge?

In our view, the response is in many ways similar to the one that helped find a way out of deadlock, namely, recourse to the force of reason and knowledge. However, a vector of that force must obviously be modified. It is not to target increasing provision of various resources through their more efficient use but instead their reduced involvement and correspondingly lower impact on nature. It is necessary to pass on from purely volume figures of used resources (from solid waste to greenhouse gases) to incremental ones. Only in such a case it will be possible to ensure a transition to 'green development' as the pages of this issue's paper collection testify. 'Negative impact on environment per unit of Gross Regional Product must be reduced the more, the higher economy grows' (the paper by I.P. Glazyrina).

From our point of view, only if it masters control over the intensity of emissions can the humankind 'keep in its place' – go on living and flourishing on the planet Earth. The 'Queen's rule' thus changes and becomes more complex – along with maintaining a certain speed (such as GRP dynamics) it must be able to control the changes it produces.

The general conceptual premises may be implemented only in the case of unanimity and combined focused efforts of different countries and peoples. This fully applies to Russia as our country is a world leader in generating production waste (the paper by T.O. Tagayeva).

As part of moving in this direction, the early 2018 saw adoption of the Strategy for developing an industry of processing, utilization and decontamination of production and household waste for the period until 2030 (the same paper). Unfortunately, this document from its structure to proposed implementation mechanisms is very far from the mentioned contemporary approach to solving the problems of resource provision and even farther from reducing the negative impact on environment.

The reasons of this are nothing new. These are a lack of system approach, the technocratic character of implemented measures ('volumes – money – technologies – time'), failure to understand the

role and connections of various levels of spatial hierarchy in resolving ecological problems.

The need to consider those (and a number of other) important features and peculiarities of interaction between the environment and the economy was repeatedly pointed out by researchers from various countries. Thus, in 1997–1998, the International Human Dimensions Program (IHDP) stated that "interaction of humanitarian and eco-systematic dimensions in socio-ecological systems is not a simple relation but actual integration and unity... Without adequately comprehending these connections at local, regional, national, continental and global levels it would be impossible to move forward in resolving problems of sustainable development in all three dimensions: ecological, economic and socio-cultural... There is a need for new social understanding of the role of technologies and knowledge in the interaction between socio-cultural and ecological systems"¹.

It is precisely due to neglecting these general – system and institutional – conditions in Russia that one must talk about "channeling revenues from eco tax to particular enterprises and regional operators participating in waste utilization" (the paper by T.O. Tagayeva). Following the inobservance of such conditions, along with modest results of economic development the total contribution of environmental quality in Russia in building and maintaining the standard of living as a whole is hardly noticeable. That is why, for instance, in the Far East (as in a number of other regions in Russia) 'implemented institutional transformations have not as yet been conducive to a significant rise of people's wealth (the paper by I.A. Zabelina).

As always, Russia is going it alone. As for finding effective responses to new ecological and anthroposphere's challenges we are in the beginning of the road. There is some knowledge as well as understanding of some practical steps and measures. It is obvious that resolving the tasks at hand is not about implementing this or that strategy (program) decreed from 'above' but uniting the public around and for the purpose of reaching the main goal of socio-economic development – that of granting decent living standards for

¹ Folke, C., Pritchard, L., Berkes, F., Colding, J. and Svedin, U. (2007). The problem of fit between ecosystems and institutions: ten years later. Ecology and Society 12(1): 30. URL: http://www. ecologyandsociety.org/vol12/iss1/art3

current and future generations. There is no one around but ourselves who will make our own and our children's life healthier and more purposeful.

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