# Teoretičeskaâ i prikladnaâ nauka

# Theoretical & Applied Science

# Teoretičeskaâ i prikladnaâ nauka

# Theoretical & Applied Science

06 (74)

2019

# International Scientific Journal

# Theoretical & Applied Science

ISSN 2308-4944

06

9 772308 494195

# International Scientific Journal

# Theoretical & Applied Science

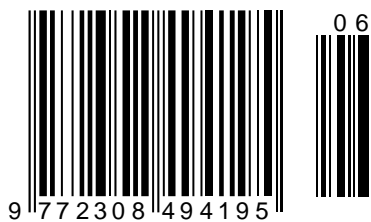# International Scientific Journal

# Theoretical & Applied Science

**Impact Factor ICV = 6.630**

**Impact Factor ISI = 0.829**
**based on International Citation Report (ICR)**

**The percentage of rejected articles:**

| 29% | 71% |
|-----|-----|
| Accepted | Rejected |

9 772308 494195

06

**SECTION 25. Technologies of materials for the light and textile industry**

QR – Issue    QR – Article

**Merab Shalamberidze**
Akaki Tsereteli State University
Doctor of Technical Sciences, Professor, Faculty of Technological Engineering, Department of Design and Technology, Kutaisi, Georgia
merab.sh@hotmail.com

**Zaza Sokhadze**
Akaki Tsereteli State University
Doctor of Mathematic, Professor, Faculty of Natural Sciences, Department of Mathematics,  Kutaisi, Georgia,
z.soxadze@gmail.com

**Natalia Lomtadze**
Akaki Tsereteli State University
Doctor of Engineering, Ass. Professor, Faculty of Technological Engineering, Department of Design and Technology, Kutaisi, Georgia,
lomtadzenato@mail.ru

# CONSTRUCTING THE TRANSVERSE-VERTICAL GEOMETRICAL SHAPE OF THE ORTHOPEDIC SHOE-TREE IN SECTION 0,5D USING THE SOLUTIONS OF SINGULAR DIRICHLET BOUNDARY PROBLEMS

*Abstract*: *The paper presents the results of designing the transverse-vertical section shape of the orthopedic shoe-tree in 0,5D. It is known that from a geometric standpoint, the shoe-tree has a very complicated shape, and its description using mathematical methods of research is a complex and time-consuming process. To solve this problem, the authors of the article used the integral curves of the solutions of singular Dirichlet boundary problems, in particular, for constructing a transverse-vertical shape of the orthopedic shoe-tree in 0,5D. Using the combinations and connections of the segments of integral curves, a transverse-vertical shape was constructed of the orthopedic shoe-tree in 0,5D. This method also allows for changing the shapes on a large scale and with great accuracy to change the shape of the transverse-vertical sections of the orthopedic shoe-tree when shifting from one size to another size. The research results are particularly relevant in the design and production of orthopedic shoe-trees.*

*Key words*: *Orthopedic shoe-tree, integral curves, differential equations.*
*Language*: *Russian*
*Citation*: Shalamberidze, M. M., Sokhadze, Z. P., & Lomtadze, N. Z. (2019). Constructing the transverse-vertical geometrical shape of the orthopedic shoe-tree in section 0,5d using the solutions of singular Dirichlet boundary problems. *ISJ Theoretical & Applied Science, 06 (74),* 501-504.
*Soi*: http://s-o-i.org/1.1/TAS-06-74-56    *Doi*: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.56

## ПОСТРОЕНИЕ ПОПЕРЕЧНО-ВЕРТИКАЛЬНОЙ ГЕОМЕТРИЧЕСКОЙ ФОРМЫ ОРТОПЕДИЧЕСКОЙ ОБУВНОЙ КОЛОДКИ В СЕЧЕНИЙ 0,5D С ПОМОЩЬЮ ИНТЕГРАЛЬНЫХ КРИВЫХ РЕШЕНИЙ СИНГУЛЯРНЫХ КРАЕВЫХ ЗАДАЧ ДИРИХЛЕ

*Аннотация*: *В статье представлены результаты проектирования формы поперечно-вертикального сечения ортопедической обувной колодки на 0,5D. Известно, что обувная колодка с геометрической точки зрения представляет собой очень сложную форму и ее описание с применением математическими*

методами исследования является сложным и трудоемким процессом. Для решения данной проблемы авторы статьи использовали интегральные кривые решений сингулярных краевых задач Дирихле, в частности для построения поперечно-вертикальной формы ортопедической обувной колодки на 0,5D. С помощью комбинаций и соединений отрезков интегральных кривых была построена поперечно-вертикальная форма на 0,5 D ортопедической обувной колодки. Данный метод дает также возможность в широком масштабе и с большой точностью менять формы поперечно-вертикальных сечений ортопедической обувной колодки при переходе от одного размера на другой размер. Результаты исследований особенно актуальны при проектировании и в производстве ортопедической обувной колодки.

*Ключевые слова*: Ортопедическая обувная колодка, интегральные кривые, дифференциальные уравнения.

**Введение.**

В обувной промышленности большое внимание уделяется вопросу проектирования ортопедической обувной колодки. Известно, что форма обувной колодки с геометрической точки зрения является сложным и ее описание математическими методами исследования является довольно долгим и трудоемким процессом. В процессе проектирования обувной колодки в обязательном порядке учитываются антропометрические данные стопы, такие, как размеры и формы. Авторами статьи были исследованы педографические, антропометрические и тензометрические данные стоп пациентов. Создана база данных, в которой индивидуально зафиксированы патологические отклонения стоп пациентов.

Для производства сложной ортопедической обуви проектируют такие специальные колодки, которые учитывают все патологические отклонения деформированной стопы. Только в этом случае образуется комфортное внутри обувное пространство для нормального функционирования стоп с патологическими отклонениями.

Алгоритмы, описывающие геометрическую форму обувной колодки, рассмотрены в работах широкого круга ученных [1-5]. Для описания геометрической формы поперечно-вертикальных сечений обувной колодки они использовали следующие методы исследования: радиус графический, биквадратный сплайн, бикубический интерполярный сплайн и др. Вышеуказанные методы исследования требуют большого времени в процессе проектирования, а также характеризуются некоторыми отклонениями в достоверности.

**Методы исследования.**

Для системного описания поперечно-вертикальных сечений ортопедической обувной колодки авторы статьи применили интегральные кривые решений сингулярных краевых задач Дирихле [6, 95-127]. С помощью выше указанного математического метода исследования нами были построены формы поперечно-вертикальных сечений ортопедической обувной колодки на 0,18D, 0,62D и 0,78D [7, 27-32; 8, 23-31, 9, 122-126, 10, 17-21]. Аналогичным методом была построена геометрическая форма поперечно-вертикального сечения ортопедической обувной колодки на 0,5D.

**Результаты и их обсуждения.**

В процессе исследования преобразовали биомеханические характеристики деформированных стоп и на этой основе определяли кривые поперечно-вертикального сечения колодки на 0,5D.

На рис. 1 представлен поперечно-вертикальное сечение ортопедической обувной колодки на 0,5D.
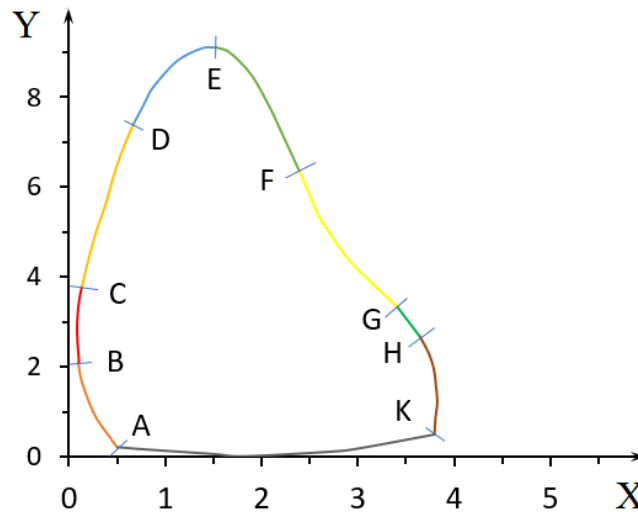
**Рис. 1. Поперечно-вертикальное сечение ортопедической обувной колодки на 0,5D.**

Для построения поперечено-вертикального сечения ортопедической обувной колодки на 0,5D ее предварительно разделили на девять частей. Кривых пронумерованных девяти отрезков описывали с помощью дифференциальных уравнений. С помощью интегральных кривых решений сингулярных краевых задач Дирихле выбирали те девять отрезков, которые идентично соответствуют геометрической форме поперечно-вертикального сечения на 0,5D ортопедической обувной колодки, в частности:

I - кривая AB соответствует той части решения уравнения $u(t) = (-\frac{1}{3} - \frac{1}{3}c)t + \frac{1}{3}c\frac{1}{t^2} + \frac{2}{3}t + \frac{t^2}{2} + \frac{t^4}{6}$, для которой с=0, с множеством $[-2,4; 1.8] \times [1.8; -0.5]$;

II - кривая AB соответствует той части решения уравнения $u(t) = (-\frac{1}{3} - \frac{1}{3}c)t + \frac{1}{3}c\frac{1}{t^2} + \frac{2}{3}t + \frac{t^2}{2} + \frac{t^4}{6}$, для которой с=0, с множеством$[1.7: 2.3] \times [1.8; 2.9]$;

III - кривая CD соответствует той части решения уравнения $u(t) = (-\frac{1}{3} - \frac{1}{3}c)t + \frac{1}{3}c\frac{1}{t^2} + \frac{2}{3}t + \frac{t^2}{2} + \frac{t^4}{6}$, для которой с=5, с множеством $[-2.8; -2.1] \times [9.1; 4.2]$;

IV - кривая DE соответствует той части решения уравнения $u(t) = \frac{t^3}{2} + \frac{1}{3}ct^{-2} - (1 - \frac{1}{3}c)t + \frac{1}{2}$, для которой с=3, с множеством $[-5.1; -1.6] \times [-2.1; -0.9]$;

V - кривая EF соответствует той части решения уравнения $u(t) = \frac{t^3}{2} + \frac{1}{3}ct^{-2} - (1 - \frac{1}{3}c)t + \frac{1}{2}$, для которой с=5, с множеством $[-0,9; -0,1] \times [0.1; -6.1]$;

VI - кривая FG соответствует той части решения уравнения $u(t) = \frac{t^3}{2} + \frac{1}{3}ct^{-2} - (1 - \frac{1}{3}c)t + \frac{1}{2}$, для которой с=0, с множеством $[-2.7; -1.6] \times [-7; 0.1]$;

VII - кривая GH соответствует той части решения уравнения $u(t) = (-\frac{1}{3} - \frac{1}{3}c)t + \frac{1}{3}c\frac{1}{t^2} + \frac{2}{3}t + \frac{t^2}{2} + \frac{t^4}{6}$, для которой с=2, с множеством $[-1.9; -1.8] \times [2.1; 3.2]$;

VIII - кривая HK соответствует той части решения уравнения $u(t) = (-\frac{1}{3} - \frac{1}{3}c)t + \frac{1}{3}c\frac{1}{t^2} + \frac{2}{3}t + \frac{t^2}{2} + \frac{t^4}{6}$, для которой с=1, с множеством $[-1; -0.4] \times [0.1; 2.7]$;

IX - кривая KA соответствует той части решения уравнения $u(t) = \frac{t^3}{2} + \frac{1}{3}ct^{-2} - (1 - \frac{1}{3}c)t + \frac{1}{2}$, для которой с=2, с множеством $[1.2; 2.8] \times [0.8; 14,8]$.

**Выводы.**

Таким образом, на основе базы данных патологических отклонении стоп пациентов и с помощью интегральных кривых решений сингулярных краевых задач Дирихле, построено поперечно-вертикальное сечение на 0,5D ортопедической обувной колодки.

С использованием вышеуказанного метода исследования можно построить любые формы поперечно-вертикальных сечений ортопедической обувной колодки. Также, данный метод дает возможность менять формы поперечно-вертикальных сечений при переходе от одного размера колодки на смежный размер колодки. Использование данного математического метода исследования в процессе проектирования ортопедической колодки

является актуальным, особенно для пациентов с деформированными и патологическими стопами.

**References:**

1. Fukin, V. A. (1980). *Radiusograficheskiy metod konstruirovaniya vnutrenney formy obuvi.* (p.381). Moscow: Legkaya industriya.

2. Fukin, V. A., Kostyleva, V. V., Lyba, V. P. (1987). *Proektirovanie obuvnykh kolodok.* (p.268). Moscow: Legprombytizdat.

3. Fukin, V. A. (2000). *Teoreticheskie osnovy proektirovaniya vnutrenney formy obuvi.* 2-izdanie per. i dop. (p.356). Moscow: MGUDT.

4. Kiselev, S. Y. (2004). *Avtomatizirovannoe proektirovanie i izgotovlenie tekhnologicheskoy osnastki dlya proizvodstva obuvi i protezo-ortopedicheskikh izdelii.* Diss. d-ra tekh. nauk. (p.392). Moscow: MGUDT.

5. Zamarashkin, K. N. (2004). *Matematicheskie metody proektirovaniya obuvi i konstruirovaniya tekhnologicheskoy osnastki.* (p.312). SPB.: SPGUTD.

6. Rachunkova, I., Spielaurer, A., Stanek, S., & Weinmuler, E. B. (2013). The sttucture of a set of positive solutions to Dirichlet BVPs with time and space singularities. *Georgian Mathematical Journal, №1*, pp. 95-127.

7. Shalamberidze, M., Sokhadze, Z., & Tatvidze, M. (2018). Construction of the Transverse-Vertical Shapes of the Orthopedic Boot-Tree by Means of the Solution to Singular Dirichlet Boundary Value Problem. *Bulleten of the Georgian National Academy of Sciences, Vol. 12, №1*, pp. 27-32.

8. Shalamberidze, M., Sokhadze, Z., Tatvidze, M. (2018). Constructing the main transverse-vertical cross-sections of the orthopedic shoe boot tree by means of the integral curves. *Bulleten of the Georgian National Academy of Sciences, Vol. 12, №3*, pp. 23-31.

9. Shalamberidze, M., Sokhadze, Z. (2018). Constructing a shape of orthopedic boot-tree print by means of the solution to differential equation with deviating argument. Philadelphia USA. *International Scientific Journal. Theoretical & Applied Science, vol. 61, №5,* pp. 122-126.

10. Shalamberidze, M., Sokhadze, Z., Tatvidze, M. (2019). Construction of the Orthopedic Boot-Tree Print and Main Longitudinal-Vertical Section by Means of the Solution of Differential Equations. *Bulleten of the Georgian National Academy of Sciences, Vol. 13, №2*, pp. 17-21.

**SECTION 7. Mechanics and machine construction.**

**Akmal Ahadovich Mirzoev**
Academy of Sciences
Doctor of Philosophy, institute
of mechanics and seismic stability
of structures
the Republic of Uzbekistan

**Yanvarjon Djakhongirovich Khodjaev**
Academy of Sciences
Doctor of Science, Uzbekistan

# RETARDATION RHEOLOGICAL EQUATION OF THE ELASTIC-VISCOUS-INERT MEDIUM AND ITS SOLUTION

*Abstract*: *The goal of this research is to improve the strain state deformation (SSD) equations for resiliently viscous-inert media that resist them by taking into account the volume contents of the phases and solid-like fluid viscous-inertly deformable media in order to establish the flow pattern with the formation and destruction of the plastic flow core and more adequate description of the flow processes.*

*Key words*: *rheology, relaxation, retardation, heredity, viscosity, elasticity, plasticity, inertly deformability, fluid, multiphase, stress, dispersion.*

*Language*: *Russian*

*Citation*: Mirzoev, A. A., & Khodjaev, Y. D. (2019). Retardation rheological equation of the elastic-viscous-inert medium and its solution. *ISJ Theoretical & Applied Science, 06 (74),* 505-511.

*Soi*: http://s-o-i.org/1.1/TAS-06-74-57    *Doi*: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.57

## РЕТАРДАЦИОННОЕ РЕОЛОГИЧЕСКОЕ УРАВНЕНИЕ УПРУГО-ВЯЗКО-ИНЕРТНОЙ СРЕДЫ И ЕЕ РЕШЕНИЕ

*Аннотация*: *Целью исследования данной работы является усовершенствование уравнений НДС упруго-вязко-инертной сопротивляемых их сред посредством учета объемных содержаний фаз и твердообразных текучих вязко-инертно деформируемых сред с целью установления закономерности течения с образованием и разрушением пластического ядра потока и более адекватного описания процессов течения.*

*Ключевые слова*: *реология, релаксация, ретардация, наследственность, вязкость, упругость, пластичность, инертно деформируемость, текучая среда, многофазность, напряжения, дисперсность.*

**Постановка проблемы**.

Большая часть встречаемых в природе, технике и технологии твердообразных текучих материалов являются дисперсными системами, состоящими из двух и более фаз. К таким средам относятся, в частности, глинистые и цементные растворы, смолы, парафинистые нефти, пасты, мази, пульпы, смазочные материалы, масляные краски, пищевые массы и многое др.

Эти вещества обладают несколькими фундаментальными свойствами: упругостью, пластичностью и вязкостью. Вещества, свойства которых определяются вязкостью и пластичностью и соответствуют телу Шведова-Бингама, образуют класс веществ, называемых бингамовскими средами. Среды, обладающие вязкостью и пластичностью в различной степени и образующие более широкий класс веществ, чем бингамовские среды, называются вязкопластическими средами.

Течение вязкопластической среды по предложенному Сен-Венаном обобщенному реологическому уравнению, начинается, когда напряжение равно или больше предельного

напряжения сдвига ($\tau \geq \tau_0$) при этом область течения, где $\tau = \tau_0$ образует ядро потока (при течении в трубопроводах) или область пластичности, а в области течения, где $\tau > \tau_0$ происходит вязкое течение. Считается, что ядро потока движется как твердое тело, а за приделами ядра потока вязкое течение, таким образом, поток состоит из двух агрегатных состояний структурированного ядра потока и вязкой жидкости. Практическими и экспериментальными измерениями установлен факт разрушения ядра потока по мере движения среды, т.е. ядро потока постепенно разрушаясь переходит в вязко-пластичную жидкость [1]. Это изменение агрегатного состояния ядра потока приводит к изменению реологических и гидродинамических свойств всей движущейся среды.

Так как своевременное и более точное установление значений реологических и гидродинамических параметров сред, используемых в технике и технологии, является важнейшим фактором предупреждения аварийных ситуаций, осложнений, а также являются стимулом усовершенствования техники и технологических процессов, то научные исследования в данном направлении являются актуальными.

**Анализ последних исследований и публикаций.**

В последние десятилетия развиваются представления о том, что, в исследовании течений сред, содержащих несколько фаз, находящихся в различных агрегатных состояниях, перенос физической субстанции осуществляется не только на молекулярном, но и молярном уровне. Молярные переносы, проявляемые в турбулентном потоке, изучены Рейнольдсом, Прандтлем, Лойцянским, Batchelor G.K. и др. [1, 3, 6, 8, 9, 10]. Коллективные - молярные переносы в газовых потоках рассмотрены Струминским и его учениками [1]. Уравнения напряжённо-деформационного состояния (НДС) для молярных переносов в неньютоновских текучих средах предложены в работах [4, 7]. Большинство выше указанных сред проявляют тиксотропные свойства, т.е., структура их изотермически разрушается при действии нагрузки и образуется после снятия нагрузки. Разрушение структуры происходит формированием надмолекулярных образований – молей, размеры и форма которых соответствуют действующему значению нагрузки. Это явление объясняется структурной релаксацией малопрочной твердообразной текучей среды, при остановке по истечении некоторого времени в системе опять образуются

моли и более крупные кинетические единицы, а в последействии непрерывная структура.

**Выделение нерешенных ранее частей общей проблемы.**

В работах авторов данной работы получена новая закономерность, заключающаяся в пропорциональности тензора напряжения тензору ускоренных деформаций и тем самым определено новое свойство материалов. Предложена механическая модель, параллельным и последовательным соединением которой получены множества релаксационных и ретардационных моделей для описания реологически сложных сред, наделенных упругими, вязкими и инертными свойствами. В частности, решением простой ретардационной модели относительно скорости деформации установлено свойство деформирующегося материала, выражающее собой вязкое последействие, которое обусловлено упруго-вязко-инертной сопротивляемостью сред к деформационным процессам.

Введены понятия двух периодов релаксации (ретардации) равные отношению линейной плотности к динамической вязкости и корню квадрата отношения линейной плотности к коэффициенту упругости соответственно.

В вышеупомянутых работах показано, что многие вещества, особенно двух и более фазные, не могут быть охарактеризованы простыми реологическими моделями. Реологически сложные деформируемые среды обладают более чем одним периодом релаксации или ретардации, а чаще целым спектром периодов релаксации и ретардации. С возрастанием действующей нагрузки скорость деформирования увеличивается, т.е., происходит ускорение деформации, разрушение пространственной сетки структуры превалирует над восстановлением, и среда течет с изменяющимися параметрами, определяющими его свойства

Весьма часто явления релаксации и последействия, известные под общим названием как наследственность, проявляются одновременно даже у сред, которые при течении не отличимыеот вполне вязких жидкостей, не говоря уже о таких средах, как концентрированные смеси, растворы, масла, пасты, нефти, битумы и т.п., в которых эти свойства ярко выражены. Релаксационные и ретардационные переходы в смесях проявляются на разных уровнях их молекулярной и молярной организации. Под термином «моли» мы подразумеваем более представительные частицы, состоящие из большого количества молекул как однородной, так и неоднородной среды в физико-

механическом поведении, которые проявляют себя как целостное образование.

**Формулировка целей статьи.** Целью исследования данной работы является усовершенствование уравнений НДС упруго-вязко-инертной сопротивляемых их сред посредством учета объемных содержаний фаз и твердообразных текучих вязко-инертно деформируемых сред с целью установления закономерности течения с образованием и разрушением пластического ядра потока и более адекватного описания процессов течения.

