2. Индексы загрязнения воды сравнивают для водных объектов одной биогеохимической провинции и сходного типа, для одного и того же водотока (по течению, во времени, и так далее).

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Капар Ш., Тлеукулов А.Т.

СУ РЕСУРСТАРЫНЫҢ ЛАСТАНУ ДЕҢГЕЙІНІҢ БАҒАСЫ
(Шу өзені алабы мысалында)

Бұл мақалада судың микробиологиялық ластануы индексі және интегралды жағдай сипаты қарастырылуда. Судың ластануы әр класқа бөлінеді және әр түрлі ластану жағдайына бөлінеді.

Kapar Sh., Tleukulov A.T.

ESTIMATION OF LEVEL OF CONTAMINATION OF WATER RESOURCES

In the article the index of contamination of water and index of saprobity it is necessary to attribute to integral descriptions of the state. The level of muddiness and class of quality of water objects sometimes set depending on microbiological indexes.

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DEPENDENCE OF THE INDEX OF HUMAN DEVELOPMENT ON AN ECOLOGICAL STATE OF ENVIRONMENT

Abstract

Index of human development (IHD) as the method of measurement of human development was entered by the Program of development of the United Nations (PDUN) in 1990. It is settlement statistics in which are considered both volumes of consumption of material benefits, and possibilities for development of the person, provided by health systems and educations. Each of base indicators quantitatively represents one of the main directions of human development: longevity, erudition and actually standard of living.

Key words: indicators, development Index, longevity.

On the present a design procedure of an index of human development, include the following three indicators: gross internal product per capita, literacy of the population and duration of the forthcoming life. In turn, indicators in each of these three areas at first are estimated in percentage of certain ideal, not reached situation in one country yet:

The expected life expectancy equal to 85 years;

• Literacy and population coverage by formation of all three steps at level of 100%;

• Real gross domestic product per capita at level of 40000 dollars.

Intorduction

As a whole the human development Index, is accepted equal, the sum of 1/3 values of an index of life expectancy, 1/3 values of an index of the reached education level and 1/3 values of an index of real gross domestic product on Saff. The greatest possible value of IHD – 1, minimum – 0.

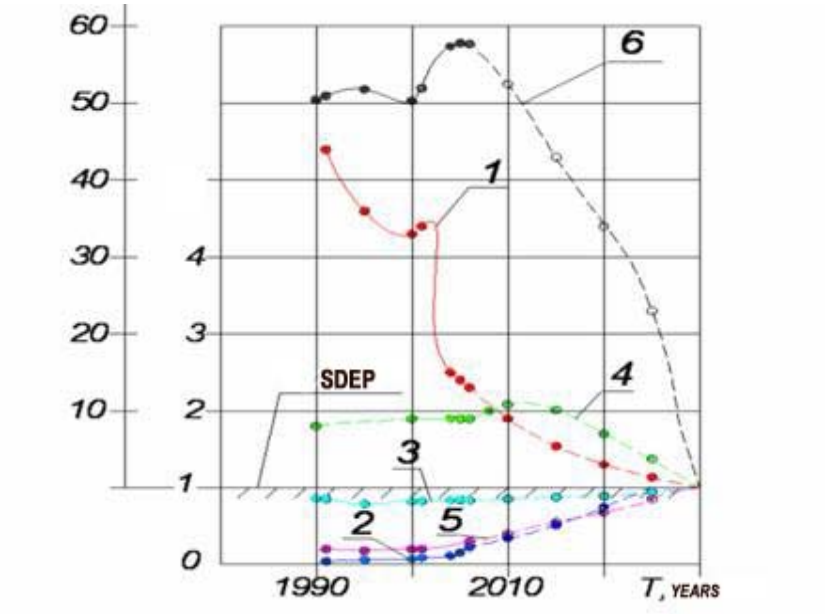
Material and methods

According to World Health Organization health of the person depends on: health system for only 10 %, for 50 % – from a way of life which is formed under the influence of an environment of the person, quality of life and availability of possibilities of health strengthening.