**Изложение основного материала.** В связи, с чем рассматриваемую среду считаем, состоящей из двух частей, причем одна часть состоит из неупорядоченных, несвязанных мельчайших частиц, а вторая из связанных сегментов представляет собой распределенные по всему объему структурированные микрообласти - моли различного типа. Различные типы молей характеризуются соответственно различными временами жизни. При изменении напряжения происходит перераспределение числа частиц между структурированной и неструктурированной частями среды, т.е., изменяется относительное объемное содержание свободных частиц и молей.

Смеси, в частности, дисперсные системы, структура которых описывается моделью, согласно которой имеется жидкая и твердая фазы. Частицы твердой фазы, связываясь с молекулами жидкости и близи находящимися частицами твердой фазы, в нашем понимании молей, как в отдельности, так и в связанной совокупности представляют собой моли, но более прочные, чем моли, состоящие из частиц жидкости. Таким образом, вязко-инертно деформируемые среды - это жидкости, часть которых образует непрерывную вязко деформируемую фазу, а часть жидких частиц объединенные в моли как в турбулентном потоке (размеры которых могут иметь от нескольких сот микронов до нескольких сот метров, обладая различной формой и массой). К молям, в нашем понимании, относятся также дисперсные частицы и их связанные между собой и жидкостью более крупные кинетические образования, находящиеся в среде. При этом молекулярные образования и дисперсные частицы, а также их связанные комплексы в жидкости будем называть молями. Эти смеси деформируются кроме механизма вязкостного, упругого также по деформационной инерции [11].

В данном случае сравнительно небольшие количество совокупленных частиц - молей могут обеспечить возрастание необратимой вязкой

деформации, связанной с деформационной инерцией или, наоборот, могут задержать ее по той же причине если они, сопротивляясь благодаря той же деформационной инертности или то же самое вязкой запаздывающей деформации двигаются в течении. Для недеформированной среды процессы разрыва и восстановления физических узлов (связей) при тепловом движении молекул и молей взаимно уравновешиваются, а после приложения нагрузки равновесие нарушается и начинается процесс направленной перегруппировки узлов и цепей с образованием и разрушением различного размера и формы кинетических единиц. Из-за чего в таких средах будет наблюдаться широкий набор времён релаксации и ретардации, охватывающих несколько порядков. По этим данным можно определить практически все физико-механические свойства сред связанных с протекающими в них процессами релаксации и ретардации.

Особенности структурной организации сред, т.е. существование различных форм их молекулярной и молярной подвижности приводят к появлению различных релаксационных и ретардационных процессов, каждый из которых связан с подвижностью тех или иных структурных элементов. Поведение такой среды в целом может быть описано спектром времён релаксации и ретардации. В этих средах, за быстрые релаксационные и ретардационные процессы ответственны мелкомасштабные движения молекул и макромолекул, а времена релаксации и ретардации, связанные с подвижностью более крупных представителей – молей, т.е. различных элементов надмолекулярных структур, частиц дисперсной фазы и их комплексов могут быть довольно большими и распределяться в большом диапазоне временной шкалы. Соответствующие им релаксационные и ретардационные процессы протекают относительно медленно, т.е., более ярко проявляется деформационная инертность крупных образований в этих средах.

В связи с чем, релаксационные и ретардационные процессы в текучих средах следует рассматривать как макроскопическое проявление их молекулярной и молярной подвижности, связанной с отличающимися по размеру (в широком интервале) кинетическими отдельностями-молями.

Для характеристики эксплуатационных свойств и их прогнозирования: растворов, смол, парафинистих нефтей и многих других многофазных сред, в частности, глинистых растворов, содержащих различного размера и рода частиц, их структурных образований наиболее важными являются медленные релаксационные и

Clarivate Analytics *indexed*

ретардационные процессы. В связи, с чем появляется необходимость развития метода релаксационной спектрометрии в этой области, соответствующей медленным процессам физической и гидродинамической релаксации. Медленные релаксационные процессы, проявляющиеся, в частности, в глинистых растворах при тиксотропном образовании и разрушении структуры природы и закономерности, которых на данное время недостаточно исследованы. Основной интерес здесь представляет, какие именно релаксационные механизмы ответственны за эти процессы, сколько их, как они связаны со структурными параметрами среды и как, достоверно прогнозировать свойства этих сред, проявляемых в технологических процессах.

Очевидно, что разработка современных методов расчета и прогнозирования невозможна без знания всех релаксационных и ретардационных механизмов и их кинетических характеристик для различных жидкостей и смесей и особенно для тех, которые находятся в переменных и длительных условиях эксплуатации. Как было сказано выше, при воздействии на среду напряжения происходит перераспределение числа частиц между структурированной (молярными образованиями) и неструктурированной частями среды, т.е. деформационные процессы, сопровождаются изменением относительных объемных содержаний свободных мельчайших частиц и молей. В связи, с чем рассмотрим вопросы обобщения реологических уравнений состояния на случаи учитывающих в выделенном элементе объема объемные содержания реологических свойств фаз.

Представим себе среду, состоящую из частиц ньютоновской жидкости, обладающих вязкими свойствами, твердых частиц, обладающих упругими свойствами, а также связанных в комплексы большого количества того и другого сортов частиц, проявляющих свойства деформационной инертности. Эти свойства определяются $\mu$ - динамической вязкостью жидкости, $m_\ell$ - коэффициентом линейной плотности молей, а также коэффициентом упругости $G$ твердых частиц.

Если для простоты предположить, что в выделенном объеме находятся два типа частиц и они распределены случайным образом и каждый сорт частиц занимает определенную долю объема [3] то эта часть объема будет обладать свойствами тех частиц, которые в нем находятся, скажем свойством выражающимся истинной динамической вязкостью $\mu_i$, а вторая часть выделенного объема скажем деформационной инертностью, определяющей это свойство истинным коэффициентом линейной плотности $m_{\ell i}$. Если теперь предположить, что из выделенного объема изъяты молярные частицы, а жидкость распределить по всему объему, то она будет иметь свойство жидкости, выражаемой приведенной динамической вязкостью $\mu_n$.

Если из выделенного объема, в котором находятся частицы вязкой жидкости и молярные частицы, изъять вязкую жидкость и считать, что молярные частицы, имевшие истинные коэффициенты линейной плотности $m_{\ell i}$, распределены по всему выделенному объему, то эта среда будет иметь теперь коэффициент приведенной плотности $m_{\ell n}$.

Таким образом, отношения, приведенных свойств к истинным свойствам, т.е. $\mu_n/\mu_i = f_1$ и $m_{\ell n}/m_{\ell i} = f_2$ есть нечто иное как объемная доля вязких и деформационно-инертных свойств смеси соответственно. Это же рассуждение, распространив для упругого свойства твердых частиц в случае нахождения их в выделенном объеме, получим объемную долю упругих свойств в смеси в виде $G_n/G_i = f_3$.

Если в выделенном объеме отсутствуют частицы, имеющие деформационные свойства, кроме рассматриваемых здесь, то будем иметь соотношение:

$$\mu_n/\mu_i + m_{\ell n}/m_{\ell i} + G_n/G_i = 1 \quad \text{или}$$
$$f_1 + f_2 + f_3 = 1. \tag{1}$$

Так как $\mu_n = f_1\mu_i$, $m_{\ell n} = f_2 m_{\ell i}$ и $G_n = f_3 G_i$, то в смеси напряжения по закону Гука, Ньютона и деформационной инертности выразятся следующим образом:

$$\tau = f_1\mu_i\dot{\gamma}, \quad \tau = f_2 m_{\ell i}\ddot{\gamma}, \quad \tau = f_3 G_i\gamma. \tag{2}$$
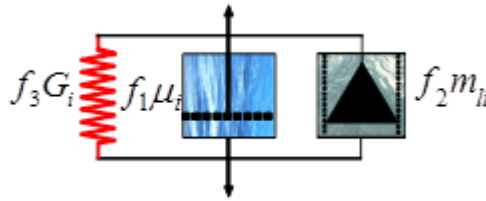
**Рисунок 1 - Параллельное соединения простых механических элементов Гука, Ньютона и деформационной инертности.**

Соединяя параллельно элементы Гука, Ньютона и деформационной инертности [2] получим ретардационные уравнение напряженно-деформационного состояния в виде (рис.1):

$$f_2 m_{\ell i} \ddot{\gamma} + f_1 \mu_i \dot{\gamma} + f_3 G_i \gamma = \tau. \tag{3}$$

Если на эту систему действует переменная во времени напряжения $\tau = \tau_0 \cos \omega t$, то вместо (3) будем иметь:

$$\ddot{\gamma} + \frac{f_1 \mu_i}{f_2 m_{\ell i}} \dot{\gamma} + \frac{f_3 G_i}{f_2 m_{\ell i}} \gamma = \frac{\tau_0}{f_2 m_{\ell i}} \cos \omega t. \tag{4}$$

Решение ретардационного уравнения состояния. Полное решение уравнения (4) будет состоять из двух частей - первая, "нестационарная" часть, которая затухает со временем как $e^{-\frac{f_1 \mu_i}{f_2 m_{\ell i}} t}$ и имеет вид:

$$\gamma = C e^{-\frac{f_1 \mu_i}{f_2 m_{\ell i}} t + i\left(\frac{f_3 G_i}{f_2 m_{\ell i}} - \frac{f_1^2 \mu_i^2}{f_2^2 m_{\ell i}^2}\right)^{1/2} t}, \tag{5}$$

где $\dfrac{f_2 m_{\ell i}}{f_1 \mu_i} = t_{Kh_1}$.

Заменив в уравнении (3) $\tau = \tau_0 \cos \omega t$ величин $\tau = \tau_0 e^{i\omega t}$ перепишем его в виде:

$$f_2 m_{\ell i} \ddot{\gamma} + 2 f_1 \mu_i \dot{\gamma} + f_3 G_i \gamma = \tau_0 e^{i\omega t}. \tag{6}$$

Решение уравнения (4.6) выберем в виде:

$$\gamma = A e^{i\omega t}, \tag{7}$$

откуда,

$$\dot{\gamma} = i\omega A e^{i\omega t} = i\omega \gamma,$$
$$\ddot{\gamma} = i^2 \omega^2 A e^{i\omega t} = -\omega^2 \gamma.$$

Подставляя эти равенства в уравнение (6), имеем:

$$(-A\omega^2 f_2 m_{ei} + i\omega A f_1 \mu_i + A f_3 G_i) e^{i\omega t} = \tau_0 e^{i\omega t}$$

Поскольку это уравнение выполняется при всех значениях $t$, то:

$$A = \frac{\tau_0}{i\omega f_1 \mu_i + (f_3 G_i - \omega^2 f_2 m_{\ell i})}.$$

Умножив числитель и знаменатель последнего равенства на $-i$ и ведём понятие реологического импеданса, которое, в отличие от механического импеданса, определяется как напряжение, необходимое для деформирования среды с единичной скоростью деформации, т.е.:

$$|I| = \frac{\tau_0}{\dot{\gamma}}. \tag{8}$$

По аналогии с механическим импедансом, который определяется механическими параметрами, реологический импеданс системы, описываемой (8), определяется реологическими параметрами в виде:

$$I = f_1 \mu_i + i\left(\omega f_2 m_{\ell i} - \frac{f_3 G_i}{\omega}\right) = f_1 \mu_i + i I_i,$$

где $I = |I| e^{i\varphi}; \quad tg\varphi = I_i / f_1 \mu_i;$

$\varphi$ - разность фаз между напряжениями и скоростью деформации:

$$|I| = \left[ f_1^2 \mu_i^2 + \left(\omega f_2 m_{\ell i} - \frac{f_3 G_i}{\omega}\right)^2 \right]^{1/2}.$$

Здесь в отличии от работ [2, 4] реологический импеданс выведен с учетом объемных концентраций фаз - вязких, инертных и упругих деформационных свойств.

Таким образом, коэффициент $A$ можно переписать так:

$$A = -i \frac{\tau_0}{\omega I}.$$

Следовательно, решение (7) примет вид:

$$\gamma = -i\,\frac{\tau_0 e^{i(\omega t - \varphi)}}{\omega|I|}. \qquad (9)$$

**Выводы и перспективы дальнейших исследований.** Этим стационарным решением в комплексной форме полностью определяется амплитуда и фаза деформации относительно действующего напряжения, после того как нестационарный член не оказывает влияния на общее решение.

Решение (9) позволяет сделать три существенных приведенных ниже выводов. Наличие реактивной части реологического импеданса обусловливает разность фаз $\varphi$ между деформацией и напряжением. Существует дополнительная разность фаз, обусловленная множителем - $i$, даже при $\varphi = 0$ деформация отстает по фазе от напряжения $\tau = \tau_0 \cos\omega t$ на 90°. Максимальная деформация среды равна $\dfrac{\tau_0}{\omega|I|}$.

Выделив действительную часть из решения:

$$\gamma = -i\,\frac{\tau_0}{\omega|I|}\cos(\omega t - \varphi) + \frac{\tau_0}{\omega|I|}\sin(\omega t - \varphi),$$

получим:

$$\gamma = \frac{\tau_0}{\omega|I|}\sin(\omega t - \varphi). \qquad (10)$$

Определение расчетной формулы для изменения скорости деформации среды. Скоростью деформации при вынужденном колебательном деформировании среды в стационарном состоянии будет:

$$\dot{\gamma} = \frac{\tau_0}{|I|}e^{i(\omega t - \varphi)}, \qquad (11)$$

откуда следует, что разность фаз между скоростью деформации $\dot{\gamma}$ и напряжением равно только $\varphi$ , так как перед $\tau_0$ нет множителя $i$. При $\varphi = 0$ из (11) следует, что скорость деформации будет находиться в фазе с напряжением.

Амплитуда скорости деформации равна $\tau_0/|I|$, как и ожидалось при определении

реологического импеданса (8). Действительная часть скорости деформации (11), соответствующая действительной части напряжения, запишется в виде:

$$\dot{\gamma} = \frac{\tau_0}{|I|}\cos(\omega t - \varphi). \qquad (12)$$

Сравнивая (10) и (12), получаем, что скорость деформации в среде всегда будет опережать деформацию по фазе на 90° , а ее сдвиг фазы относительно напряжения равен лишь $\varphi$, причем:

$$tg\varphi = \frac{\omega f_2 m_{\ell i} - \dfrac{f_3 G_i}{\omega}}{f_1 \mu_i} = \frac{I_i}{f_1 \mu_i}. \qquad (13)$$

Амплитуда скорости деформации, как показано выше, равна:

$$\frac{\tau_0}{|I|} = \frac{\tau_0}{\left[f_1^2 \mu_i^2 + \left(\omega f_2 m_{\ell i} - \dfrac{f_3 G_i}{\omega}\right)^2\right]^{1/2}};$$

она зависит от частоты $\omega$, действующей на систему напряжения. При действии на систему напряжением низкой частоты реологический импеданс будет в основном определяться коэффициентом упругой деформации, а при действии напряжением высокой частоты - членом $m_{\ell i}\,\omega$ (коэффициентом инертной деформации, умноженным на $\omega$). На частоте:

$$\omega^2 = \frac{f_3 G_i}{f_2 m_{\ell i}} = \frac{f_3 G_i f_1 \mu_i}{f_1 \mu_i f_2 m_{\ell i}} = \frac{1}{t_K t_{Kh_1}},$$

$$\omega = \sqrt{\frac{1}{t_K t_{Kh_1}}},$$

откуда где $t_K = \dfrac{f_1 \mu_i}{f_3 G_i}$, $t_{Kh_1} = \dfrac{f_2 m_{\ell i}}{f_1 \mu_i}$ - время ретардации, реологический импеданс принимает свое минимальное значение $|I| = f_1 \mu_i = I$, следовательно $f_1 \rightarrow 1$, а скорость деформации принимает максимальное $f_1$ значение и определяется закономерностью вязкого течения Ньютона:

$$\dot{\gamma} = \frac{\tau_0}{f_1 \mu_i}.$$

В этом случае частота $\omega_0 = (f_3 G_i / f_2{}^{m_{\ell i}})^{1/2}$ называется частотой резонанса скорости деформации рассматриваемой среды. При $\omega = \omega_0$ имеем $tg\varphi = 0$, так как скорость деформации и напряжение в фазе. Из уравнений (12) и (13) следует, что при $\omega f_2{}^{m_{\ell i}} > f_3 G / \omega$ скорость деформации $\dot{\gamma}$ отстает по фазе от напряжения, поскольку в аргумент косинуса входит $\varphi$. Когда частота напряжения очень велика ($\omega \to \infty$), $\varphi \to 90^\circ$, поэтому скорость деформации отстает по фазе от напряжения именно на эту величину.

При $\omega f_2{}^{m_{\ell i}} < f_3 G_i / \omega$ фаза $\varphi$ отрицательна и скорость деформации опережает по фазе

напряжение. В случае действия напряжения низкой частоты ($\omega \to 0$) имеем $I \to \dfrac{f_3 G_i}{\omega}$ и $\varphi \to -90^\circ$.

Таким образом, скорость деформации на низких частотах опережает напряжение по фазе ($\varphi$ отрицательна), а на высоких частотах - отстает от напряжения по фазе (фаза отрицательна). При $\omega f_2{}^{m_{\ell i}} < f_3 G_i / \omega$ и $\varphi = 0$ скорость деформации и напряжение находятся в фазе.

Перспективами дальнейших исследований является исследование более сложных ретардационно-релаксационных реологических с целью повышения эффективности модели движения многофазных текучих сред, используемых в практике.

**References:**

1. Gnoevoy, A. V., & Chesnokov, V. M. (2003). Bingham medium as an object of study. *MSM, Volume 3, Moscow,* pp. 90-98.
2. Khusanov, I. N. (2008*). Rheological model of concentrated slurries.* Mezhduharodnaya nauchno-tekh. konferentsiya «Sovremennaya tekhnika i tekhnologiya gorno-metallurgicheskoy otrasli n puti ikh razvitiya» [Int. sci.- tech. Conf. "Modern equipment and technology of mining and metallurgical industry and their development"]. (pp.109-110). Navoi.
3. Rakhmatulin, K. A. (1956). Fundamentals of hydrodynamics of interpenetrating motion of compressible media. *PMM, Volume XX, Issue 2*, pp. 184-195.
4. Khusanov, I. N. (2008). *Rheological model of concentrated slurries.* Mezhduharodnaya nauchno-tekh. konferentsiya «Sovremennaya tekhnika i tekhnologiya gorno-metallurgicheskoy otrasli n puti ikh razvitiya» [Int. sci.- tech. Conf. "Modern equipment and technology of mining and metallurgical industry and their development"]. (pp.109-110). Navoi.
5. Mirzoev, A. A., Khodjaev, Y. D., Khusanov, I. N., & Khajimatova, M. M. (2015). *The flows of multiphase with complex considering volume content phases.* XI Vserossieskiy s"ezd po fundamental˙noy i prikladnoy mekhaniki [The XIth all-Russian congress on basic problems of theoreticaland and applied mechanics]. (pp. 2558–2561). Kazan.
6. Nigmatulin, R. I. (1978). *Osnovy mekhaniki getrogenykh sred [Fundamentals of mechanics of heterogeneous media].* (p.336). Moscow.
7. Khusanov, I. N. (1987). *About deformable medium by inertia. Sbornik «Gidrodinamika mnogofaznykh sred i teplomassoobmen»* [In Proc. «Hydrodynamics of multiphase media, and heat and mass transfer»]. (pp.151-155). Tashkent: Fan Publ.
8. Slezkin, N. A. (1955). *Dinamika vyazkoy neszhimaemoy zhidkosti* [The dynamics of a viscous incompressible fluid]. (p.520). Moscow: State Publ. of tech. – theory. references.
9. Loytsianskiy, L. G. (2003). Mekhanika zhidkosti i gaza [Fluid Mechanics]. (p.840). Moscow: Drofa Publ..
10. Batchelor, G. K. (2000). *An Introduction to Fluid Dynamics*. Cambridge, UK: Cambridge University Press.
11. Mirzoev, A. A., & Khusanov, I. N. (2016, October). Model of quasi-linear rheodynamic medium end its solution. *International Journal of Research in Engineering and Technology (IJRET) Volume 5, Issue 10,* pp. 37-42.

QR – Issue    QR – Article

**A.M. Radjabova**
International Islamic Academy of Uzbekistan
Lecturer,
+998 90 9010153
aziza_dip@mail.ru

# EMERGENCE AND SOME STAGES OF THE EVOLUTION OF GENDER PHENOMENON

*Abstract: The focus in the article is given to the analysis of the emergence and evolution of gender phenomenon in the human-beings history. It comparatively analyzes different interpretations of relationships between men and women at different times, and stages of development. It explains the importance of equality, which provides protection of equal rights for men and women.*
*Key words: gender, gender studies, feminism, sustainable development, development indicators, social status.*
*Language: English*
*Citation: Radjabova, A. M. (2019). Emergence and some stages of the evolution of gender phenomenon. ISJ Theoretical & Applied Science, 06 (74), 512-515.*
*Soi: http://s-o-i.org/1.1/TAS-06-74-58    Doi: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.58*

**Introduction.**

Women's social activity has become one of the most important issues in human development. The social and political status of women is determined by such factors as political consciousness and the breadth of thoughts, participation in social, economic and political processes in the society. Meanwhile, the issues of equality between men and women have always been relevant in the process of political decision-making. the study of the historical and evolutionary development of gender issues revealed that the views on relationships between men and women have undergone various developmental stages at different times in the sense that the status of women was based on several factors.

**Main part.**

In particular, the fact that women in the past have lower status than men is defined not only by a political factor, but also by a physiological factor. From the first quarter of the 20th century, this issue had its own scientific language, and began to be referred to in the scientific literature as "gender problem", "gender equality" or any other similar terms. The main focus of these terms is concentrated on considering equal rights of men and women in social life. However, today their attitude toward this vital issue is radically changing.

One of the leading gender researchers, Joan Scott, praises the following statement on gender issues in his article "Gender: The Useful Category of Historical Analysis": "gender is not only a matter of opening new pages of history for women in the process of analyzing history of humanity, but also of creating a new history itself"[1-2]. Early gender research (Sherry Ortner, Wendy Cealey Harrison, Spelman, Collins, Laurel Furumoto and Elizabeth Scarborough) has focused on sociology and psychology, focusing mainly on the comparison of anthropological characteristics of men and women, similar and distinctive features, emotional experiences and other similarities in personalities. However, the modern meaning of the gender phenomenon is wider than ever, whereas many non-governmental organizations are working to address gender issues. The main purpose of this paper is to clarify the historical stages of the formation of the modern "gender" phenomenon.

The first look at gender is fundamentally different from that of today's integrated interpretation. In particular, the views of Western feminist women, promoting gender equality, served as a driving force of these studies. The idea of feminists refers to the guarantee of gender equality in decision-making processes, politically, economically and socially. It also implies full and effective participation of women in all areas of professional activities - ranging from ordinary to executive positions, and ensuring equal opportunities for them. The following are examples of

Clarivate Analytics indexed

how the equality between men and women can be realized in practice.

In many cases, including in antiquity, women were subjected to social norms and to degrading and social status. According to ancient scholars, women status were comparable with slaves status [3]. According to an ancient antiquity philosophy, a man's domination over a woman is based on the principle of status-quo given to men [4]. The relationship between man and woman was the same as the relationship between the ruler and the slave [5]. Plato points out this in a somewhat relaxed form in his book The Republican: "The relationship between man and woman in society is built on the basis of sovereignty and self-reliance"[6]. Plato, unlike Aristotle, does not regard women as slaves, but as a citizen who is governed by men. Women's vulnerability tells men to be able to rule them. It is worth mentioning that the main reasons why women were left out of politics at that time were their ignorance.

In the XVI-XVII centuries the western scientific impetus is focused on assessing the rights of women and men and their social equality, with all the characteristics of the two sexes. As a result of the research, the phisical, psychological and emotional well-being of the male gender has further strengthened the status of women. Studies on political leadership were mostly carried out by men, with very little information about women's case [7]. Therefore, it is a bit more difficult to get clear facts. Nevertheless, it is possible to observe active participation of women in public affairs at certain times. In particular, royal family members, as the younger generations of the throne, were the only members of the royal family who were considered to be widows of the deceased king. Particularly, active participation of women in the governance of the British, French, Castile and Aragones countries in the Carolingian and Merovingian dynasties, as well as the active participation of women in governance.

By the 18th century, scientists concluded that men and women are one cohesive system and fill each other. However, women still had no natural and political rights. The revolutionary views of the 19th century have made radical changes. New class opponents of the old bourgeois system have begun to propagate the idea that each individual has the right to contribute to the development of the society. This idea will later become a motto for feminist movements. Women who initially acted as representatives of the working class, later began to fight for their political rights. Feminist ideas have had a strong impact on the economic, social, political and technological development of states.

At the beginning of the 20th century, the world's unemployment rate reached its peak. In this situation, women were the most vulnerable part of the society. Therefore, the main task of the international organizations established between the WWII was the implementation of economic and social reforms aimed at ensuring employment. The Society for Psychological Study of Social Problems (SPSII) [8], established in 1936, is among them. The role of the organization in promoting women's political and economic status, in particular their leadership potential, has led to the realization of today's reforms related to women's status.

"Women's problems", more precisely, the weak involvement of women in society has become a major topic of sociology in the mid-20th century. The main problem of women is that they have an inadequate capacity for biodiversity and cultivation in senior positions [9]. Naturally, this claim was rejected by women themselves. It can be said that the number of feminist women has increased. As a result, the movement began to gather representatives from various sectors. This, in turn, has led to the study of women's role and status in society not only as a practical player, but also as a scientific one. Thus, in the world of science there was a scientific direction called "gender studies" or "women's studies".

The fact that the United States was founded in 1966 by the Women's National Organization was a practical and scientific impetus. The spectrum of research carried out in the West has been enriched with a new trend of the Germanic science. This kind of work began to be the subject of small research topic in the early years of major and empirical research centers. At the same time, this sector has become one of the main directions of a number of international organizations, non-governmental and non-profit organizations. From the end of the 20th century, faculties and higher education establishments specializing in this issue began to emerge. Undergraduate, Graduate, Ph.D. degrees and research centers were functioning in partnership with the International Gender Studies Center (Social Sciences Division) at the International Department of Social Sciences [10]. Moreover, UNDP, UN Women, Human Rights, FAO, ECOSOS, UNICEF, World Bank (WB), UNAIDS, as well as the Organization for Economic Cooperation and Development and the Organization for Security and Cooperation in Europe started their gender studies. Among the goals of these organizations are to promote gender equality, empower women, monitor and analyze women's rights and interests worldwide, develop and implement relevant laws and programs in these areas. These tasks are becoming increasingly important.

Another important aspect is that the United Nations and several other international organizations have developed a program to establish sectoral programs to reflect the realities in this area. The main goal is to make a fair assessment of progress and shortcomings in the area of gender equality and to develop new priorities. On September 25, 2015, the UN Sustainable Development Goals were adopted. This strategy provides a shared blueprint for peace and

prosperity for people and the planet, now and into the future and also covers areas such as gender equality and women's rights and their empowerment [11]. Sustainable development goals are to further extend the achievements that have so far been reached, including the elimination of discrimination against women and girls around the world. In addition, the UN has developed a Human Development Indicator that evaluates progress in various areas of the country for 1990-2017, in which gender-specific parameters are also envisaged. According to the UN's Human Development Index, which has been published since 1990, this indicator for women is 0.705 and for men 0.749 [12]. The analysis of these indicators shows that the vital aspects of women's role are significantly less important. This situation is based on a number of interconnected factors. Particularly, women's scientific potential, professional skills, work ability, political participation in the society, social security, social, economic and political rights, economic development, welfare and some other factors.

It should be stressed that international attention to gender issues is constantly growing. This can be seen in a number of concrete facts. In particular, the annual International Economic Forum is preparing a special report that identifies gender indicators and covers 144 countries. The report is based on four directions of indexation - indicators of economic activity in the country, achievements in the education

system, healthcare and expansion of political capacity [13].

The role of women and men in social life, ensuring their equitable distribution of natural, social, economic, political rights and freedoms, opportunities and responsibilities is one of the priorities facing democratic countries based on a free market economy. Women's empowerment is an important factor in addressing many of the challenges. As the world experience shows, such an approach will serve to ensure sustainable growth rates in the country, a high potential of additional labor, a decrease in unemployment rates, the eradication of social inequalities, a decline in social security, and strengthening social stability and other vital issues.

**Conclusion.**

In today's globalized world, the members of the "gentle sex" systematically strengthen their social status by taking advantage of their abilities and potential in socio-economic and political life, as well as by utilizing the privileges and opportunities they create. Their aspiration to work equally with men in all areas is becoming increasingly evident. In the conditions of Uzbekistan, this reality is especially noticeable. In particular, this conclusion confirms the fact that women participate in entrepreneurship and have their own business and property. All this is a good result of the privileges, conditions and high attention created to women.

**References:**

1. Scott, J. W. (1986, Dec.). Gender: A useful Category of Historical analysis. *The American Historical Review, Vol. 91, No. 5*, pp. 1053-1075.
2. Gordon, A. D., Buhle, M. J., & Dye, N. S. (1976). *The problem of Women's History."* In Berenice Carroll, ed., Liberating Women's History (Urbana . III., 1976), 89.
3. (1980). Aristotle. Nicomachean Ethics. Translated and with an introduction by David Ross. Revised by J.L. Ackrill and J.O. Urmson. (Eds.). Oxford: Oxford University Press.
4. Parker, H. N. (n.d.). Aristotle's Unanswered Questions:Women and Slaves in Politics 1252a-1260b/
5. (n.d.). Aristotel on Women and slaves.
6. (n.d.). Edward Clayton Aristotle: Politics, Chapter 12, 1245b12, Retrieved 2019, from https://www.iep.utm.edu/aris-pol/
7. Borghini, A. (n.d.). *Plato and Aristotle on Women: Selected Quotas.* Retrieved 2019, from https://www.thoughtco.com/plato-aristotle-on-women-selected-quotes-2670553
8. Meade, T. A., & Wiesner – Hanks, M.E. (2004). A companion to gender History. P26 http://www.blackwellpublishing.com
9. Kesler, U. R. (1986). *Handbook of the Psychology of women and Gender*. Stagner.
10. Boring, E. G. (1951). The woman problem. *American Psychologst, 5*, pp.679-682. Women's Studies at Flinders University, Adelaide, South Australia, MSt in Women's Studies proceed to doctoral degrees at Oxford and at other universities, Harvard University, Boston College, Brandeis University, Tufts UniversityTufts University, Northeastern University, Boston University, Simmons College, MIT Program in Women's and Gender Studies (WGS), Massachusetts Institute of

Technology, Centre for Women's Studies (CWS), The Department of Women's Studies and Feminist Research at Western University, the University of Michigan Women's Studies Department https://www.ox.ac.uk/admissions/graduate/courses/mst-womens-studies?wssl=1#,http://wgs.mit.edu, http://www.flinders.edu.au/sabs/ssps/womens-studies/, https://www.york.ac.uk/study/postgraduate-taught/courses/ma-womens-studies/, https://www.uwo.ca/womens/about_/index.html , https://lsa.umich.edu/women

11. (n.d.). *The sustainable development goals 2015-2030.* Retrieved 2019, from una-gp.org
12. (2018). *Human development indices and Indicators*, Statistical Update 2018 by UNDP.
13. (2017). World Economic Forum, The global gender gap report 2017. Retrieved 2019, from http://weforum.org

QR – Issue    QR – Article

**Z.S. Pulatkhodjaev**
International Islamic Academy of Uzbekistan
Senior lecturer
+998 97 409 10 01
z.pulatkhodjaev@mail.ru

# MODERN INITIATIVES OF UZBEKISTAN TO STRENGTHEN INTEGRATION IN CENTRAL ASIA

*Abstract*: the article provides a brief retrospective of evolution of the approaches to regional integration of the newly independent States of Central Asia. Particular attention is paid to the new policy of Uzbekistan towards neighboring States, articulation of fundamental principles and approaches of the Republic aimed at strengthening regional integration. Article includes examples of formation of new approaches to Central Asia by external centers of influence, considering as a single regional international subsystem.

*Key words*: regional cooperation, national interests, foreign policy concept, sovereignty, Central Asian integration, centers of power, national elites, subregion, international relations subsystem, isolationism, autochthon ties, collective relations, sustainable development.

*Language*: English

*Citation*: Pulatkhodjaev, Z. S. (2019). Modern initiatives of Uzbekistan to strengthen integration in Central Asia. *ISJ Theoretical & Applied Science, 06 (74),* 516-518.

*Soi*: http://s-o-i.org/1.1/TAS-06-74-59    *Doi*: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.59

**Introduction.**

From the first days of its independence, the States of Central Asia repeatedly declared a commitment to strengthening good-neighborly relations and regional cooperation. However, their elected development paths have significant differences. This has led, on the one hand, mutually discordant paradigm formation of regional cooperation and, on the other hand, these factors influenced the formulation of their foreign policy. The newly independent States of Central Asia must first form their national interests, and only after that choose the path of establishing regional cooperation with its immediate neighbors [1].

Today most experts agree that a new stage in the evolution of the idea of a Central Asian regional cooperation came in the context of election of the new President of the Republic of Uzbekistan Sh.Mirziyoyev. He in the first keynote speech September 8, 2016 stated that "the main priority of the foreign policy of Uzbekistan is the region of Central Asia, which are linked to national interests of our country. We continue to remain committed to an open, friendly and pragmatic policy towards its immediate neighbors — Turkmenistan, Kazakhstan, Kyrgyzstan, Tajikistan. [2] This statement clearly traced deep conviction that successful foreign policy begins with

the establishment of mutually beneficial and mutually respectful cooperation with neighboring countries. It should be emphasized that this approach is based on an in-depth analysis of the features of the evolution of geopolitical processes in the modern world, in which shows clearer trend to building international political, economic and other relations on a regional principle.

**Main part.**

On the vision of the President of the Republic of Uzbekistan Sh.Mirziyoyev fundamental step in this direction should be the development of a specifically legal document or concept, disclosing the development prospects of countries in conjunction with the steady strengthening of relations with immediate neighbors.

Adequate awareness of this reality is reflected in the February 2017 on the "Strategies for action in five priority areas for the development of Uzbekistan in 2017-2021" [3]. At the heart of this document in the foreign context aims to create around Uzbekistan peculiar zone security, stability and good-neighborliness. Mechanisms of its construction are considered all the available methods, first of all, the intensification of efforts to resolve questions of delimitation and demarcation of State borders [4].

Following a fundamental prerequisite for the creation of a unified subsystem of international relations in a given region is a formal declaration of such intentions among the wider international community. Not accidentally the first President Sh.Mirziyoyev UN September 19, 2017 a central place was given justification regional cooperation in Central Asia. It was clearly stated that the main priority of the foreign policy of Uzbekistan today is a region of Central Asia. It was also emphasized that "peaceful, economically prosperous Central Asia is our most important goal and the key challenge. Uzbekistan is committed to constructive engagement and dialogue, strengthening good-neighborliness" [5].

Thanks to the joint efforts of the States of Central Asia in recent years in the region significantly increased the level of political trust. So according to the results of the Samarkand high-level Conference held in November of the year 2017, neighbors in Central Asia have jointly initiated the adoption of a special resolution of the United Nations.

Later, the UN General Assembly a resolution was adopted in June 22, 2018 "Strengthening regional and international cooperation to ensure peace, stability and sustainable development in the Central Asia"[6]. It is known that the document drafted Uzbekistan jointly with the neighboring countries in Central Asia, has received the unanimous support of all members of the United Nations. It is also noteworthy that the resolution was co-sponsored by 55 countries in Europe, North and South America, Asia and Africa, including countries such as Australia, Austria, Afghanistan, Belarus, Germany, Italy, India, Indonesia, Canada, Nigeria, Norway, U.A.E., Republic of Korea, Singapore, Turkey, Switzerland, Ecuador, etc. The vitality of the idea of the existence of a sustainable regional subsystem was demonstrated again in the course of consultations on the elaboration of this document. This process took an active constructive participation by all the leading partners of the countries of Central Asia, including Russia, China, the United States and the EU. The resolution recognizes the important role of the Central Asian countries in ensuring peace, stability and sustainable development in the region, as well as in promoting regional and international cooperation [7].

The adoption of a special resolution on the strengthening of cooperation among the Central Asian States is a landmark event. It shows, first of all, the changing perception of the international community of the role and importance of the region as an integral part of global relationships that serves as another indication of the formation of new international subsystem here. It promotes the growth trend in favor of accounting for this segment of international relations with the formation of geo-strategic approaches [8].

For continuation of sustained movement of cooperation among the States of Central Asia,

according to the head of Uzbekistan, is necessary to create conditions for the holding of regular consultations of the heads of State of the region. The format of the high level meetings is a deeply thoughtful proposal taking into account the previous experience of movement for integration in the region. March 15, 2018 in Astana capital of Kazakhstan hosted the first consultative meeting of the heads of Central Asian States. At the Summit had discussed expanding the political, trade, economic and humanitarian cooperation between the countries of the region, a joint counter terrorism, extremism, trafficking drugs and weapons, strengthening Security and stability in Central Asia. The parties unanimously confirmed that Central Asia is not only geographical and geopolitical, but a single cultural and civilizational space [9].

Uzbekistan has borders with all Central Asian States. The decision of all vital issues ranging from border security to the rational allocation of water resources is directly dependent on the relations among the countries of the region. Without the active cooperation of neighboring countries, to ensure their better integration cannot implement major regional projects in transport, communications and energy spheres. UN Secretary-General António Guterres stated that "water issues in Central Asia, peace and security are inextricably linked. Therefore, there is no alternative to solving water problems that takes into account equally the interests of countries and peoples of the region" [10]. Proposed by him formula, which has approach to solving the most pressing problems in Central Asia has been positively received by all countries in the region that opens a real prospect for a legal solution to the issue. Water resources from conflict factor may again become a significant tool for associations of neighbors, as it was for many centuries the historic communication peoples occupying the land.

**Conclusion.**

These examples show that the international community and the world's leading centers of influence are considering Central Asian region increasingly as an independent subject of international relations. Large inventory of sought-after natural resource in today's world, solid intellectual potential, promising prospects of laying here transport corridors, capable to connect the shortest way the whole Eurasian continent, initially attracted the attention of external players to Central Asia. And the remarkable increase in political, economic and social installations on strengthening cooperation between the countries of the region shows also strengthening the political will of local elites in favor of consolidation of efforts in a variety of areas, including foreign policy. In addition to these economic imperatives increasingly move toward regional cooperation, comes the awareness of the prospects of more meaningful benefits from

Clarivate Analytics *indexed*

partnership, starting inner circle, not the other way around, that has characterized recent past. The strengthening of this objective trend also contributes to the centuries-old neighborhood, shared values, which is rapidly emerging in the context of globalization, almost all spheres of international life.

## References:

1. Paramonov, V. (2015). Main problems on the way of cooperation in Central Asia: forecasts of foreign policy countries of region. *«Regional policy». Moscow., v. 18, edition 1*.

2. (n.d.). *Speech at the joint meeting of the Legislative Chamber and Senate of the Oliy Majlis of the Republic of Uzbekistan*. Retrieved 2019, from http://president.uz/uz/lists/view/5

3. (n.d.). *"Strategies for action in five priority areas for the development of Uzbekistan in 2017-2021"*. Retrieved 2019, from http://strategy.gov.uz/en

4. (n.d.). *Uzbekistan, Kazakhstan and Turkmenistan signed the boarder agreement*. www.gazeta.uz/ru/2017/11/10/docs/

5. (2017). *Address by the President of the Republic of Uzbekistan Sh.Mirziyoyev on 72 session of the United Nations General Assembly September 20, 2017*. Retrieved 2019, from http://.president.uz/en/lists/view/1063

6. (n.d.). *"Strengthening regional and international cooperation to ensure peace, stability and sustainable development in the Central Asia"*. Retrieved 2019, from https://unrcca.unmissions.org/general-assembly-adopts-resolution-strengthening-cooperation-central-asia

7. (n.d.). *Address by UN General Secretary António Guterres on 73 assembly*. Retrieved 2019, from www.un.org/sg/ru/content/reports-secretary-general-work-organization

8. (n.d.). *New opportunities to develop partnership between EU and Central Asia*. Retrieved 2019, from https://eeas.europa.eu/delegations/uzbekistan_ru

9. (n.d.). *The first consultative meeting of the heads of Central Asian States*. Retrieved 2019, from http://uza.uz/en/politics/pervaya-konsultativnaya-vstrecha-glav-gosudarstv-tsentralnoy-15-03-2018

10. (n.d.). *UN chief: the scarcity of water in the world is becoming more acute*. Retrieved 2019, from https://tass.ru/obschestvo/4318596

**H.Ya. Azimov**
International Islamic Academy of Uzbekistan
lecturer
+998 99 897 62 88
habibulloxon1988@mail.ru

# THE PROBLEM OF MORO MUSLIMS

*Abstract*: This article is devoted to the current state, historical and socio-political processes taking place in the life of the Christian and Muslim population, especially the Muslim community of the Moro tribe, living in the island part of the Philippines. The desire of the Muslim population of Moro to create an independent statehood, as well as the actions they carried out in this direction, caused inter-ethnic tensions and differences in the Philippines. This article aims to reveal the true causes of these processes. In an article in particular on the basis of statistical and factual material discussed the attitude of the Government of the Philippines to the Muslims, the status of Muslims in this country, the success achieved by the Muslim Moro in their long struggle for independence and barriers to the movement of independence, roots of ethno-religious differences between Muslims and Christians and ideological struggle, socio-political processes arising as a consequence of this, the prospects of the liberation movement, Moro Muslim ethnic minority constituents, as well as the prospects of an agreement with the Government on this issue.

*Key words*: Philippines, Moro Muslims, ethno-confessional differences, socio-political processes, ethnic minorities, liberation movements, uprisings, agreements, the causes of conflicts, ideological struggle, the status of Muslims, the desire for independence, the separatist movement, the Moro Liberation Front, Muslim Mindanao autonomy.

*Language*: English

*Citation*: Azimov, H. Y. (2019). The problem of Moro Muslims. *ISJ Theoretical & Applied Science, 06 (74),* 519-521.

*Soi*: http://s-o-i.org/1.1/TAS-06-74-60     *Doi*: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.60

**Introduction.**

In the XIII century Islam penetrated the islands in the Philippines.  This event is associated with the establishment of maritime trade relations by the Arabs through South-East Asia. Islam was predominantly spread in the territories of Mindanao island of the Philippine State, and this island from XIII to XVI century, i.e. until it became colonized by Spaniards had been under the ascendant of Muslim sultans. [1]

As a result of the defeat of Spain in 1898 in the US-Spanish war, the Philippines came under the control of the Americans.  In 1899-1913, the Muslims of this region revolted against the United States. This event went down in history as the "Moro rebellion". On July 4, 1946, the Philippines also gained its independence along with many countries in the region.   Catholics who came to the top of the government pursued a policy of resettlement of citizens of the new Philippines belonging to the Catholic religion to the territory of Mindanao, where Muslims lived. In response, the Muslim minority, called by the Spaniards as "moro" or "moor" in the territory of Mindanao, began to claim their rights.[2] As a result of the indifference of the authorities to these requirements, the national liberation movements gradually acquired their essence.  Over time, they became the causes of the outbreak of armed conflict.