The analysis of statistical year-books [1] shows that infantile mortality in the Republic of Kazakhstan on 1000 live-born for 1991-2006 decreased from 27,0 to 13,91, respectively in relative sizes from 5,4 to 2,8, drawing 1.

The gross national product per capita in Kazakhstan increased in US dollars from 1 052,1, in 1995 to $13 000 the USA in 2012. Life expectancy of the population for 1991-2009 remained at level 67,6 – 67,30 years. Quantity of the registered cases of diseases with for the first time established diagnosis for 1990-2006 increased for 16 %, and by diseases of blood, blood bodies and separate violations with involvement of the immune mechanism in 6,7 times. Data on Kirghiz Republic show that the Gross national product in US dollars per capita steadily decreased, and life expectancy of the population remained practically at one level, within 68,5 years.

Sovereign and independent development of the state is provided, if the economy of Kazakhstan is successfully integrated into world economy and respectively will take a worthy place in world economic system. For the solution of this task there are all necessary preconditions, standard and legal bases of social, economic development of the country are created.



1–infantile mortality on 1000 live-born; 2–gross internal product per capita; 3–life expectancy; 4–quantity of beds on 10 thousand population; 5–index of human development; 6 – a disease with for the first time established diagnosis on 100 thousand population

Drawing 1. Dynamics of an index of human development change and its components for 1990-2006 with their forecasting for prospect, at a sustainable development and protection of the environment (SDPE).

For today development of economic power of the state shouldn't be limited by critical conditions in environment. In this direction, both requirements of the international legal acts, and development on environmental protection are developed in the Republic of Kazakhstan. To enter into number of fifty most competitive countries of the world the Republic of Kazakhstan in 2013-2018 should reach in efficiency of use of resources (EIR) of an indicator, 43 % aren't lower, it is necessary to increase efficiency of use of resources, to increase life expectancy of the population and to provide increase of an index of ecological stability [2].

For the Republic of Kazakhstan, the main problem which leaves the mark on life expectancy, there is an ecology. In the XX century Kazakhstan faced with powerful «ecocatastrophy» in the territory. Thus, for 2010-2020, still there is sharp a problem of access of the population of the country to qualitative drinking water. 20 percent of inhabitants of the Republic of Kazakhstan consume the water which is not corresponding to the standard quality standards [3]. According to the established representations in Kazakhstan, health of the person depends on medicine for 15 %, an ecology condition for 20 %, security and quality of water for 15 % and from itself for 50 %.

One of ways of achievement of high level of IHD is a development of methods and criteria according to a state of environment. At modern level in normative documents a pollution level, both water resources, and atmospheric air is offered to determine by criteria of maximum concentration limit, IZV and IZA. Applied criteria not fully reflect the actual level of pollution of environment [4]. There are separate shortcomings, criteria - the given concentration of impurity, an index of impurity of waters determined by each conditional group of association separately.

It is offered, new integrated criterion according to social ecological and economic situation of a certain territory - an index of harmonious development of the state:

$$IHDS= IPE+ IWE, \quad (1)$$

Thus the environmental pollution index, is established, as

$$IPE = (IWE + IPS) + IPA + (0,2\text{-}0,5)\ IPS, \quad (2)$$

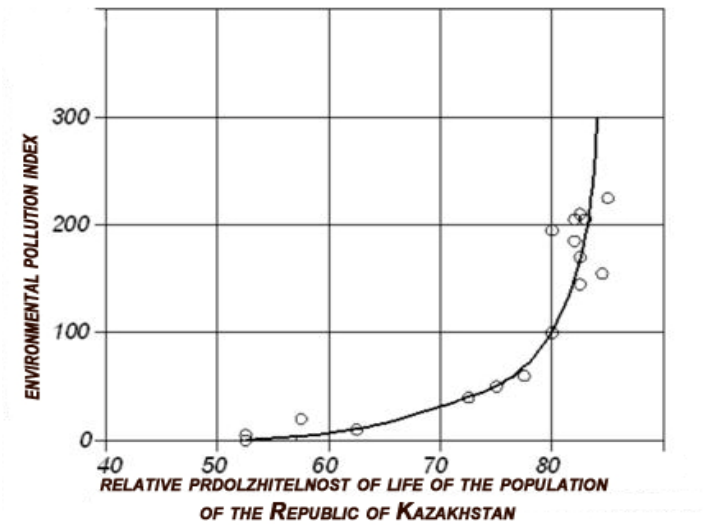
where IWE – an index of exhaustion of water; IPA - an index of pollution of the atmosphere; IPS – an index of pollution of the soil.