**Main part.**

By 1996, the government of the Philippines created an autonomous territory for Moro Muslims, that is, Autonomous Region in Muslim Mindanao – ARMM.   This step meant that some of the requirements of the Muslims were met. But, Moro Muslims which is constitute a minority in the territory of Mindanao still have not abandoned the requirement for independence. They continue to provide armed confrontation against the government. [3]

According to estimates, the population of the Philippines has reached about 100 million people. According to the National Statistics Committee, 93% of the population are Christian, 6% are Muslim, and the remaining 1% are from other religions.

In other words, Muslims make up the largest portion of the religious minority population in the Philippines. Currently, most of them, as already mentioned, live in Mindanao. Muslims make up 20% of the 16 million people living in it. This serves as a unifying factor for ethnic groups living in the territory of Islomba such as Maguindanoa, Maranoa, Tausug, Samal and Yakan. [4]

Religious holiday of Muslims is now officially announced as a day off. They seek to create Sharia institutions to resolve differences within Muslims, as well as to solve problems associated with ethnic roots. Accordingly, sharia law constitutes a certain part of national legislation in the region, including criminal law. [5]

This fact can be interpreted as one of the measures that the government is carrying out in this latter time in order to prevent separatist movements which may occur in the country. And also, it can be explained by the fact that 2000 Muslim religious schools and madrassas operate in Mindanao and other parts of Philippines.[6]

In spite of, Mindanao is less developed than other territories of the Philippines in socio-economic terms, it is rich in underground and surface natural resources. But the armed confrontations occurring in the territory does not allow their development.

The separatist movements in Mindanao have continued for a long time. According to some sources, the death toll of the Moro rebellion has been exceeded more than 120 thousand people since 1970. According to data provided by Reuters, as a result of the troubled state during that period, about 2 million people were forced to leave their places of permanent residence.

In 1972, Moro National Liberation Front was established under the leadership of the Philippine University professor Nur Misuari. [7] He also joined the armed forces in their ranks. The organization's task was to create an independent Muslim state in the south of the Philippines. Until 1996, as a result of the merciless suppression of the uprisings of this organization, several tens of thousands of people were killed on both sides. [8]

Military-political conflicts in the Philippines are in the center of attention of the international community, in particular the Organization of Islamic Cooperation (OIC). In 1976, a commission to reconcile the Muslims of Moreau and the state of the Philippines was established in Tripoli under the leadership of the OIC. However, due to the lack of agreement by the parties, the negotiations turned out to be ineffective. By 1996, the leadership of the Philippines eventually allowed Moro Muslims to build their autonomy, which led to the creation of an autonomous Muslim region of Mindanao. According to some sources, the population of the autonomy is about 5 million people. This is the only autonomous region in the Philippines.

The first head of the autonomous region, Nur Misuari, was forced to resign by 2001 due to the deterioration of the socio-economic situation in the region.

In the summer of 2001, Moro's liberation front attacked the residence of the Philippine military in Jolo island. Despite the fact that the Filipino soldiers were killed on him, the army settled the attack in a short time. Most members of the Moro Liberation Front were arrested and sentenced to imprisonment. Nur Misuari, who escaped to Malaysia, was soon captured by the Philippine National Security Service and sentenced to life imprisonment. [9]

The inability to compromise in the reconciliation process of 1976 caused the division of the Moro national liberation front into two parts. Second leader of MNLF, Salomat Hashim founded Moro Islamic liberation front. Today, the Moro Islamic liberation front, which has about 12,000 troops, also announced that its task is to create an independent Islamic state in the south of the Philippines. However, unlike MNLF, MILF is a more radical Islamic group.

After long negotiations between the government and the MILF, a 1997 truce was signed on the cessation of hostilities. But since 2001, Philippine President Joe Esther has launched a large-scale campaign against the MILF. This led to the cancellation of the 1997 peace agreement between the government and radical Islamist groups. The military confrontations between the government and Islamist groups continued for a long time, and finally in 2008, the government and the MILF reached a new agreement. In accordance with this, measures were envisaged such as further expanding the territories of the Muslim autonomous region in Mindanao, increasing the participation of the representatives of local population in management, improving the region's infrastructure and increasing autonomy revenues from oil and gas, applying special amnesties to MILF members and other activities. However, the agreement was not implemented because of the denial of Catholic politicians.

As a result, the armed and political new struggle between the parties in 2008 has continued. One of the sad consequences of this was reflected in the fact that people are forced to leave their places of residence.

Another radical Islamist group in the Philippines is the Abu Sayyaf group. It was formed in 1991 as a result of the creation of its team after the withdrawal of certain members from the MNLF organization headed by Abduradzhik Abubakar Djandjoloy. It is announced, that the main goal of the Abu Sayyaf group is the creation of a large Islamic theocratic state not only in the Philippines, but also in Southeast Asia. [10] In the past, the Abu Sayyaf team has carried out many terrorist attacks in the Philippines. The United States, the United Kingdom, Australia, and other countries record it as a group linked to Al-Qaeda

Clarivate Analytics indexed

international terrorist organization based on their nature and scope.

**Conclusion.**

As a conclusion, it can be stated that the resolution of these ongoing conflicts in the Philippines is of great importance not only for this country, but also for the entire region of Southeast Asia. As, other separatist movements in the region and participants of ethno-confessional conflicts are closely watching the struggle of Moro Muslims towards the realization of their rights.

In this sense, it can be said that the problem of Moro Muslims is becoming a reflection of the political situation not only in the Philippines, but also in the entire region of South-East Asia.

## References:

1. Lopez, M. L. (2006). *A Handbook of Philippine Folklore.* (p.29). Quezon City: The University of the Philippines Press.
2. (n.d.). Internet resource. Retrieved 2019, from http://www.muslimmindanao.ph/shari'a/code_muslim.pdf
3. Majul, C. A. (2010). Islam and Philippine Society, University of the Philippines Diliman, p. 20.
4. Abinales, P. N., & Amoroso D. J. (2015). *State and Society in the Philippines.* Lanham: Rowman & Littlefield inc., p.102.
5. Jainal D. Rasul ve Amir T. Rasul (2003). *Struggle for İdentity: a Short History of the Filipino Muslims.* (p.112). Manila: CARE Minorities, Inc.
6. Heesterman, J. C. (1989). "India and Indonesia: General Perspectives", Bulletin of the Leiden Centre for the History of European Expansion, New York, p. 23.
7. Halili, C. N. (2004). *Philippine History.* (pp.74-75). Manila: Philippines National Publishers Association, Cilt 1.
8. Embree, A. T. (1997). *Asia in Western and World History.* (p.665). New York: Library of Congress Cataloging.
9. Jernegan, P. F. (2007). *A Short History of the Philippines.* (p.317). California: D. Appleton.
10. Jainal D. Rasul ve Amir T. Rasul (2003). *Struggle for İdentity: a Short History of the Filipino Muslims.* (p.132). Manila: CARE Minorities, Inc.

**Z.I. Munavvarov**
International Islamic Academy of Uzbekistan
Doctor of Political Science, Professor,
+998 90 351 70 33
z.munavvarov@mail.ru

# THE ROLE OF SCIENTIFIC CENTERS OF MAVERANNAHR AND KHOREZM IN THE RENAISSANCE OF ISLAM

*Abstract: The article is devoted to a brief review of the role of scientific centers of Maverannahr and Khorezm in the Muslim Renaissance of the 9th-10th centuries. It also sheds light on the processes of scientific and cultural upheaval that continued in these parts of Central Asia until the beginning of the Mongol invasion.*

*Key words: scientific centers, renaissance, theology, hadith, fiqh, exact and natural sciences, Majlis al-ulama, academy, nisba, encyclopedia.*

*Language: English*

*Citation: Munavvarov, Z. I. (2019). The role of scientific centers of Maverannahr and Khorezm in the Renaissance of Islam. ISJ Theoretical & Applied Science, 06 (74), 522-525.*

*Soi: http://s-o-i.org/1.1/TAS-06-74-61    Doi: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.61*

**Introduction.**

The famous work of A. Metz [1] "The Renaissance of Islam" is almost unanimously recognized as an outstanding achievement of Western Orientalists thought, which adequately reflects the success of Islamic civilization in the context of the first period of the history of the Abbasid Empire (750-945). At the same time, there are significant differences in the scientific world in interpretation of the semantic load, which the author has filled with the concept of "Renaissance" [2], which put into the title of the book. These differences, one way or another, are related to the fact that the concept of "Renaissance" implies a revival of what has already happened in the past. In scientific tradition the term "Renaissance" refers to the revival of classical antiquity.

Many prominent Western Orientalists, including G. Becker[3], were inclined to interpret this fact as a hint of the author that Islam took its final form, mainly under the influence of Hellenism [4]. In favor of the correctness of this opinion, the aforementioned and many other Western Orientalists refer to the fact that the 9th and 10th centuries were a time when the material and spiritual life of Western Asia [5] was saturated with elements of Hellenism. It is emphasized that the issues of worship, dogmata and law in Islam have grown on the basis of the Christian-ancient tradition. It is pointed out that the ancient (pre-Islamic) Persian tradition also played a significant role

in this process, although it itself experienced a certain influence of Hellenism.

V. Bartold, arguing about the concept of "renaissance" in relation to the book of A. Metz, noted that in the era of the heyday of Muslim culture there was a certain admiration for the science of the ancients - "I'lm al-ava'il" ava'il ", and pointed out that the common feature of the European Renaissance and the flourishing of Muslim culture was the revival of Greek science. Thus, he put in one row the "European Renaissance" and the "flourishing of Muslim culture", considering at the same time that the book would more suit the name "Revival in the world of Islam".

**Main part.**

Without denying the existence of certain logic in such reasoning, it is necessary to emphasize that the scientific and cultural phenomenon of world importance that took place in the 9th-10th centuries and named by A. Metz the "Muslim Renaissance", was primarily the result of the development of Islam in the first two centuries since its inception. It is this fact that underlies the scientific and cultural flourishing of the Islamic world, which was concentrated in the 9th-10th centuries, in fact, and sometimes formally, within the boundaries of the vast and amorphous in terms of the unified state of the Abbasid Caliphate.

Of course, the implied scientific and cultural development was fueled by many processes that took

Clarivate Analytics *indexed*

place not only in the center of the Abbasid Empire, but also on its periphery. The contribution of such, so to speak, "peripheral regions" to the general Muslim renaissance that began in the 9th century and lasted in some regions, such as, for example, in Central Asia, until the end of the first quarter of the 13th century [6], has not been sufficiently studied.

This paper is devoted to a brief review of the place of some scientific centers that were formed in the 9th-12th centuries in one of the important regions of that time - formally Arab, but in fact polyethnic empire, which played an extraordinary role in the framework of the processes outlined in the work of A.Metz as components of the "Muslim Renaissance". For various historical reasons, this region in the Middle Ages was called by two toponyms - Maverannahr and Khorezm [7].

As researchers rightly point out, in the implied period of the history of Central Asia, the main cities of Sogdiana - Samarkand and Bukhara, as well as Termez, became the largest centers of Islamic science and culture in Central Asia. They, of course, were in the forefront of scientific centers that ensured our country's high place in the Central Asian Renaissance. Their role in the scientific and cultural ascent of Central Asia in the 9th-12th centuries has not been studied quite satisfactorily.

For this reason, and due to the limited time available for the report, we will not specifically dwell on them, but concentrate on less studied scientific and cultural centers of historical Maverannahr and Khorezm.

One of them, of course, was Nasaf (Nakhshab). It was glorified during the specified period of history with its scientific schools, where hundreds of eminent scholars lived and worked, including theologians, hadith scholars, jurists, historians, linguists, writers, representatives of the exact and natural sciences, who left behind the richest scientific heritage. The most prominent of them are Abu-l-Mu'ti Makhul ibn Fazl an-Nasafi (died in 930), Abu-l-Abbas al-Mustag'hfiri an-Nasafi (961-1041), Abu-l-Mu'in an-Nasafi (1027-1114), Najmuddin Abu Hafs Umar an-Nasafi or an-Nakhshabi (1068-1142), and others [8].

The beginning of the formation of Kesh as one of the important scientific centers of Maverannahr dates back to the 9th century. Such theologians and Muhaddises as Abd ibn Humaid al-Keshi (786-863), Idriss ibn Burhan al-Keshi (9th century), Abd ibn Yahya al-Keshi (9th-10th centuries), Abu Bakr al-Keshi (died in 1173), Abu Shakur Salemi al-Keshi (XI cent.) and dozens of other eminent scholars ensured the high place of this ancient city in the context of the Central Asian Renaissance of the IX-XII centuries.

An important scientific center in this period of history, especially in the field of theology, was Shash. The merits of such eminent theologians as Abu Bakr al-Qaffal ash-Shashi (904-976), Qosim ibn Imam Abu Bakr Muhammad ibn Ali ibn Ismail al-Qaffal ash-Shashi (died in 1010), Abu Bakr Muhammad ibn Ahmad i-Shashi (died in 1010), Abu Bakr Muhammad ibn Ahmad i-Shashi (died in 1010) Umar ash-Shashi (1038-1114), Abu Bakr Homid ash-Shashi (1007-1092), Abu Raja' Mu'mil ibn Masrour ibn Abu Sahl ibn Ma'mun ash-Shashi (1049-1123) and hundreds of others contributed to shaping the image of this city as one of the influential factors of the spiritual and cultural life of the Muslim world.

The scientific and cultural centers of the Fergana Valley, which were formed and functioned in the 9th-12th centuries, deserve undoubted attention. The power of Fergana as one of the important scientific centers of Maverannahr in the period under review is clearly demonstrated, for example, by the Ferghana's school of Muslim jurisprudence - fiqh. Its main components were the scientific communities of Akhsikent, Marg'ilan, Rishtan, Qubo, Kasan, Chust, Uzgand, Osh and Khojand, which gave the world such eminent as encyclopedic scholars and jurists like Asiruddin al-Akhsikati (1108-1198), al-Husain Abu Ali al-Akhsikati (died in 11th century), Abu Bakr ibn Mas'oud ibn Ahmad Ala-uddin al-Kasani (died in 1191), Muhammad ibn al-Hassan Burhanuddin al-Kasani (died in 11th century), Abd-l-Aziz ibn Abdu-r-Razzak al-Marginani (died in 1085), Ali ibn Abdu-l-Aziz ibn Abdu-r-Razzaq Zahiruddin al-Kabeer (died in 1113), Shaykhu-l-Islam Burkhanuddin al-Marg'inani (1118-1197), Ali ibn Suleiman ibn Daud al-Khatib Abu-l-Hasan al-Uzgandi (no biographical information available), Hasan ibn Mansour ibn Mahmoud Fakhruddin Qazikhan al-Uzgandi (died in 1197), Siraj-ad-Din Ali ibn Usman ibn Muhammad ibn Suleiman al-Ushi al-Farg'ani (died in 1173) and dozens of other famous scholars who have *nisba* "al-Farg'ani" in their name and left a rich scientific and spiritual heritage part of which is waiting for its researchers [9].

Among the scientific and cultural centers of medieval Ferg'ana, its main ancient capital, Akhsikent (Akhsikat), stood apart. In the considered period of history it became famous not only as a developed center of spiritual, religious and socio-political thought. There lived a lot of scientists who have achieved great success in the exact and natural sciences. For example, the already mentioned Asiruddin al-Akhsikati was also known as a mathematician, chemist, healer, astronomer, poet, linguist, etc. The rich engineering and technological knowledge accumulated in Akhsikent made unique scientific discoveries possible, including in the field of iron processing and the production of very strong steel. Sabers and daggers made in Akhsikent were highly valued in the Middle East. Built in the 10th century, the Akhsikent water supply system functioned well until the beginning of the XIII century. The above and other facts testify to the high level of technological knowledge of the inhabitants of

Ferg'ana – one of the most important scientific centers of Maverannahr in the 9th-12th centuries.

The place of the Dzhizak oasis, the historical Ustrushana in the Central Asian Renaissance of the 9th-12th centuries, remains virtually unexplored. Meanwhile, in the period under review, it gave the world a whole galaxy of prominent scholars and scientists who glorified this region as one of the major centers of science and culture in Central Asia. Among them were such famous theologians, Muhaddises and writers like Taleb ibn Ali ash-Shayrakasi (died in 901), Abu Kasr Sayf ibn Zaahid al-Zaamini (died in 909), Ahmad ibn Husayn al-Usturshani (died in 929) Abu Bakr Dulaf ibn Ja'far al-Shibli (859-946), Abu Ja'far al-Usturshani (died in 1013), Rayhaan ibn Muhammad al-Usturshani (died in 1015), etc.

One of the most significant figures of the mentioned scientific center was the talented pupil of the great Burkhanuddin Marginani (1123-1197) - Jurist Majduddin ibn Mahmud ibn Hussein al-Usturshani (1180-2040), the author of the unique written monument of medieval juvenile justice "Jaami' ahkaam al-sig'aar" ("Code of legal rights of children"). It is noteworthy that this work is the only written monument of the Middle Ages specifically devoted to the problem of the rights of children, at least in the Muslim world.

Certainly an outstanding contribution to the Central Asian Renaissance was made by Majlis al-'ulama (Academy of Ma'moun) in Khorezm (1005-1017), famous for such geniuses of scientific thought as Abu Rayhan Beruni (973-1048), Abu Ali Ibn Sina (980-1037), Abu Nasr ibn Iraq (died in 1036), Abu Sahl Maseehi (died in 1011), Abu-l-Khair Hammar - "the second Hippocrates" (born in 942), Muhammad ibn Ali ibn Ibraaheem al-Hirasi al-Khwarazmi (died in 1034), the famous historian Ibn Miskavayh (10th-11th centuries) and many others. They conducted unique researches in the fields of astronomy, mathematics, medicine, chemistry, physics, geography, mineralogy, philosophy, history, literature, linguistics, law, and other sciences. In particular, corrected astronomical tables for stars and planetary motion, as well as new astronomical instruments, were developed by the representatives of this center.

**Conclusion.**

The enumeration of scientific centers of Maverannahr and Khorezm, which emerged and achieved outstanding results in the period of the Muslim Renaissance in its generally accepted understanding and the centuries that followed it up to the Mongol invasion, is not limited to the proposed list. It is much more extensive and requires detailed clarifications. The fact that the scholars and scientists born and raised in the ancient land of Maverannahr and Khorezm and mentioned in the famous Muslim bio-bibliographic dictionaries are in the thousands, is in favor of the correctness of such a conclusion, and the number of *nisba*, which usually indicates the homeland of their owners, approaches a thousand [10]. These facts eloquently testify to a wide range of distribution of scientific and cultural centers that played an extraordinary role in the Muslim Renaissance.

In conclusion, speaking about the place of the Central Asia in Muslim Renaissance, it is important to emphasize that it is the synergy of the scientific centers of Maverannahr and Khorezm that became the main driving force behind the processes of unprecedented scientific and cultural growth that advanced this region in world civilization.

**References:**

1. Adam Metz (n.d.). (Germ. Adam Mez; April 8, 1869-December 1917), a well-known Swiss Orientalist of German origin, an Arabist, was a professor at the Department of Oriental Languages at the University of Basel.
2. (n.d.). The term "renaissance", which has French roots, was used to designate a cultural and intellectual renaissance of global significance in the history of Europe. It replaced the Middle Ages and preceded the Enlightenment and the New Age. By the time it is necessary: in Italy - at the beginning of the XIV century, and everywhere in Europe - at the XV-XVI centuries.

Distinctive features of the Renaissance - the secular nature of culture, its humanism and anthropocentrism. Interest in ancient culture flourishes, its "rebirth" is taking place - and this is how the term appeared. Currently, the term "Revival" has become a metaphor for cultural flourishing.

3. Karl Heinrich Becker (n.d.). (German: Carl Henrich Becker; April 12, 1876–10 February 1933), a German orientalist and statesman, published "The journal Islam" and became one of the founders of modern oriental studies,

uniting linguistic, historical, religious and sociological aspects.

4. (n.d.). Hellenism is a period in the history of the Mediterranean, primarily of its Eastern part, which lasted from the death of Alexander the Great (323 B.C.) until the final establishment of Roman rule in this territory, which usually dates by the fall of Hellenistic Egypt, headed by the Ptolemies (30 B.C.). The term originally meant the correct use of the Greek language, especially by none Greeks, but after the publication of Johann Gustav Droysen's work "The History of Hellenism" (1836-1843), it fixedly entered into historical science.

5. (n.d.). Today's Middle East (except its African part) and partly Transcaucasia.

6. (n.d.). It is known that this multifaceted progressive scientific and cultural process in Central Asia was interrupted by the Mongol invasion.

7. (n.d.). In medieval geographic literature, that part of Central Asia, where modern Uzbekistan, Tajikistan, Afghanistan, Turkmenistan and partially Iran are located, was divided into three major regions: Maverannahr, Khorezm and Khorasan. The geographical coordinates of the first two of them almost completely coincide with the current territory of the Republic of Uzbekistan.

8. (2017, April 18). Decree No. 433-F of the Cabinet of Ministers of the Republic of Uzbekistan on in-depth study and widespread popularization of the rich scientific and spiritual heritage of Abu al-Mu'in Nasafi was issued, which is designed to give new impetus to research related to the place of Nasaf as an important scientific center in the Central Asian renaissance.

9. (2009). For more information about the Ferg'ana school of fiqh, see: O.A. Qoriev. Farg'ona fiqh maktabi va Burhonuddin al-Marg'inoni. Toshkent: "Fan" Publishing House.

10. (2008). For example, in the "Encyclopedia of scholars of Central Asia", based on extracts from such well-known medieval bio-bibliographic dictionaries of the Muslim East, as "Kitab mu'jam al-Buldan" (Ya'qout al-Hamavi), "Kitab vafayat al-a'yan" (Ibn Khallikan), "Kitab al-ansaab" (Abd al-Karim al-Samani), "Kashf al-Zunun 'an assi' al-Qutub al a-funun" (Haji Khalifa), "Mu'jam al-muallifin "(Rida Kahhala) and other over twenty medieval encyclopedias, provides information on more than 2,700 scholars from Central Asia. Most of them lived and worked in the IX-XII centuries. See: "". (p.956). Tashkent. (in Arabic and English).

**SECTION 28. Pharmaceutical Sciences**

**Uliana Ryabinina**
Moscow Polytechnic University,
Student of Biotechnology faculty,
Moscow, Russian Federation

**Natalia Metelitsa**
Moscow Polytechnic University,
Senior teacher of chair "Foreign Languages"
Moscow, Russian Federation

# CONTINUOUS GLUCOSE MONITORING WITH NEW ADVANCED DEVICES

*Abstract*: *The author of the article attempts to make people more acquainted with diabetes and ways to control this pathology. The purpose of this article is to spread out information about the new technology for controlling blood sugar rate. Despite there are a lot of methods for tracking blood sugar, the author proves that a new advanced device makes it much more easier to do.*
*Key words*: *diabetes, blood, sugar, pathology, device, technology.*
*Language*: *English*
*Citation*: Ryabinina, U., & Metelitsa, N. (2019). Continuous glucose monitoring with new advanced devices. *ISJ Theoretical & Applied Science, 06 (74), 526-528.*
*Soi*: http://s-o-i.org/1.1/TAS-06-74-62    *Doi*: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.62

**Introduction**

Over the last centuries the idea of changing the world and improving our lifestyle has occupied people's minds. New technologies, new approaches, new processes appear and are rapidly implemented in everyday life of ordinary people. One of the major public issue is extending lives through modifying its quality. Prevention of some habits, constant controlling strategies can reduce the risk and complications of diabetes which are urgently required [1;180]

Diabetes is a disease which impairs the body's ability to process blood glucose. It happens because the pancreas stops carrying out its function properly. The organ does not secrete enough insulin or does not secret that compound at all. If insulin is absent, your body cannot obtain enough glucose so it stays in bloodstream and level of blood sugar spikes. Glucose is the main source of energy for our body. When cells are lack of this monosaccharide it means they do not have enough energy to carry out their functions. Therefore, over time high blood sugar leads to such problems as heart diseases, strokes, kidney diseases, eye problems, dental diseases, nerve damages, and foot problems.

There are three main types of diabetes. Type 1 diabetes is a condition when the body does not make insulin. The person's immune attacks and destroys cells of the pancreas which produce this hormone called islets. Therefore, people who have type 1 diabetes are called insulin-dependent. They need to get artificial insulin in order to stay alive. One of their options is to constantly use the insulin pump. This is a machine that transfers small doses of insulin throughout the day. Besides insulin pump, there are other ways of delivering insulin. For instance, insulin shot by syringe, needle or special pen, inhaler method. Type 2 diabetes is also known as insulin resistance. The pancreas is not capable of making enough of insulin to transport glucose or the cells that are dedicated to obtaining insulin, become less permeable to the hormone so we need more of it. Such a condition could arise in every age. Type 2 diabetes is strongly linked to obesity. However, the disease could occur also because of genetic mutations. The third type of diabetes is gestational diabetes. It occurs while pregnancy because a woman's body becomes less sensitive to insulin. Physicians prescribe different types of insulin to each patient according to a person's overall lifestyle. There are rapid-acting, regular, intermediate-acting and long-acting types of insulin

[2]. Also, sometimes doctors prescribe premixed insulin. This is a mix of two types of insulin.

A well-known fact is that diabetes has no cure. Therefore, people exposed to this sickness need always follow a special diet, be active and constantly track their blood sugar level in order to comprehend how much insulin to insert [3]. There are some ways of tracking this parameter. The most common for monitoring is a blood glucose meter. This is a small portable device with a lancet for pricking the side of your fingertip in order to get a drop of blood for analysis. Another way of tracking your blood sugar is CGM or continuous glucose monitoring. That device constantly supplies you with information about the glucose level in the bloodstream. This is very comfortable because you can make more precise decisions about your food, medicines and physical activity [4].

First CGM was approved by the FDA in 1999 [5]. It worked through a tiny sensor, which was implanted under your skin of arm or belly. The sensor detected glucose in the liquid between cells. After the detection, this mechanism sent information to the insulin pump or the pocket-sized device. CGM is mostly applicable to people with type 1 diabetes, however, there are cases when CGM is vital for people with type 2 diabetes as well. For example, if you need to control the health of your child, it is obviously useful. Furthermore, you might get a recommendation to use CGM, if you have got hypoglycemia unawareness, frequent leaps of blood sugar or if you are on intensive insulin therapy.

Overall, CGM devices help people to manage their blood glucose better, hence to avoid low blood sugar emergencies. However, you could not rely solely on CGM results. It means that in order to change your insulin dose you needed to prick your finger with finger-stick glucose test to check your sugar rate. This type of checking your blood sugar was mandatory while using the CGM device. What's more, you also needed to replace the sensor every 7 or 14 days respectively to the model. The two disadvantages mentioned above make the device less comfortable. But as science is moving forward we have more and more advanced and convenient technologies.

For example, The FDA has approved new Eversense CGM device made by Senseonics for patients in the USA [6]. The system consists of a tiny pill-sized sensor, on-body transmitter and a smartphone app for analyzing data. The main advantage of the Eversense CGM device is that the sensor is implanted in the upper arm for 90 days. Therefore, you don't have frequently extraction of the sensor required by other CGMs (e.g., Abbott's FreeStyle Libre, Dexcom G5/G6, Medtronic's Guardian Sensor 3) [7]. The implantation of the sensor occurs in a healthcare provider's office. It takes around 5 minutes to make a professional insertion

procedure. What' more, the sensor isn't seen through the skin surface. Eversense CGM transmitter is located above the sensor and can be easily removed at any time without disturbing the sensor. This transmitter vibrates while there is high or low sugar rate even when the phone is out of range. It is really useful for those who have impaired vision or hearing ability. But there is one disadvantage. The patient cannot change his dose of insulin according to results Eversense CGM system shows.

However, there is another device called Dexcom G6 which does not require finger-stick calibration. That is why you can alter insulin dose on your own. Dexcom G6 system is comprised of the same pieces but the sensor is a bit different. The insertion of it is carried out by the patient himself. Dexcom G6 system has been upgraded so now it has one-bottom applicator which makes insertion of the sensor less painful.

As we see each patient can find what is more convenient for him. Both systems mentioned above are resistant to acetaminophen, the chemical that is used for soothing different aches and inflammations, so results are accurate even when taking this pill. Particularly Eversense CGM device was tested on interfering with different substances [8]. The carried out research has proved that the Eversense sensor does not interfere with acetaminophen and ascorbic acid. It's a huge CGM breakthrough because people frequently reported about that interference. However, electrochemical-based transcutaneous CGM system reacts with tetracycline and mannitol. Everesens and Dexcom G6 are provided with handy apps compatible with Apple and Android. It means that you always have got easy access to your health data. Sensors send data every 5 minutes to smartphones. Moreover, patients can share their health statistics with their physicians at once. There was a large study carried out in the USA which was assessing the accuracy of CGM system Dexcom G6 [9]. The researched showed that G6 results were almost the same with laboratory ones so the study has approved accuracy of this device. That is why the FDA let people change their dose of insulin according to G6. These systems are truly well-made and thoroughly considered. American Diabetes Association checked Eversense sensor on toxicity. Scientists were suspicious about the dose of dexamethasone acetate included in the silicon collar of the sensor. Although DEX is a compound preventing inflammatory processes and improving outcomes, some studies have shown a potential user risk to exposure to that chemical. There were clinical trials. During them, DEX level in plasma was measured each day throughout the whole life cycle of the Eversense system - 90 days. The results showed that the dosage of DEX didn't outreach the norm [10]. The rate of dexamethasone acetate was always below the necessary concentration for an organism's

response. This fact demonstrates the safety of Eversense system.

The devices mentioned above really give hope to people exposed to diabetes. And there are lots of these people. A scale of the disease is overwhelming. Diabetes caused death to 1,5 million people in 2015 but if we add death related to high blood sugar, the number will increase up to 3,7 million. There were 1,6 million deaths in 2016. Now it is slowly decreasing because of improvements in medical service. However, a number of people having diabetes is still growing. For instance, 1,5 million people are diagnosed with diabetes in America each year.

As we still do not have a cure to diabetes we reckon that using ubiquitously such sensors as Everesens system or Dexcom G6 is the best option. We are sure that those devices are going to prevent plenty of deaths connected to high blood sugar because implantable systems are equipped with alarm signal mechanisms. In the near future, these sensors might become more advanced. For instance, people may be able to keep the sensor in their body for the whole year and there might not need to check the glucose rate twice a day by pricking the finger with a glucometer lancet. The sensor might be so sensitive

and accurate that information which it gets may be very close to laboratory results. What's more, when the mankind attains the point of such technologies, we guess, the industry and the scientific community working on that issue will unite in order to spread these sensors throughout the society by making them cheaper. We predict that each medical office will provide its patients exposed to diabetes with CGM sensors. It will be easier to create an effective treatment plan because of new gathered information. The database collected by the sensors will be tremendous so it will be possible to notice some new disease patterns and invent smart algorithms for treating diabetes. However, we cannot just sit and wait for changes in medicine service. Therefore, for all who needs support, desire changes or who are seeking more information about your disease, we advise you to look through the website of the International Diabetes Federation.[11, 12] They have got plenty of available easy-written information about diabetes, education programs, diabetes voice center, support group and much more.

## References:

1. Shrestha, P., & Ghimire, L. (2012). A Review about the Effect of Life style Modification on Diabetes and Quality of Life. *Glob J Health Sci., Nov; 4(6)*: 185-190.
2. Kropff, J., & DeVries J. H. (2016, Feb.). *Diabetes Technology & Therapeutics.* ahead of print Retrieved April 04, 2019, from http://doi.org/10.1089/dia.2015.0345
3. (2017). *Centers for Disease Control and Prevention. National diabetes statistics report, 2017. Centers for Disease Control and Prevention.* Retrieved April 28, 2019, from www.cdc.gov/diabetes/pdfs/data/statistics/natio nal-diabetes-statistics-report.pdf
4. (2015). Diabetes Prevention Program Research Group. Long-term effects of lifestyle intervention or metformin on diabetes development and microvascular complications over 15-year follow-up: the Diabetes Prevention Program Outcomes Study. *The Lancet Diabetes & Endocrinology, 3 (11),* 866–875.
5. (2016). American Diabetes Association. Classification and diagnosis of diabetes. *Diabetes Care,* 39(Suppl. 1), pp.13–22.
6. (n.d.). *official website of the Eversense system.* Retrieved April 30, 2019, from https://www.eversensediabetes.com/
7. (n.d.). *official website of the Dexcom G6.* Retrieved April 30, 2019, from https://www.dexcom.com/g6-cgm-system
8. Lorenz, C., Sandoval, W., & Mortellaro, M. (2018, May). *Diabetes Technology & Therapeutics.* ahead of print. http://doi.org/10.1089/dia.2018.0028
9. Shah, V. N., Laffel, L. M., Wadwa, R. P., & Garg, S. K. (2018, June). *Diabetes Technology & Therapeutics.* ahead of print. http://doi.org/10.1089/dia.2018.0143
10. (n.d.). *Integration of Novel Emerging Technologies for the Management of Type-2 Diabetes.*
11. (n.d.). *International Diabetes Federation.* Retrieved 2019, from https://idf.org/52-about-diabetes.html
12. (n.d.). *National Institute of Diabetes and Digestive and Kidney disease.* Retrieved 2019, from https://www.niddk.nih.gov/

QR – Issue    QR – Article

**Abdurasul Abdullaev**
the Islamic institute of Tashkent
Ph. D Candidate, Philosophical Science,
Senior Lecturer

# RELIGIOUS TOLERANCE CULTURE IN UZBEKISTAN IS HERITAGE OF ANCESTORS

*Abstract: Deep respect to languages, traditions, cultures and customs of other nations, keeping their entity, giving opportunity in carrying out cultural and spiritual demands, supporting them in all are the clear features of Uzbek tolerance. Exactly such kind of tolerance, patience gave the opportunity for saving enriching valuable examples of our culture, transmitting them through the tests of centuries. We can also see ideas propagating values concerning religious tolerance in the works of scholars of our country. We can find a lot of opinions about religious tolerance in Islamic sources written by scholars of our country. From this point of view religious tolerance of our nation living with representatives of other religion is not from needs occurred from necessity, but it has become the way of life. Uzbekistan is mentioned as historical inheritor of religious tolerance in the world community. Nevertheless, in this country from the ancient time religious tolerance was the main factor for the representatives of different religions that provided striving for welfare of the country.*

*Key words: Central Asia, mosques, Uzbek, Hanafi (Imam A'zam) mazhab, Sunni, Christians, Jews, Great Silk Road.*

*Language: English*

*Citation: Abdullaev, A. (2019). Religious tolerance culture in Uzbekistan is heritage of ancestors. ISJ Theoretical & Applied Science, 06 (74), 529-531.*

*Soi: http://s-o-i.org/1.1/TAS-06-74-63    Doi: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.63*

**Introduction**

In Central Asia from the ancient time there was big attention and respect to the religious diversity. The first President of the Republic of Uzbekistan Islam Karimov wrote: "During thousands of years Central Asia was peaceful center of different religions, cultures and ways of life. Ethnic patience and tolerance became necessary natural standards for developing and surviving strikes of the life. Religious tolerance always served as specific shield against animosity in religious land. It opened the way for existing of different religions in one period and place together at one time, and also cooperation and unanimity among their carriers[1].

During centuries mosques, churches and synagogues operated in big cities, and representatives of different nations and religions realized their religious deeds freely. During the most difficult periods of our history there were not religious

conflicts among them, and it proves our nation has big experience concerning religious tolerance[2].

Deep respect to languages, traditions, cultures and customs of other nations, keeping their entity, giving opportunity in carrying out cultural and spiritual demands, supporting them in all are the clear features of Uzbek tolerance. Exactly such kind of tolerance, patience gave the opportunity for saving enriching valuable examples of our culture, transmitting them through the tests of centuries, developing them, and also enriching them with significant results of other cultures. In turn it is proved by the history that such kind of attitude opened the way for accepting standards of behavior and spiritual values of our nation by neighboring people.

From the 9th century Hanafi (Imam A'zam) mazhab of Sunni way of Islam was developed in today's Uzbekistan. It was for particular reason. Imam A'zam mazhab differs from others in giving freedom concerning other religions and local customs. Al

---

[1] Achildiev A. National ideology and international relationship – T.: Uzbekistan, 2004. p. 92.

[2] Ideology of national sovereignty: Main concept and tendencies. – T.: Uzbekistan, 2000. – p. 61

Clarivate Analytics indexed

Maturidi, Abul-Mu'in an-Nasafi and al-Marginani, who developed the doctrine of Hanafi mazhab, made great contribution to eliminate ideological supporting among Muslims, and keep stability of the way "ahli sunna va-l-jamaa". Not only great scholars, but also rulers of Middle Asia fought in this way[3].

We can also see ideas propagating values concerning religious tolerance in the works of scholars of our country. The ideas concerning tolerance mentioned in the works of the great scholar, the founder of Maturidi way of aqida Abu Mansur al-Maturidi (870-944) can be example for this.

Also, Maturidi in his work famous in the Islamic world on the commentaries to the Qur'an "Ta'vilat ahli sunna" in the surah "Hajj", ayah 40 states firmly: "It is forbidden to destroy churches and synagogues. That's why, they still exist in the Islamic countries. On this matter there is no controversy among scholars".[4]

The scholar and mufassir from Samarkand Abu Lays as-Samarqandi in his book on the commentaries to the Qur'an "Bahr al-ulum" in the commentary to the surah "Mumtahana", ayahs 8-9 wrote: "Keep relationship with the representatives of other religions who are not at war with you, and be in just attitude to them"[5].

One of the well-known scholars and mufassirs in Mawarannahr Abul Barakat an-Nasafi in his famous book in the Islamic world "Madorik at-tanzil" gives the commentary to above mentioned ayahs as follows: "Show respect for representatives of other religions and do them good in words and deeds"[6].

In the works of well-known Sufi al-Hakim at-Termizi positive opinions are given concerning some classes of Christians[7]. Al-Maturidi states that Christians are closer to Muslims in spirit and they are closer to be in friendly relations[8]. Abul Barakat an-Nasafi states that Christians are close to Muslims in spirit, and there are faithful and modest, that is learned among them. He also mentions that it doesn't matter who owns knowledge, it will lead to good.

We can find a lot of opinions about religious tolerance in Islamic sources written by scholars of our country. From this point of view religious tolerance of our nation living with representatives of other religion is not from needs occurred from necessity, but it has become the way of life. We can see it in analyzing

ancient and modern states of attitude to Jews and Christians in our country.

From the past Central Asia is considered the point that developed the opportunity for different cultures to come across, their influence and enriching. Certainly, Great Silk Road connecting the East with the West that went through Central Asia created conditions for this.

At the beginning of the 15th century the ambassador of Castile in the palace of Temur stated, that Temur had gathered representatives of different religions and showed respect for them. As it is mentioned in other sources, one of the sons of Temur was responsible for supporting Christians and relationships among Christian countries[9].

At the beginning of the 18th century because of political processes occurred in Central Asia Jews divided into Iran, Afganistan, Khiva, Kokand and Bukhara groups. In the second half of the 19th century occupying one of the parts of Central Asia by Russian empire resulted dividing of Jews again into Turkistan and Bukhara groups. As Jews of the continent lived in the territory of Bukhara emirate, they were known with the name "Bukhara Jews", but the main part of them lived in Samarkand[10].

It is known, that Central Asian Jews were so embodied with local people that they spoke Persian-Turkic languages mixed. The main reason is that Jews came to Central Asia through Iran, they used Torah in Persian language until recently, and they mixed partly with local people. In spite of the fact that religious factors and hard conditions in the past caused Jews to live separately from all, it was seen their becoming close with the local people. As a result, Jews language changed into Samarkand-Bukhara dialect of Tajik language. Also, elements of Uzbek-Tajik people appeared in their cloths, meals, traditions, musical culture and life style.

But, mixing of Jews with local people didn't occur, because religious relating didn't allow it. Religious belonging played the role of ethnic differentiating[11].

There were schools, periodicals and special publications of Jews in Hebrew. In 1932 there was founded Jews theater in Samarkand. Basing on the idea "Mixing of nations in the future" Communistic

---

[3] Hasanov A. Uzbekistan is the land of tolerance. // Contribution of Uzbekistan to development of Islam civilization. Collection of lectures and congratulations of international conferences // T.: Publications of Republic scientific educational center named after Imam Bukhari, 2007. p. 373

[4] Abu Mansur al Moturudi. Ta'volitahli Sunnah. – Beirut: Muassasaar-risala, 2004. Vol.III. p. 376

[5] Abu Lays as Samarqandi. Bahr al ulum. Beirut: Dor al kutub, 1993. Vol.III. p. 353

[6] AbulBarakot an Nasafi. Madorik at Tanzil. Beirut: Dor al kutub. Vol.II. p. 674

[7] Al Hakim at Tirmizi. Navodir al usul. Cairo: DorarRayyon, 1988. p. 222-227

[8] Abu Mansur al Moturidi. Ta'volitahlisunna. Beirut: Muassasaarrisala, 2004. Vol.II. p. 60

[9] History of religions of Central Asian nations / edited by Sh. Yavkachev. – T.: TSOI. 2006. p. 67

[10] History of religions of Central Asian nations / edited by Sh. Yavkachev. – T.: TSOI. 2006. p. 61

[11] History of religions of Central Asian nations / edited by Sh. Yavkachev. – T.: TSOI. 2006. p. 58-59

Party cancelled the opportunity for nations small in numbers to get education in their own language. Also, it was cancelled to teach in Jews language and conduct cultural activity.

In 1991 after Uzbekistan achieved Independence there were given all conditions for all religions to be believed freely. Nowadays in our country national cultural centers of Jews of Bukhara and Europe were founded, and eight Jews religious groups are operating.

During the centuries Islam created big conditions for social-economic and cultural developing. Also, in eastern countries under the influence of Islamic teachings cultures of different nations became close to one another, developed synthesis of civilization. As a result, different nations are keeping national entity, religious belief, spirit and big heritage during thousands of years. Concerning these friendly relationships Islam Karimov wrote: "Living of Muslims and Christians in the territory of Uzbekistan unanimously is the valuable sign of spiritual friendship and the best example of tolerance to all representatives of other religions"[12].

Thanks to Independence in addition to all spheres of social life there were serious reforms in the attitude to believers. There are all bases for this. At first, there are all conditions for religious scholars in participating actively in social life. In the second, until recently interest and striving for knowing religious values and studying them assessed negatively. But nowadays, all conditions are given to keep and develop religious customs, traditions and values.

In our country organizations concerning Islam and other fifteen religious confessions are operating nowadays. Each person, society and nation should realize that humanity consists of different cultures and should respect them. As there is no peace without tolerance, so there is no development without peace.

Uzbekistan is mentioned as historical inheritor of religious tolerance in the world community. Nevertheless, in this country from the ancient time religious tolerance was the main factor for the representatives of different religions that provided striving for welfare of the country. It continues so now too.