Index of a wealthy of environment (IWE):

where FS.U. FE.U. - respectively actual levels of social and economic conditions of the region; FZ.N. - actual level of deterioration of health of the population; FE.B. - actual level of an economic wealthy of the region.

The executed comparative calculations show that life expectancy of the person, to 50 units of IPE, practically doesn't depend on an environment state of pollution, drawing 2.

1–infantile mortality on 1000 live-born; 2–gross internal product per capita; 3–life expectancy; 4–quantity of beds on 10 thousand population; 5–index of human development; 6–a disease with for the first time established diagnosis on 100 thousand population



Drawing 2. Dependence of relative life expectancy of the population on an environmental pollution index.

However, from here it doesn't mean that it is possible to pollute environment. The environmental pollution is higher, the growth rates of life expectancy of the person are lower. Therefore, at the first stage, environmental pollution is necessary to reduce to 150 units, that is almost in 2 times. Further, it is necessary to reduce a level environmental pollution to 50 units. It is possible to reach decrease in level of pollution of atmospheric air almost in 2 times.

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Капар Ш., Тлеукулов А.Т.

АДАМЗАТ ПОТЕНЦИАЛЫНЫҢ ДАМУЫ ҚОРШАҒАН ОРТА ЖАҒДАЙЫ ЭКОЛОГИЯСЫНА ӘСЕРІ

Қоршаған ортаның адамға деген әсерінің негізінен және ауыз су мәселесінің таза болуы, болмауы жағдайының әсерінен қоғам денсаулығына кері әсері көп екендігіне көзіміз жетіп отыр. Сондықтан да әрбір тамшы суымыздың таза болуын талап етіп отырсақ, өмір сүру ұзақтығымыз да артпақ.

Капар Ш., Тлеукулов А.Т.

ЗАВИСИМОСТЬ ИНДЕКСА РАЗВИТИЯ ЧЕЛОВЕЧЕСКОГО ПОТЕНЦИАЛА ОТ ЭКОЛОГИЧЕСКОГО СОСТОЯНИЯ ОКРУЖАЮЩЕЙ СРЕДЫ

Суверенное и независимое развитие государства обеспечивается, если экономика Казахстана успешно интегрируется в мировую экономику и соответственно займет достойное место в мировой экономической системе.

УДК 631.452.:631.474

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ОСОБЕННОСТИ ФОРМИРОВАНИЯ ЭЛЕМЕНТОВ ПРОДУКТИВНОСТИ КЛЕЩЕВИНЫ В ЗАВИСИМОСТИ ОТ СРОКОВ ПОСЕВА И ГЛУБИНЫ ЗАДЕЛКИ СЕМЯН

Аннотация

В статье изучены особенности формирования элементов продуктивности клещевины в зависимости от сроков посева и глубины заделки семян.

Сделаны выводы, что сроки посева и глубина заделки семян оказывают определенное влияние на высоту растений, накопление сухой массы, формирование площади листовой поверхности.

На основании проведенных исследований по изучению основных приемов возделывания, клещевина вполне пригодна для роста, развития и формирования полноценного урожая семян в условиях Акдалинского массива рисосеяния.

***Ключевые слова*:** клещевина, Донская крупнокистная, сроки посева, биометрический показатель, глубина заделки, урожайность.

Введение

Управление формированием урожая весьма сложно, так как растения в ценозе, изменяясь в процессе вегетации, взаимодействуют с другими сложными системами – микроорганизмами почвы, возбудителями болезней, сорняками, вредителями. Многие факторы среды – температурный режим, осадки и другие – практически невозможно контролировать. Многие факторы поддаются регулированию. Можно изменить условия минерального питания, воздействовать на сорняки, вредителей болезней. Управление процессом формирования урожая ведут на основе систематического контроля за