## References:

1. AbulBarakot an Nasafi (n.d.). *Madorik at Tanzil*. Vol.II. (p.674). Beirut: Dor al kutub.
2. Abu Mansur al Moturidi (2004). *Ta'vilotahlisunna*. Vol.II. (p.60). Beirut: Muassasaarrisala.
3. Abu Mansur al Moturidi (2004). *Ta'vilotahli Sunnah.* Vol.III. (p.376). Beirut: Muassasaarrisala.
4. Abu Lays as Samarqandi (1993). *Bahr al ulum*. Vol.III. (p.353). Beirut: Dor al kutub.
5. Achildiev, A. (2004). *National ideology and international relationship*. (p.92). Tashkent: Uzbekistan.
6. Al Hakim at Tirmizi (1988). *Navodir al usul*. (pp.222-227). Cairo: DorarRayyon.
7. Hasanov, A. (2007). *Uzbekistan is the land of tolerance. Contribution of Uzbekistan to development of Islam civilization.* Collection of lectures and congratulations of international conferences. (p. 373). Tashkent: Publications of Republic scientific educational center named after Imam Bukhari.
8. (2006). *History of religions of Central Asian nations*. edited by Sh. Yavkachev (Eds.). (p.67). Tashkent: TSOI.
9. (2006). *History of religions of Central Asian nations*. edited by Sh. Yavkachev (Eds.). (p.61). Tashkent: TSOI.
10. (2006). *History of religions of Central Asian nations*. edited by Sh. Yavkachev. (pp.58-59). Tashkent: TSOI.
11. (2000). *Ideology of national sovereignty: Main concept and tendencies*. (p.61). Tashkent: Uzbekistan.

---

[12] In the way of spiritual development. – T.: Uzbekistan, 1998. p.42

QR – Issue     QR – Article

**M.M. Mukhammadsidiqov**
International Islamic Academy of Uzbekistan
doctor of political sciences, acting professor in
+998 90 980 9158
mmuhammadolim@mail.ru

# THE DEVELOPMENT OF ENERGY SECTOR IN CENTRAL ASIA AND THE ROLE OF UZBEKISTAN IN IT

*Abstract: The article gives an overview of the energy potential of Central Asian countries and the geostrategic significance of the region, the opportunities for accelerating the integration processes of the region's states, the creation of transport corridors for the entry of these countries into the world market, and the work carried out in the country in the development of the energy resources of the Republic of Uzbekistan.*

*Key words: hydropower resources, gas and condensate reserves, the place connected with civilization, uranium product, regional cooperation, national interests, foreign policy concept, Central Asian integration, subregion, international relations subsystem, autochthon ties, collective relations, sustainable development.*

*Language: English*

*Citation: Mukhammadsidiqov, M. M. (2019). The development of energy sector in Central Asia and the role of Uzbekistan in it. ISJ Theoretical & Applied Science, 06 (74), 532-534.*

*Soi: http://s-o-i.org/1.1/TAS-06-74-64     Doi: cross https://dx.doi.org/10.15863/TAS.2019.06.74.64*

**Introduction.**

From the point of view of the energy potential of Central Asian countries, it can be divided into two groups: the highest (Tajikistan and Kyrgyzstan) and the lower (Kazakhstan, Uzbekistan, Turkmenistan). The countries of the first row possess significant volumes of hydropower resources, but have no hydrocarbon reserves. The countries of the second layer have huge hydrocarbon reserves - oil, gas, and coal, but have no large hydroelectric reserves. It is known that in Central Asia, the largest gas and oil-producing countries are Kazakhstan, Uzbekistan and Turkmenistan. The export earnings in this area constitute an important part of the budget of these countries and provide significant imports of products in the form of production and consumption.

**Main part.**

The Central Asian region has been the center of civilization and important transit zone for international trade. We can say that Central Asia is the most important and indivisible part of Heartland, according to the famous British geographer H.Mackinder's Theory of Heartland. According to Mackinder, "Who governs the world's island (Eurasia and Africa), who governs the world, manages the whole world" [1]. As it is known, although it is impossible to reach the seaport for Central Asian

countries, it is possible to establish economic relations not only with neighboring countries, but also with the whole world by developing land transport. First of all, in the countries of the region, it is necessary to achieve internal stability and to create transport corridors for entering the world market.

Kazakhstan has a high potential for energy exports in the region, primarily due to its 105 million tons of oil production and consumption - 50 million tons. The Kazakh government plans to increase oil production by 2015 to 178 million tons a year [2]. It is also planning to increase gas production by 2020 by 40 billion cubic meters at the expense of the Caspian shelf (estimated reserves - 2 trillion m3) [3].

For the New Silk Road project, which will help China to implement the multi-billion dollar plan, Kazakhstan is currently building a railway station in the Horgos desert region on the eastern border with China [4]. The share of European countries in the export of Kazakh energy exports to foreign countries in 2013 is 76% [5].

In Turkmenistan, total primary energy production is almost 60 million tons, of which nearly 50 million are natural gas and 10 million tons of oil. 34% of natural gas, 2/3 of oil and petroleum products are exported [6]. In Kyrgyzstan, domestic primary energy production only covers half of the country's energy needs and generates at the expense of

Clarivate Analytics *indexed*

hydropower demand of more than 80%. In Tajikistan, energy production is mainly driven by hydropower, with the total energy balance of hydropower at 96% [6].

Today, Uzbekistan is implementing large-scale plans for modernization and diversification of its economy, and additional revenues from natural gas sales are important. Energy is the root of any economy, so energy diversification is a topical issue. Oil, gas and coal are the main sources of energy. Currently, Uzbekistan is extracting 12 billion tons of energy sources in a year. However, approximately in the next 40 years oil, in 50-60 years gas and in 100 years coal will end. Therefore, alternative or renewable energy development is important. Leading countries are currently using solar, wind, water, and geothermal energy. These comprise more than 20 percent of the total energy potential [7].

Uzbekistan has about 182 million tons of sun power, which is equal, the same amount of oil per year. If the country consumes 60-65 tons of oil equivalent per year, it means that there are more than three shares of this demand. In total, the sun has a capacity of 51 billion tons of oil.

In 2019, Uzbekneftegaz plans to produce 43 billion cubic meters of gas. Overall, the country plans to increase its gas production from 60 billion to 63.6 billion cubic meters in 2018 and 70 billion cubic meters by 2025 [8]. Nowadays Lukoil, Gazprom, China National Petroleum Corporation, as well as leading companies in the world. The government is negotiating with VR PLC and Total SA.

Today, the country's domestic demand for gas is about 40 billion cubic meters. Uzbekistan exports gas to Russia, Kazakhstan, Tajikistan and Kyrgyzstan. Last year, the volume of gas supplies to China via three pipelines reached 9 billion cubic meters, and it is planned to increase this capacity by commissioning the fourth line.

In general, the fuel and energy complex of Uzbekistan grew strongly in the Soviet era, consolidating the oil and gas, coal, and power sectors. In addition, Uzbekistan produced uranium, but it was only for the domestic export of the union, and there were no nuclear power facilities in the country. Due to the large population and the presence of large industrial complexes, Uzbekistan's energy needs were enormous, and most of the energy sources were consumed in the country.

Only the Uzbek oil and gas sector, as well as the uranium product, were of union importance [9]. According to the "Oil and gas" magazine in January 2014, oil reserves were estimated at $ 594 million and total oil production and other fuel products in 2013 amounted to 102,000 barrels a day [10].

Uzbekistan's hydropower station consists of more than 190 natural gas, oil and gas condensate and coal mines. The total reserves of these deposits are estimated at 2.1 to 5.7 billion cubic meters. The reserve for energy is natural gas, proven reserves are about 1.8-2 trillion.m3. Uzbekistan occupies the second place in the CIS on production of natural gas, with its share in world production accounting for 2.3% - 2.5%. Uzbekistan is among the world's top ten uranium reserves and has the necessary production and technology capability.

Uranium production in the country today is equal to 7% of world production [6, p.4]. Gold reserves are 2100 t. but this account can be up to 3,500 tons. Annual gold extraction is 80-85 t. , representing 3% of global production [11].

It is possible that Uzbekistan has unique fuel and energy resources. Exploded gas reserves reach $ 2 trln. About three billion cubic meters of coal, 2 billion cubic meters of coal. More than T. There are more than 160 oil deposits. Oil, gas and condensate reserves do not only meet our needs, but also enable us to export energy resources. Uzbekistan has very large oil and gas deposits underground. Approximately 60% of the country's territory can be explored in the future. There are five main regions where oil and gas can be found.

These are Ustyurt, Bukhara-Khiva, South-West Gissar, Surkhandarya and Ferghana regions. Oil and gas reserves reach $ 1 trln. More than US $. The explored reserves cover the republic's demand for natural gas for more than 35 years, with oil up to 30 years [11].

In terms of natural gas, Turkmenistan, Kazakhstan, and Uzbekistan account for about 10.6% of global gas reserves. In this regard, the share of Tajikistan and Kyrgyzstan is almost unclear in the British Petroleum report. According to the BP report, the share of Kazakhstan in the world's oil reserves is 1.8%, with the potential of Uzbekistan and Turkmenistan to be less than 0.05%.

**Conclusion**

In short, the discovery of new aspects of the economic potential of the Central Asian region will further enhance its geopolitical and geo-strategic significance. This, in turn, determines the interest of leading world states in the region to further increase competition.

**References:**

1. Alimov, R. M, & Arifkhanov, S. R. (2002). *Tsentral'naya Aziya: geoekonomika, geopolitika, bezopasnost'.* (p.87). Tashkent: «Shark».

2. (n.d.). *Energy Information Administration.* Retrieved 2019, from www.eia.doe.gov/emeu/cabs/kazak.html

3. (n.d.). Retrieved 2019, from www.newsru.com/finance/22may2006/kazgaz.html

4. (2014). "*The Economist*", November 15th-21st,Volume 413,Number 8913, p.61.

5. (n.d.). Retrieved 2019, from www.eia.gov/countries/analysisbriefs/Kazakhstan/images/crude_exports.png

6. (2007). "*Analiticheskaya zapiska*", UNDP, № 1 (8), p.3.

7. (n.d.). Alikhonov: takhminan 40 yilda neft', 50-60 yilda gaz, 100 yilda kŭmir zakhiralari tugaydi. Retrieved 2019, from https://kun.uz/news/2019/05/24/alixonov-taxminan-40-yilda-neft-50-60-yilda-gaz-100-yilda-komir-zaxiralari-tugaydi

8. (n.d.). *«Uzbekneftgaz» zhoriy yil okhirigacha uchta aloḳida kompaniyaga bŭlinadi.* Retrieved 2019, from https://kun.uz/news/2019/05/22/ozbekneftgaz-joriy-yil-oxirigacha-uchta-alohida-kompaniyaga-bolinadi

9. Strokov, A., & Paramonov, V. (2013). *Evropeyskoe prisutstvie v energetike Uzbekistana, Kyrgyzstana, Tadzhikistana.* Retrieved May 06, 2019, from www.easttime.ru/analytics/tsentralnaya-aziya/evropeiskoe-prisutstvie-v-energetike-uzbekistana-kyrgyzstana-tadzhikist

10. (n.d.). *Uzbekistan, Country Analysis Note, US Energy information administration, independent statistics and Analysis.* Retrieved 2019, from www.eia.gov/countries/country-data.cfm?fips=uz

11. Klavins, M., Zaloksnis, J., & Azizov, A. (2014). *Environment, pollution, development: The case of Uzbekistan.* University of Latvia, Riga, ISBN 978-9984-45-888-5, p.13.

Clarivate Analytics *indexed*

**QR – Issue**      **QR – Article**

**S. T. Nunev**
Angel Kanchev University of Ruse
Associate Professor,
Doctor of Science of Social Work, Bulgaria
https://orcid.org/0000-0003-3414-0733

**Sociological research.**

# POSSIBILITIES FOR CONDUCTING SUPERVISION IN THE PRACTICAL TRAINING OF SOCIAL WORK STUDENTS

*Abstract*: *The article presents research on issues of supervision in social work practical training, based on identification of the attitudes of 252 students from University of Ruse, Bulgaria, towards possibilities for its implementation in the conditions of their educational practice in frameworks of four academic years. The content, functional, organizational and structural specifics of supervision of social work students in the conditions of their practical training is analyzed, as well as results of researches in this field. A methodology is used to identifying students' attitudes towards possibilities for realizing supervision in social work practical training, which includes a research tool with certain structural and content components. The results of the research reveal the dominance of the respondents' positive attitudes towards organizational, methodological and operational possibilities for implementation of supervision in social work practical training. A presented is importance of supervision and respondents' preferred model of supervision acquisition of values, knowledge, skills and good professional experience in practical conditions, integrating theory and practice, analysis of problems and situations, reflection, correction of behavior, achievement of change and personal, cognitive and educational development, and formation of professional competence. Highlighted is the contribution of supervision of social work students to improving the quality and effectiveness of their practical training as an important component of their overall educational preparation.*

*Key words*: *supervision; supervision of social work students; attitudes towards supervision in social work practical training; model of supervision; quality of practical training; student development.*

*Language*: *English*

*Citation*: Nunev, S. T. (2019). Possibilities for conducting supervision in the practical training of social work students. *ISJ Theoretical & Applied Science, 06 (74)*, 535-550.

*Soi*: http://s-o-i.org/1.1/TAS-06-74-65     *Doi*: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.65

### Introduction

Supervision is a significant component of social work of help for the client/the social service user and of the social work education for quality preparation of students. It is a process, accompanying the daily professional and educational activity, by which, not only the social workers but also social work students in conditions of practical training acquire values, knowledge, skills and practical experience, receive support to face the challenges of the working environment and achieve change and development in themselves and the client/the social service user. Supervision enables them to explore and analyse the problems and feelings of the client/the social service user, as well as their own difficulties, anxieties, experiences and feelings, and to cope with them in accordance with the professional standards and ethical principles. In addition, supervision is a useful exchange of values, knowledge, skills, ideas, models of professional conduct and good practical experience that allows the supervised practitioners and students to implement and manage their activities in the best interest of the client, its human rights and quality service. In addition, supervision is a useful exchange of values, knowledge, skills, ideas, models of professional conduct and good practical experience that allows the supervised practitioners and students to realise and manage their activities in the best interest of the client, its human rights and quality service. Typical for the supervision is its implementation as a shared responsibility of a supervisor and a supervised, providing efficient support and encouraging competent, responsible, culturally sensitive and based on the principles of anti-discrimination and anti-oppression practice. Its application in the training of social work students is

Clarivate Analytics indexed

essential for their early professional formation and development and their future professional realization. The acquired by students under the conditions of supervision the values, knowledge, skills, practical experience and dealing of related them thinks, feelings, anxieties and experiences during of the this period of education have a significant impact on their professional competence, values orientation, identity, development and good practice of the future social worker. Consideration of the supervision as an important component of the practical training in social work and substantial factor for quality service of the client/the social service user requires researching the problem for its role and importance in the practical training of social work students [3; 10;11;13; 22; 28; 30; 37]. The researches for the social work supervision in Bulgaria are predominant in comparison with its use in the practical training of students in social work. [29; 31; 32; 34; 36].

**Content, structural and functional aspects of supervision in the practical training of social work students**

The analysis in the research requires clarifying presence of differences between supervision in professional social work and supervision for students under their practical training. Researchers note that such differences exist. They consider supervision of social work students in a relatively uniform background as accentuate on different points, depending on following positions:

A. Structured, interactive and partnership process with certain frames time and includes monitoring, facilitating, training and support of the social work students. Its main purpose is to provide opportunities and conditions for the student to give a significance to their own practice and their observations on the activities of social workers in a given social service or institution for practice. The position of researcher E. Bedoe [4] is that the relationship between the supervisor and supervised social work student are the core of his practical training and are far more different from those in therapeutically oriented models and apprenticeship. Typical of them is that they focus on teaching and learning with features of reflexivity and facilitation. Thus the development of every student in a supportive and yet challenging environment is ensured [4; 17; 19; 39].

B. Learning environment in which social work students realize purposes and tasks of the training for integrating theory with the realities of practice and in which they face and feel the impact of contradictions and conflicts of practice [16; 17; 18].

C. An important factor that creates conditions for applying the theory into the practical environment [20; 24; 26; 41].

D. Helping social work students to reflect on their experience and providing the opportunity to test

and applying the acquired by them values, knowledge and skills, which allows them to optimize their theoretical and practical learning [17; 21].

E. Appropriate environment and means for development of the professional self of the supervised student [14].

F. Interaction between the supervisor and supervised student, which contributes to improved relationships with social workers from the social service or institution for practice, clients and community organizations, who allowing students the students are introduced to and learn various models and practices of the social work. Linking the working relationships between the supervisor and the supervised student with the tasks assigned is in favour of both parties [5; 15].

G. Interactions between supervisors and supervised students characterized by intensive interpersonal and supportive relationships and considered as the main means of learning, integrating theory and practice, acquiring practical experience, professional formation and development, student orientation in the implementation of values and ethics of the social work [37; 40].

H. The relationship between the supervisor and supervised student is interpreted as a field with the ability to apply the attachment theory. Supervision is conceptualized as informed about attachment ("attachment-informed supervision") and appropriate direction and field of learning. Model of training in the conditions of supervision is based on leading concepts in attachment theory and consider the relationship "supervisor – supervised student" in the context of the working alliance and parallel process. His contribution to increasing the effectiveness of social work learning is recognized [6; 7; 8; 9; 42]. The presented brief overview reveals that compared to the supervision of social workers, the supervision of students in social work is conceptualized primarily as a training context and supportive and favourable a learning environment. Its goals and tasks oriented towards integration of theory and practice and application of own and acquired within the interaction with the mentors-social workers values, knowledge, skills, activity models and practical experience in certain working conditions. The components of the given context include teaching and learning with features of reflexivity and facilitation, considered as a means for the formation of professional identity and professional development. The environment, in which the practical training of students and related supervision are conducted, is characterized by specific dynamics, difficulties and contradictions in the implementation of professional activities. This enables them not only to get a real idea of the workload and responsibility of the profession, but also to seek the support of a supervisor. The specific in the supervision of students is that in many cases, depending on the adopted concept and model of work,

the function and role of the supervisor coincide with those of the controlling and evaluating person in the face of the social worker-mentor and the university lecturer responsible for the training practice. To some extent, this creates tension, anxiety, and hampers of building of trust, partnership, protection and attachment.

The review of publications on the topic reveals that all authors focus on the benefits of the experience gained by students under the supervision of their practical training in social work. Specialists who supervise students during their learning practice should use approaches that are tailored not only to their needs of acquiring of values, knowledge, skills and experience in a particular field, but also to their behavioural and learning models. In this regard, their activities must comply with the following requirements:

a. to create such working relationships in the supervision, as are used in a constructive and pedagogically appropriate manner the types of power relationships and methods of supervision;

b. to achieve a reasonable balance between the capacity to support and encourage students in the process of mastering the vocation of the profession, on the one hand, and the functions of controlling and evaluating students' results, including also joint assessment by certain power positions (social worker-mentor and university lecturer responsible for practical training), on the other hand;

c. assisting and orientation students in making independent solutions, which are in the interests of their qualitative practical training and professional formation and development;

d. giving focus (direction) and content of the work meeting for supervision in line with the needs to acquire values, knowledge, skills, experience, and the need to overcome the difficulties and barriers encountered in practical training;

e. assisting students in exploring, analysing in depth and assessing objectively specific issues and events, planned and implemented activities, as well as achieving personal progress and development in line with the purposes of the practical training;

f. organizing work meetings on a regular basis for supervision of students, thus carrying into effect a process of continuous learning and complying with the requirements of the methods, standards and ethics of social work, as well as realising on learning through informal contacts and interactions.

Research results have revealed that an important role in the supervision of students has their active participation in the evaluation of their own activity, as in this direction there is a high level of correlation between competence and ability to self-analysis and self-criticism of the student [38]. This allows the evaluation to be formed as a joint result of the activities of the student and the supervisor, standing away from the traditional asymmetric relationships of positions of power between the subject and object of evaluation. When the functions and roles of the supervisor and social worker – the mentor or university lecturer in practice coincides in the evaluation, the negative effect of this overlap is considerably reduced if the students are aware that they have an active role in evaluation their own activities and results. Under such circumstances, the inclusion of the student in the process of evaluation of the results of supervision is an important part of the experience gained in the practical training [31; 32; 33; 34].

The structure and content of the supervision in the practical training of social work students are determined by the following factors:

a. creating a learning environment and atmosphere for conducting work meetings for supervision that stimulate cognitive activity, collaboration, attachment and reflection;

b. using a system of methods of supervision for students, consistent with its purpose, specific orientation, environment for implementation and level of practical training of the supervised;

c. planned and organized implementation, ensuring continuity of the process and contributing to an operative and constructive feedback and achievement of a high quality and effectiveness of practical training and student's development;

d. ensuring an adequate answer to the educational needs of the students in accordance of their level of development, the need to integrate theory and practice and two-way transfer of knowledge and skills from the theoretical and practical field;

e. achieving a value and cognitive change stimulating cognitive activity, reflexivity in knowledge and self-knowledge and pursuit of development and self-improvement;

f. supporting and promoting professional and personal development, integration of the values of the social workers community and formation and development of professional identity.

In the framework of the practical training of the social work students, the supervisor conducts educational interventions, thus providing not only guidance and support, but also encouraging and mobilizing the students and their resources to carry out the assigned tasks with high level of responsibility and quality, to explore in details the problems encountered and cope with the challenges thereof. Supervision of social work students, as a positive and constructively oriented interaction, enables both parties to establish their level of progress in terms of acquisition of values, knowledge, skills and practical experience and better manage the processes of learning, adoption of good practices and integrating the values of the profession.

The supervision in the training of social work students is an insufficiently researched problem. The first thorough and related with this theme research in

Europe is conducted in seven universities in countries with different experience and traditions (the Netherlands, Germany, Sweden, Spain, Belgium, Croatia, Slovenia) in 2010 under the project initiative of the network Supervision in Social Work Education in Europe [1; 2; 12; 22]. It presents the position that the supervision conducted in the practical training of students in social work is regarded as a method of training and is denoted by the term "student supervision".

According to the researchers on the project, it has an "academic orientation" and differs from the term "supervision in social work" (in particular educational supervision) relating to professional social work [25]. The research is oriented towards the search for answers to questions that are related to the reasonable inclusion of supervision in the curricula and educational programs of the specialty and solving organizational and methodological issues in the implementation of supervision in the practical training of social work students. The results from the research show that most university programs in social work at the bachelor's degree in Europe offer supervision to support students in their practical training. Nevertheless, student's supervision in their practical training on social work is interpreted in a different way. Discrepancies relate mainly to the planning, organization and the way it is included in the curricula and educational programs. Despite the outlined situation, the academic teams in all universities are unanimous that it is necessary and useful the use of supervision for the practical and comprehensive training of students and the results that must be achieved.

The supervision of social work students is characterized by the following functional particularities:

a. giving an appropriate response to the educational needs of students and creating conditions for cognitive and practical professional formation and development;

b. using reflection and accumulation of reflexive experience; creating conditions for professional and personal development of the future social work specialist;

c. defining a clear and well-structured time frame in relation to the number of regular meetings with a specific purpose and for a given time period.

In organizational, structural and methodological aspect, the supervision in practical training of social work students includes the following basic stages:

1. Initial stage, which consists in introducing the student/students with the bases for practice (Department for Social Assistance, Department for Persons with Disabilities; Department for Child Protection; municipal Department for Social Activities; various types of Social Services, etc.) and their staff, the social worker performing the functions of the supervisor and the group for supervision.

2. Main stage that represents the real part of the process of the supervising of the student/students in their social work practical training and in accordance with the adopted models, methods, organizational, structural and timing frame. It is realized through a series of work meetings, which are initiated jointly by the supervisor and the student/students.

3. Final stage, which is associated with the completion of the training in a given practical field for a certain time period and conducting of an individual and group supervision in purpose:

a. identifying of main problematic issues and fields; analysing an implemented activity in terms of achievements and shortcomings;

b. joint assessment of the conducted supervision and determination of measures and opportunities for development;

c. outlining of future measures to cope with them;

d. working on the implementation of a smooth transition from the given base and field of social work practical training to the next in the training for the semester or the academic year.

**Attitudes of the social work students towards the conduct of supervision in the practical training**

In Bulgaria, there are no legal provision, standards and methodology for conducting supervision in practical training on social work students in the specialties in the professional field "Social work". Supervision of students' social work learning practice is not used in all universities in the country and it is implementation out in accordance with their position on its function, role, content and methodological provision. This leads to the deprivation of social work practical training from a very important component and to a significant deficit in the following aspects:

a. forming a positive attitude towards supervision in the social work learning practice and future professional activity;

b. optimal use of the opportunities of supervising in social work learning practice for the acquisition of values, knowledge, skills and good experience, development and accelerated identification with the profession and community of social workers;

c. encouraging social work students to make best use of the supervision in their future professional activity to improve the quality and effectiveness of serving social services users and to achieve professional development.

***Purpose of the research***

Identifying the students' attitudes of the Social Work Bachelor's and Master's degree programs towards conduct of supervision in their practical training as one of the important factors for active inclusion in activities, acquisition of values,

Clarivate Analytics indexed

knowledge, skills, experience and achieve educational and professional development.

The object of the research is the social work students' supervision in the social work practical training and the subject – are its content, functional, organizational and technological, cognitive, valuable, motivational, reflexive, educational and qualification elements and characteristics of social work students' supervision. The analysis of the research results and the conclusions thereof is expected to contribute to the creation of the suitable educational environment for conducting of social work students' supervision.

### *Participants in the research*

The research is implemented with 225 students from the Social Work Bachelor's (88%) and Master's (12%) degree programs at University of Ruse from 2014 to 2018 (4 academic years, totalling 8 semesters: 120 weeks or a total of 30 months). The students from both social work programs during these years are a total 252. Quantitative information reveals that 89.29% of all social work students participate in the research by their own choice. The sample of the research is unintentional and random (randomized). It provides equal opportunities for all students from Social Work Bachelor and Master Degree to fall into it. The choice of the non-representative small sample is determining by the factors: A. Cognitive orientation of the study and specific nature of interactions in pedagogical and a professional-practical environment with certain content and methodological features. B. Focusing on interactions and the resulting students' attitudes to supervision in their social work learning practice. C. Specificity of the functioning of the students' supervision in the context of the social work learning practice as a pedagogical interaction and an environment for assisting and improving the quality and effectiveness of the practical training. D. Searching a solution to a problem of significant cognitive, educational and professional character, which is essential for integrating theory and practice, enhancing the quality of education, students' developing and preparing them for professional realization. E. Specificity of the activity studied in the context of the social work practical training and the related processes and dynamics. F. Purpose of the research and possibility to work effectively with the sample.

### *Methods*

The research is implemented with constructing by the author tool "Questionnaire for researching attitudes of students from the Social Work Bachelor's and Master's degree programs towards conduct supervision in the social work practical training". The questionnaire is approbated, validated and included 7 subscales with a total of 25 items. It is anonymous and is filled in online on the website of the specialties of professional direction "Social Work" at the University of Ruse (https://socialaffairsru.weebly.com/). Respondents' answers to attitudes towards using supervision in their social work learning practice are reported on the five-point Likert scale. The research is conducted through informed consent and is voluntary and anonymous.

In the instructions for filling out the questionnaire are presented explanations of the used concepts. When using the concept "supervision", we mean supervision with students during their social work practical training, implemented in its individual and group form and through a specific system of methods. When using the concept "supervisor", we mean the performance of their functions by the university lecturer in charge of the educational practice or by the basic specialist-social worker (mentor), depending on the adopted conception and the decision made. Supervised is the student who participates in the supervision during the social work learning practice.

### *Analysis of the research results*

*1. Subscale 1A (Item A1; Item A2).* Organization and planning of the implementation of supervision of students in the social work practical training.

The subscale includes items related to the determination of the attitudes towards the implementation of supervision in respect of planned implementation and availability of a certain organization. It consists of the elements: prior written placing of issues, setting of day and time, preparation of both parties for the working session, stages of the work meeting, level of active participation, taking notes, recording in the journal for learning practice; conducting of supervision at least once in each base for learning practice. In synthesis, they constitute an important factor in the formation of the students' positive attitudes towards the implementation of supervision in the social work practical training. The analysis of the results in the subscale presents a relative share of responses for positive attitudes of 83.60% on average for all items (Table 1).

**Table 1. Relative values of the respondents' answers – Subscale 1A.**

| Item | Relative values of the respondents' answers depending on their orientation – % | | |
|---|---|---|---|
| | non-affirmative answers | neutral answers | affirmative answers |
| Item A1 | 5.50 | 11.00 | 83.50 |
| Item A2 | 4.50 | 11.90 | 83.60 |
| Mean value | 5.00 | 11.45 | 83.55 |

The dominant positive orientation of the positions expressed by the students reveals their attitudes and expectations to participate in supervision, which is characterized by appropriate organization, planning, realization, accordance with methodological requirements and creation of the environment and conditions for acquisition of values, knowledge, skills and professional experience. In synthesis, they contribute to quality and effective social work practical training. Respondents' responses on items in the subscale expressing negative attitudes of respondents have a relative share of 5%. Quantitative information reveals the presence of a certain part of respondents who have not overcome the negative attitudes towards the organizational, activity and resultative components of the supervision. Neutral attitudes are expressed by an average of 11.45% of the respondents, which is an indicator for taking an action to better inform the students about the importance and benefits of their participation in supervision and for their practical and complete social work training. The total relative share of an average 16.45%, formed of the negative attitudes and neutral positions, demonstrates the need for further work on improving the organization and planning of the supervision; motivating and encouraging the students to actively participate in the supervision in their practical training in social work as its necessary and important component.

*2. Subscale 2B (Item B1; Item B2; Item B3; Item B4)*. Creation of the suitable environment and conditions for supervision in the practical training of students in social work, which facilitate collaboration, active acquisition of knowledge, skills and experience, the integration of theory and practice and management of the processes of learning and acquiring of practical experience based on the basis of achieved progress and development.

Essential meaning to the realization of the constructive and positive oriented working relationship between supervisor and supervised student, with contribution to the efficient and effective process of practical training have the certain factors. The cooperation and mutual exchange of ideas and solutions between the person executing the function of a supervisor and the supervised student towards active acquisition of knowledge, skills and experience, integration of theory and practice and implementation of uncontroversial and fruitful two-way transfer from both fields. And also the determining the level of progress and development in terms of knowledge, skills and practical experience and more successful management of the process of learning and acquisition of good learning practices. The presented factors are reflected in Subscale 2B and the prevailing part of respondents' responses (on average 89.20% of subscale items) express positive attitudes towards them (Table 2).

**Table 2. Relative values of the respondents' answers – Subscale 2B.**

| Item | Relative values of the respondents' answers depending on their orientation – % | | |
|---|---|---|---|
| | non-affirmative answers | neutral answers | affirmative answers |
| Item B1 | 4.20 | 6.90 | 89.00 |
| Item B2 | 1.40 | 8.30 | 90.40 |
| Item B3 | 0.50 | 9.60 | 90.00 |
| Item B4 | 2.30 | 10.00 | 87.70 |
| Mean value | 2.10 | 8.70 | 89.20 |

This relative share is the second highest among the seven subscales and correlates to a certain extent with the expressed students' positions and attitudes in Subscale 1A, Subscale 3C and Subscale 7G (Table 1, Table 2, Table 3, Table 7). Supervision of the presented features requires the creation of an appropriate organization and environment, planning,

methodological provision, high level of responsibility of the supervisor and supervised student. Its important function is also to create conditions that promote the value, cognitive, personal and professional development of social work students. Assumptions about the high values of the relative shares of the declared neutral item positions for the subscale as a

whole (average 8.70%) and their dominance over the relative shares of the negative attitudes (average 2.10%) may be explained by the existence of some barriers in the realization of social work learning practice (Table 2). Part of the barriers may be associated with insufficient awareness and student anxiety concerning on the power positions of the university lecturer responsible for learning practice and the social worker-mentor who perform the function and role of supervisor and at the same time evaluating their activity in the learning practice. In this regard, the analysis of the results highlights a need from an accessible explanation of the students about the differences between the functions and roles of the supervisor as assessors of the learning practice. It is also important improving the style of interaction and communication between the supervisor and the supervised student, as well as the possibilities of the supervision for their qualitative and effective practical training.

*3. Subscale 3C (Item C1; Item C2; Item C3).* Providing conditions in the supervision in practical training, which facilitate and develop the analysis of the problems and situations and the active feedback, reflection in supervising students and their ability for critical thinking. By means of the Subscale 3C, the students' attitudes regarding the possibilities of supervising to activate of the analytical-critical and the reflexive components in their practical training are

identified. The relative share of the positive attitudes expressed by the respondents' responses has an average value of 86% for the subscale and allows highlighting a comparatively favorable trend in certain aspects (Table 3):

a. providing opportunities for analysis of emerging problems and situations and for maintaining of an effective feedback between the supervisor and the supervised;

b. application of methods and approaches that stimulate self-analysis in the supervised by providing an opportunity to assess the current level of practical training, level of satisfaction with it in personal, educational and in perspective in professional plan; the need to change the current situation, the use of means to achieve a new level of development that corresponds to the purposes and tasks of the practical training and of the personal and professional aspirations of the student;

c. developing a critical thinking ability in the supervised student by identifying difficulties and problems in practical training in a timely manner; collecting and evaluating information from different sources in accordance with the specifics of the problems and from different points of view; generating ideas and showing creativity; analysing and evaluating decisions and related actions and behaviour.

**Table 3. Relative values of the respondents' answers – Subscale 3C.**

| Item | Relative values of the respondents' answers depending on their orientation – % | | |
| | non-affirmative answers | neutral answers | affirmative answers |
| Item C1 | 0.9 | 7.80 | 91.30 |
| Item C2 | 4.10 | 13.20 | 82.70 |
| Item C3 | 1.30 | 14.70 | 84.00 |
| Mean value | 2.10 | 11.90 | 86.00 |

The relative share of the positive attitudes expressed by the respondents in the presented content elements is in the fourth position by value among the seven subscales in the research tool (Table 3). With the highest value, this difference it is at elements for provided supervisory capabilities to analyse problems and contradictory work situations, to maintain effective feedback between the supervisor and the supervised supervisor in a manner and in environment that stimulate the self-analysis in the supervised student. The quantitative information presented, the outstanding dynamics, and their analysis reveal the need for focussing the efforts of the performers and the role of supervisors in the learning practice on the reflexive component of the supervision, creating favourable conditions for its active inclusion and use by the students in its realization. Confirmation of the proposed measures is the low values of the relative shares of the declared negative positions by the

particular items (in the range of 0.9% to 4.10%) and the high relative share of the neutral positions (in the range of 7.80% to 14.70 %). There is reveal the existence of certain deficits and taking action to further work to positivity the attitudes of a certain part of the students (Table 3). At the highest level this need is expressed in item C3, presenting the capabilities of the supervision to develop students' critical thinking abilities in realization learning practice in social work and in the overall learning process.

*4. Subscale 4D (Item D1; Item D2; Item D3; Item D4).* Providing an opportunity at the supervision in the practical training of social work students for the development of sensitivity to their own and those of the clients thoughts, feelings, actions and behavior and a readiness for change and development.

Essential importance for the implementation of an effective supervision in the social work practical training is the formation of a working relationship

Clarivate Analytics **indexed**

which enables the students to understand their own and those of the clients inner world (thoughts, feelings and experience), actions and behavior and to strive for change and development. The Subscale 4D considered together with the Subscale 1A and Subscale 6F are one of the characterized by larger ranges. It encompasses items, which related to the determination of students' attitudes towards the following features of the supervisory working alliance:

a. raising the sensitivity of the supervised student to their own and those of the clients/ social service users thoughts, feelings, experiences, actions and behavior and formation positive attitudes towards supervision, thereby providing the opportunity for it to be used in future professional realization as a practicing social worker;

b. creating conditions, helping and encouraging the supervised student to awareness of the situation that including in this type of activity is a factor in accepting the need for receiving of support in cases of conflicts, difficulties, problems and dilemmas in practical training and in future professional activity;

c. building of the base on the experience acquired from supervision in the practical training of a new vision of action, constructive attitude towards practical training, and determination to make corrections in its to related activities and behavior if necessary;

d. forming of a sustainable motivation to use the possibilities of supervision through a regular and conscious involvement and conviction in the need to

objectively assess their own learning and practical work to achieve change and development.

The subscale includes items that relate to one of the most important methodological aspects of supervision in social work practical training – adjustment to our own and client's thoughts, feelings, actions and behaviors, professionally conscious use of supervision, objective assessment of their own activity, striving for change and development. The analysis of the results presents reveals positive attitudes at an average 85.23% of respondents' responses for all subscales, which is one of the high relative values of this type of attitudes (Table 4). The presented quantitative information highlights the importance, which the students give through their assessments, of the working relationship with the presented personal, interpersonal, interactive and reflexive focus. The highest relative share of preferred responses for positive attitudes was identified in Item D2 (89%) and Item D4 (87.60%). In a content aspect, they include certain elements. The first of these is determination and using supervision in the social work practical training as providing the possibility to accept the need to receive support in cases of problems and dilemmas in practical training and future professional activity. The second element is associated with consideration of regular participation in supervision as a factor for the formation of sustainable motivation and objective evaluation of learning-practical activities. The high relative share of positive attitudes in given items is an accompanied by low values of relative shares of expressed negative attitudes and declared neutral positions (Table 4).

**Table 4. Relative values of the respondents' answers – Subscale 4D.**

| Item | Relative values of the respondents' answers depending on their orientation – % | | |
| --- | --- | --- | --- |
| | non-affirmative answers | neutral answers | affirmative answers |
| Item D1 | 1.80 | 15.60 | 82.60 |
| Item D2 | 0.50 | 10.50 | 89.00 |
| Item D3 | 1.40 | 16.90 | 81.70 |
| Item D4 | 1.80 | 10.60 | 87.60 |
| Mean value | 1.37 | 13.40 | 85.23 |

Neutral positions stated by respondents (13.40%) prevailed over negative attitudes (1.37%) and their total relative share was 14.77% (Table 4). Our assumptions and analysis are associated with the view that the given situation is determined primarily of the insufficient knowledge of the components of the supervision in the practical training and not by rejecting them. The presented quantitative and qualitative analysis requires the university professor and the mentor-social worker active additional work with the students in certain fields: accessible and detailed informing and clarifying of the importance of

supervision their qualitative practical training and motivation and active involvement in properly organized, systematically implemented and effective supervision. The results of respondents' responses to positive attitudes towards the supervision in their practical training in Subscale 4D in a quantitative and qualitative aspect correlate with those from Subscale 2B and Subscale 3C (Tables 2, 3, 4). This underlines the importance of forming a positive, constructive and partner-oriented supervisory relationship, which is characterized by motivating students to participate in supervision; searching for opportunities to overcome

the difficulties encountered; active learning and acquisition of important practical experience; development of the reflection and the critical thinking in the social work practical training and the supervision, realized in its context.

*5. Subscale 5E (Item E1; Item E2; Item E3).* Implementation of supervision in the practical training of students in social work under a particular model – a university professor; mentor-social worker; jointly by the university professor and the mentor-social worker). The quality and effectiveness of supervision in the practical training of social work students is to a considerable extent determined by the specialist who implements it. It is perceived in a certain ways by supervised students depending on the position occupied and the performed functions, education, qualification and quality of professional practice (university professor, a mentor-social worker). The grounded choice of the aforementioned professional persons for supervisors, as well as an appropriate model of supervision in practical training are main factors in identifying the overcoming of some barriers to the interaction between supervisor and supervised student, building trust, partnership, productivity, dealing with the effect of the influence of power positions on the supervisor (trainer and assessor). Failure to address these barriers has an impact on the direction of working meets between supervisor and supervised students and the attitude of students to supervisors and supervision. To a certain extent, these attitudes influence not only the activity, the analytic, the critique, the motivation to learn in the conditions of the practical training, but also the perception of the supervision as necessary for their change and development in the educational and professional-practical aspect. Subscale 5E includes items to identify students' attitudes towards the person (s) which perform (s) or the function and the role of supervisor in social work practical training. There are three types of implementation of supervision by certain persons:

a. university professor, which guides, the learning practice;

b. mentor-social worker from a social service, department or institution in whose conditions the is realized learning practice;

c. university professor and a mentor-social worker which are partners in the implementation of the supervision and allocate the functions, roles and responsibilities depending on the specifics of the situation and the educational needs of the students.

The analysis of the results reveals expressed positive attitudes on an average at 77.67% of respondents' responses for the items of the subscale, which is the lowest relative share of this type of attitude in the all subscales in the research tool (Table 5). The quantitative information presented and its qualitative analysis give us reason to express an assumption not only of contradictions and doubts, whit which students face in clarifying their vision of the role and function of supervising a particular person in their practical training. The responsibility and competence of the teaching team in defining an appropriate model of supervision is also important. Compared to 2014-2015 the relative share of the expressed positive attitudes has risen by 10.36% (from 67.31% to 77.67%) and this reveals certain progress in addressing the contradictions and unexplained positions [33].

**Table 5. Relative values of the respondents' answers – Subscale 5E.**

| Item | Relative values of the respondents' answers depending on their orientation –% | | |
| --- | --- | --- | --- |
| | non-affirmative answers | neutral answers | affirmative answers |
| Item E1 | 12.00 | 14.10 | 73.90 |
| Item E2 | 9.50 | 14.50 | 76.00 |
| Item E3 | 3.70 | 13.20 | 83.10 |
| Mean value | 8.40 | 13.93 | 77.67 |

For the period 2014-2015, the neutral positions and negative attitudes of the respondents were approximately equal 16.66% and 16.03%, and their overall relative share was the highest in the entire questionnaire – 39.69%. After this period, the average value of the relative share of negative attitudes decreases almost twice (8.40%), and that of the declared neutral positions reduced to 13.93%. The quantitative information presented and its qualitative analysis reveal taking action and achieving a positive result. Nevertheless, there is still a need from filling certain deficits concerning persons that would perform their functions and role of supervisor in a way characterized by efficiency and contribution to the qualitative practical training of social work students. There is a need to continue the activity of selecting and approving a model of supervision in the practical training of students, which to the highest degree meets certain requirements:

a. the specifics of the practical training environment;

b. competencies and experience of the mentor-social worker and the social service staff;

c. students' educational needs and attitudes towards a supervisor figure which is appropriate and in the interests of quality and effective practical

training; dynamics and efficiency of the process of acquiring values, knowledge, skills and experience, integrating theory and practice, overcoming contradictions, difficulties and problems, and compensate of deficits.

When presenting an opportunity for realization of the supervision by the university professor of learning practice, 73.90% of respondents' responses expressed positive attitudes. This is the lowest relative share of such a type of attitude not only in the items in the analyzed subscale, but also among the subscales in the research tool. By value, the relative share of negative attitudes (12%) is less than the stated neutral positions (14.10%) and together they form an overall share of 26.10%, which is one of the highest in the given subscale and regarding of the other subscales. The quantitative and qualitative analysis of the results of this item aims at a more careful and in-depth understanding of the expediency of using the given model of supervision and taking measures to overcome the impact of the power positions of the university professor in the realization of the function and the role of supervisor. In the subscale presents a second possibility to realize out supervision with social work students, such as the function and role of supervisor are implementation by the mentor-social worker in the social service, department or institution. The mentor is also an important figure in practical training, which has a certain power positions as a trainer and assessor.

Compared to the previous item and the model presented in it, the share of positive attitudes expressed by respondents' answers is higher – 76%. The relative value of neutral positions (14.50%) predominates significantly above the value of negative attitudes – 9.50% (Table 5). Although their total share of 24% is lower than the previous one, it also raises the question of choosing a student supervision model that is based on careful and in-depth analysis, argumentation and conform to power positions of the performer of the functions and role of supervisor namely the mentor-social worker in the social service, department or institution.

The third option regarding on the subject of realizing supervision in the social work practical training on presents in a separate item a model of partnership between the university professor and the mentor-social worker (co-supervision). The relative share of the positive attitudes towards this model, expressed by respondents' answers, which a relative share of 83.10% (Table 5), which is highest compared to the previous two options for realization of supervision separately of certain persons (university professor and mentor-social worker). Compared to the previous two articles, the negative attitudes expressed were reduced three to four times (3.70%), as the rest part of respondents' replies are concentrated in the neutral positions sector - 13.20% (Table 5). Quantitative and qualitative data analysis allows us to

present a suggestion of a trend more clearly and categorically expressed positive attitudes but accompanied by a certain relative share of neutral positions. The analysis reveals that over ⅔ of the sample of respondents is aware of the importance and accepts the need to use a model of co-supervision, appreciates its importance in creating environment and conditions for a positive oriented working relationship, partnership, fruitful learning, acquiring of values, knowledge, skills and practical experience, integrating theory and practice, reflection, change and development. In this regard, our assumptions are that during the implementation of supervision in the conditions of practical training and on the base of the experience gained during the research period concerning the advantages and disadvantages of the separate models of supervision, the students had the opportunity to establish the advantages of this model and to form a certain position. In support of our assumptions, we can note that the model of co-supervision is characterized by: a wider and more balanced basis for student support and learning; more channels of constructive, analytical, reflexive and critical communication, providing the student with a wealth of relationships with professionals with mutually complementary competencies and experience and demonstrating a positive-oriented professional co-operation model [35]. The student has the opportunity to use the resources, both of individual co-supervisors, as well as the formed system of general resources and constructive and partner relationships.

Comparison of quantitative and qualitative analysis results for the three Subscale 5E items allows to present summaries of preferences and positive attitudes of students to the model of co-supervision, which have their argumentation. It connects with a specific to the model characteristics such as partnering, balancing of power positions of supervisors, a deployed communication network, and a broader basis for support and professional analysis, positions and suggestions of the two supervisors on issues, educational needs, potential and opportunities for progress and development of social work students in the conditions of their practical training.

*6. Subscale 6F (Item F1; Item F2; Item F3; Item F4).* Style of interaction used by the supervisor in the working supervision relationship. The style of interaction of the supervisor with social work students in the conditions of supervision is an essential factor for its effective realization. Included in Subscale 6F items are related to identifying students' attitudes towards the style of interaction of the supervisor and its main features in the context of the working relationship:

a. providing certain forms of support to realize the appropriate behavior of the supervised student;

b. building a trust relationship and using a peaceful, businesslike and a respectable tone of

communication when carrying out monitoring, control and placement of requirement for changing the inappropriate behavior;

c. timely reaction, implementing consistent and methodologically appropriate actions when necessary correction of a supervised student behavior;

communication and realization of activities and interactions with supervised students characterized by constructiveness, positive orientation, culture sensitivity and other differences (e.g. gender, age, disability, sexual orientation, etc.) and realization of non-discriminatory behavior.

Regarding to purpose and content, the subscale relates with identifying students' attitudes towards one of the most important technological components of supervision in their practical training, which concerns the use of a professionally grounded interaction style by the supervisor in the context of a working relationship with a supervised student. Data analysis reveals pronounced positive attitudes at an average 86.75% of respondents' responses for all subscale items, which is the third largest of the value relative share of this type of attitude in the research tool (Table 6). Established relative shares respondents' responses for positive attitudes are high in their values not only in the given subscale, but are also among the highest in the subscales of the questionnaire. The quantitative information and its analysis make it possible to highlight the position of the students about the importance of a positive, supportive, and oriented towards achieving changes in behavior and activity, methodologically appropriate, sensitive to differences and non-discriminatory interaction style of the supervisor with the supervised student. Neutral positions (10.70%) dominate over the negative ones

(2.55%), as their total relative share (13.25%) being one of the relatively low in the research tool (Table 6).

The presented situation and related with her dynamics can be interpreted as an indicator of the insufficient knowledge of the characteristics of the interaction style of the supervisor by some respondents rather than such as lack of expectations for such or rejecting them. In this direction, it is necessary to include students in supervision in the context of their social work practical training to be combination with appropriate forms of information and their stimulation to active inclusion in supervision with a positive, constructive, supportive and tolerant style of interaction. Data analysis reveals, that in quantitative and qualitative aspect and with regard to the clearly outlined trend of dominance of positive attitudes, the subscale results correlate with the results of the second, third and seventh subscales. The presented information is possible interpret as evidence of the relationship between the adequate style of interaction between the supervisor and the supervised student with the following elements:

a. constructively and positively oriented communication and partnership;

b. maintaining effective feedback and motivating to solve tasks;

c. managing and supporting learning processes, integrating theory and practice, learning good practice and assessing progress; stimulating cognitive, personal and professional development;

d. analyzing controversies, difficulties and problems, and coping with them;

e. acceptance of the values of the professional community; development of reflection and the critical thinking of the student.

**Table 6. Relative values of the respondents' answers – Subscale 6F.**

| Item | Relative values of the respondents' answers depending on their orientation –% | | |
|---|---|---|---|
| | non-affirmative answers | neutral answers | affirmative answers |
| Item F1 | 3.20 | 11.50 | 85.30 |
| Item F2 | 1.40 | 7.80 | 90.80 |
| Item F3 | 2.30 | 11,50 | 86.20 |
| Item F4 | 3.30 | 12.00 | 84.70 |
| Mean value | 2.55 | 10.70 | 86.75 |

*7. Subscale 7G (Item G1; Item G2; Item G3; Item G4; Item G5).* Inclusion of the supervised to the values and traditions of the profession and creating conditions for the development of values, cognitive, professional and personal development.

The successful realization of supervision in social work practical training is determined to a significant extent by the following factors, representing a significant part of the sub-subscale:

a. creating conditions for inclusion to the values and social work traditions and the social workers professional community;

b. supporting and promoting of the value, cognitive, personal and professional development;

c. stimulate, mobilize and motivate to solve assigned tasks with high level of responsibility and quality of results;

d. orienting in the research and analyzing the difficulties and problems encountered and overcoming the challenges generated by them.

In synthesis, the presented factors have an important contribution both to the formation of positive attitudes of students towards the use of supervision in their practical training as well as to their development in a valuable, cognitive, personality and professional aspect. In parallel, they have a long-term significance with their motivating influence for participation in supervision of future professional realization and for identifying with the community of social workers.

Data analysis of all items in the subscales reveals positive attitudes with an average of 89.58% of respondents' replies, which is the largest relative share of positive attitudes in the research tool (Table 7). Through the positions expressed, the students present their expectations and preferences for participation in supervision in their practical training, which is characterized by clear value orientation, focus on supporting and promoting the cognitive, personal and educational development contributing to the professional identification. At the highest extent this is expressed in item G3 and item G5 (Table 7), linked in content plan with the contribution of the supervision for the personal and professional development, research and analysis of problems encountered and handling the challenges posed by them. Negative attitudes in the subscale are stated at a small relative share of respondents' responses (on average, 1.62%), as in Item G5 such answers are not expressed (Table 7). Neutral position is presented on average at 8.80% of the answers, which is the second lowest relative share of this type of position in the subscales of the questionnaire. Neutral position presents an average 8.80% of the respondents' answers, which is the second lowest relative share of this type of position in the subscales of the questionnaire. The general relative share of answers related to negative attitudes and respondents' answers without expressing an opinion is 10.42%, and has the lowest value among subscales in the research tool (Table 7). Notwithstanding this result and the established sustained positive trend and minimal dynamics, our position is associated with the need for further work to stimulate active inclusion in supervision and optimal use of its possibilities as an important component of practical training.

**Table 7. Relative values of the respondents' answers – Subscale 7G.**

| Item | Relative values of the respondents' answers depending on their orientation –% | | |
|---|---|---|---|
| | non-affirmative answers | neutral answers | affirmative answers |
| Item G1 | 1.40 | 10.50 | 88.10 |
| Item G2 | 3.20 | 9.70 | 87.10 |
| Item G3 | 1.30 | 7.80 | 90.90 |
| Item G4 | 2.20 | 8.70 | 89.10 |
| Item G5 | 0 | 7.30 | 92.70 |
| Mean value | 1.62 | 8.80 | 89.58 |

8. Additional questions about the expected results from the use of supervision in the practical training of social work students

The research tool includes outside the subscales additional questions, through which students are given the possibility to present the own positions for the prognosticate result from the use of supervision in their social work practical training. Expressed attitudes to achieve a significant positive result in 76.89% of the respondents' are established. The relative share of responses with attitude of insignificant effect was 16.89%, and at 2.22% of the answers there is a doubt as to the achievement of a certain result, an extreme negative position is presented in 1.78% of the responses. Without opinion on the matter are 2.22% of the respondents' answers. The general relative share of answers without opinion, of answers with a doubt in achieving a certain result and of answers with expressed negative position, is of low value – a total 6.22%. The data analysis allows to indicate the presence of minimal dynamics and a clearly outlined positive trend in students' attitudes for the expected good results from the use of supervision in their teaching practice realized in different fields of social work. Parallel to the positive aspects presented in the quantitative and qualitative analysis, it is worth noting the need to continue the activity for development and effective functioning of the created educational and scientific-research environment for realization of supervision with social work students. The focus in this regard is the application of modern forms, methods and models of supervision in social work practical training, encouraging and motivating students to make optimal use of their possibilities for change, growth and development.

**Discussion and proposals for change and development**

The realization of supervision in the practical training of social work students in modern conditions is facing the challenge. In this regard, it is necessary to respond to the increasing importance of closer ties and the integration of theory and practice as a process of two-way transfer of values, knowledge skills and

experience in the context of the requirement for high quality education and social work education and provision of competent and qualified professionals for professional practice.

Practical training on social work is likely to be negative affected, if the supervision provided in its terms is characterized by deficits in certain aspects. They mainly relate to: organizational, methodological and resource provision; preparation and qualification of supervisors (university professor and mentor-social worker); informing and motivating students to make optimal use of the possibilities provided by supervision them to acquiring values, knowledge, skills and experience, integrating theory and practice, analysing difficulties and problems and overcoming them, correcting behaviour, achieving change and development. An important role in affirmation the importance of supervision for social work students in their practical training has partner relationships and support from staff of social services, departments or institutions and learning from his good experience of using the possibility of supervision to improve the quality and efficiency of the activity and professional development [23; 27].

Quantitative and qualitative analysis of the results of the study allows to present conclusions and proposals on creating conditions for positive attitudes towards students to participate in the supervision of social work practical training contributing to their development.

It is necessary to adopt and apply standards for supervision of the practical training of social work students with contributions in certain fields. Among them stand out: improving the quality and effectiveness of practical training; optimizing the learning process and assimilation of good practical experience; stimulating the students to use the possibilities of supervision in the process of practical training and in their future professional realization.

From substantially importance is creation of suitable organization and planning in the conduct of supervision, with a focus on the responsibility of both parties for preliminary preparation and participation; technological and methodological provision of the realized supervision, which contributes to building a positive working relationship.

A leading factor for the realization of quality and effective supervision in the practical training of social work students is the formation of environment and conditions, which encourages partnership, active and motivated learning of knowledge, skills and experience. Its important component is the integration of theory and practice, management of learning processes and the acquisition of practical experience based on the identification of achieved progress and development.

The education, qualification, competence, experience and professionalism of the supervisor are one of the important factors for formation a positive

working relationship and a style of interaction with certain characteristics. In their scope is includes: trust; focused on working process and respectable tone and atmosphere of communication; adequate use of the possibilities of the types of power relationships in the supervision process; implementing an individual and respecting personal and human dignity approach; manifestation of sensitivity to differences of cultural and other nature; non-discriminatory and non-oppressive behaviour and relationships.

From essential importance to implement supervision that contributes to quality and effective practical training in social work is to provide conditions for stimulating and developing skills to analyse problems and situations, maintaining effective feedback, developing reflexive and critical thinking in supervised students.

The supervision in social work practical training requires the development of professional thinking and the use of an analytical approach in interpreting the problems of the clients/users of social services and in the practicing. This provides a possibility of students to show sensitivity to their own and clients/users of social services thoughts, feelings, experiences and behaviours, and to stated readiness to take action for change and development.

The choice of a model of supervision in the practical training of social work students is determined depending on its capabilities to achieve high quality and efficiency and to contribute to the realization of the purposes of the learning practice in certain fields and of the education in the specialty. In this regard, the results of the research reveal presence of the highest relative share of expressed respondents' positive attitudes towards a model of supervision in the practical training on social work, which in the technological, organizational and methodological aspect includes the resources of the university professor of learning practice and of the mentor-social worker (model of co-supervision). Respondents' positions are that this model has the possibilities for answer in the highest extent of educational needs, and provision a broad foundation for support, acquiring of values, knowledge, skills and learning good practice. The model is characterized by the potential and resources to create conditions for value, and cognitive, professional and personal development; insurance of appropriate quality and efficiency of both the supervision process, as well as for realization of learning practice in different social work professional fields.

To compensate for the limitation of the research, we intend to study the opinions and attitudes of those who perform the function and role of supervisors to implementation of supervision in the practical training of students in social work.

**Conclusion**

Supervision is one of the significant components of the social work practical training, which underlie the formation and development professional competence, good practical experience and professional-personality qualities of students. Its function and role successfully to realized, when sustained positive attitudes towards the conduct of supervision are formed in the student. The supervision of practical training in social work should be based on a clear conceptual and technological justification and normative, organizational and methodologically relevant inclusion in Bachelor's and Master's social work education programs. Applying this approach has potential and possibilities to make a significant contribution to improve the quality and effectiveness of the practical and overall educational preparation of social work students. In the contemporary conditions in Bulgaria, there is an urgent need to step up the activity and the efforts of the academic and professional community of social workers to promote and affirmation the place, role and function of supervision in social work education and in the field of social activities. The presented research is part of the stated activities we hope to continue.

**References:**

1. Ajduković, M., & Cajvert, L. (2003). The Development of Social Work Supervision in Countries in Transition: Reflections from Croatia and Bosnia – Herzegovina. *Social Work in Europe, 10*(2), 11-22.

2. Ajdukovic, M., Cajvert, L., Judy, M., Knopf, W., Kuhn, H., Madi, K., & Voogd, M. (2015). ECVision. Supervision and Coaching in Europe: Concepts and Competences. Die Wiener Volkshochschulen GmbH, Vienna 2015. Retrieved from: www.anse.eu/ecvision/products

3. Australian Learning and Teaching Council (2010). *A guide to supervision in social work field education*. (Revised edition). Strawberry Hills, NSW: Australian Learning and Teaching Council.

4. Beddoe, E. (2000). The supervisory relationship. In L. Cooper, L., & L. Briggs (Eds.). *Fieldwork in the Human Services*. New South Wales: Allen and Unwin, 41-42.

5. Beddoe, L. (2015). Social work supervision for changing contexts. In L. Beddoe & J. Maidment (Eds.). *Supervision in social work: Contemporary issues*. London: Routledge, 82–95.

6. Bennett, C. S. (2008). Attachment-informed supervision for social work field education. *Clinical Social Work Journal, 36*(1), 97-107. http://dx.doi.org/10.1007/s10615-007-0135-z

7. Bennett, S. (2008). The interface of attachment, transference, and countertransference: Implications for the clinical supervisory relationship. *Smith College Studies in Social Work, 78*(2-3), 301-320. https://doi.org/10.1080/00377310802 114635

8. Bennett, S., Mohr, J., BrintzenhofeSzoc, K., & Saks, L. (2008). General and supervision-specific attachment styles: Relations to student perceptions of social work field supervisors. *Journal of Social Work Education, 44*(2), 75-94. https://doi.org/10.5175/JSWE.2008.200700016

9. Bennett, S., Mohr, J., Deal, K. H., & Hwang, J. (2013). Supervisor attachment, supervisory working alliance, and affect in social work field instruction. *Research on Social Work Practice, 23*(2), 199-209. http://dx.doi.org/10.1177/1049731512468492

10. Bogo, M. (2015). Field Education for Clinical Social Work Practice: Best Practices and Contemporary Challenges. Clinical Social Work Journal, 43(3), 317-324. DOI: 10.1007/s10615-015-0526-5

11. Brodie, I., & Williams, V. (2013). Lifting the lid: Perspectives on and activity within student supervision. *Social Work Education, 32*(4), 506–522. https://doi.org/10.1080/02615479.2012.678826

12. Cajvert, L., Branković, D., & Grbo, I. (2007). *Guide for postgraduate master studies, Supervision and Management in Social Work*. Banja Luka: Sarajevo.

13. Cleak, H., & Smith, D. (2012). Student satisfaction with models of field placement supervision. *Australian Social Work, 65*(2), 243-258. https://doi.org/10.1080/0312407X.2011.572981

14. Crockett, K. (2007). Counselling supervision and the production of professional selves. *Counselling and Psychotherapy Research, 7*(1), 19–25. https://doi.org/10.1080/14733140601140402

15. Davys, A. (2007). Active participation in supervision: A supervisee's guide. In D. Wepa (Ed.). *Clinical supervision in Aotearoa/New*

*Zealand: a health perspective*. Auckland, New Zealand: Pearson Education New Zealand.

16. Davys, A., & Beddoe, L. (2000). Supervision of students: a map and a model for the decade to come. *Social Work Education, 19* (5), 437-449. https://doi.org/10.1080/026154700435968

17. Davys, A., & Beddoe, L. (2009). The Reflective Learning Model: Supervision of Social Work Students. *Social Work Education, 28*(8), 919–933.
https://doi.org/10.1080/02615470902748662

18. Edmond, T., Megivern, D., Williams, C., Rochman, E., & Howard, M. (2006). Integrating evidence based practice and social work field education. *Journal of Social Work Education, 42*(2), 377-396. http://dx.doi.org/10.5175/JSWE.2006.200404115

19. Ellis, G. (2000). Reflective learning and supervision. In L. Cooper & L. Briggs (Eds.), *Fieldwork in the human services: Theory and practice for field educators, practice teachers and supervisors*. St. Leonards, Australia: Allen & Unwin.

20. Fortune, A. E., McCarthy, M., & Abramson, J. S. (2001). Student learning processes in field education: Relationship of learning activities to quality of field instruction, satisfaction, and performance among MSW students. *Journal of Social Work Education, 37*(1), 111-124. https://doi.org/10.1080/10437797.2001.10779040

21. Gould, N. & Baldwin, M. (Eds.) (2016). *Social Work, Critical Reflection and the Learning Organization*. Abingdon: Routledge.

22. Hees, G. van, & Geiβler Piltz, B. (Eds.). (2010). *Supervision meets Education. Supervision in the bachelor of Social Work in Europe*. Maastricht: CESRT Research Centre Social Integration, Faculty of Social Work, Zuyd University.

23. Holosko, M., & Skinner, J. (2015). A call for field coordination leadership to implement the signature pedagogy. *Journal of Human Behavior in the Social Environment, 25*(3), 275-283. https://doi:10.1080/10911359.2015.1005519

24. Jones, M. (2004). Supervision, learning and transformative practices. In N. Gould & M. Baldwin (Eds.). *Social work, critical reflection and the learning organization*. Aldershot, England: Ashgate.

25. Kadushin, A., & Harkness, D. (2002*). Supervision in Social Work*. New York: Columbia University Press.

26. Ledwith, M. (2007). Reclaiming the radical agenda: a critical approach to community development. *Concept, 17*(2), 8–12.

27. Marc, C., Makai-Dimeny, J., & Oşvat, C. (2014). The social work supervisor: Skills, roles, responsibilities. *Bulletin of the Transilvania University of Braşov, 7*(1), 221-230. Retrieved from http://webbut.unitbv.ro/BU2014/Series%20VII/BULETIN%20VII%20

28. McSweeney, F., & Williams, D. (2018) Social care students' learning in the practice placement in Ireland. *Social Work Education 37*(5), 581-596.
https://doi.org/10.1080/02615479.2018.1450374

29. Mehandzhiyska, G. (2008). *Supervision in social work. Support, guidance and development of helping professionals*. Sofia: East-West Publishing House.

30. Noble, C. (2011). Field education: supervision, curricula and teaching methods. In C. Noble & M. Henrickson (Eds.). *Social work field education and supervision across Asia Pacific*. Sydney, Australia: Sydney University Press, 3-22.

31. Nunev, S. (2014). Supervision in social work with students and models for its implementation. *HASSACC: Human and Social Sciences at the Common Conference, Section Social Science, Families, Work, Activism, Lifestyle Choices, 2*(1), 17-21.

32. Nunev, S. (2014). Supervision practical training problems with social work students. *Trakia Journal of Sciences, 12*(1), 461-466.

33. Nunev, S. (2015). Attitudes of the students towards the conduct of supervision in their practical training in social work. *Journal of Education, Psychology and Social Sciences, 3*(2). Retrieved from http://www.sci-pub.com/archive/?vid=1&aid=2&kid=10302-3

34. Nunev, S. (2015). Guide for Practical Training in Social Work. Ruse: Publishing house of University of Ruse "Angel Kanchev".

35. Nunev, S. (2015). Supervision with social work students – an important factor for the interaction between theory and practice. *Social Work Education in Europe: towards 2025*. Milan, Italy, 29th June – 2nd July 2015. European Association of Schools of Social Work. Abstract book, p. 350. Author index, p. 381.

36. Petrova-Dimitrova, N. (2014). Supervision in Social Work. Sofia: Veda Slovena-JG Publishing House.

37. Ross, E., & Ncube, M. (2018). Student Social Workers' Experiences of Supervision. *The Indian journal of social work, 79*(1), 1940-2013. https://doi.org/10.32444/IJSW.2018.79.1.31-54

38. Salmon, H. (1997). Evaluating and Assessing Community Work Students. In Briscoe, C., & Thomas, D (Eds.) *Community Work: Learning and Supervision*. National Institute Social Service Library, No. 32. London: George Allen and Unwin.

Clarivate Analytics *indexed*

39. Tierney, H. (2011). Mapping Fieldwork and Supervision Practice: Part 1. *Youth Studies Ireland, 6*(1), 18–33.

40. Vassos, S., Harms, L., & Rose, D. (2018). Supervision and social work students: relationships in a team-based rotation placement model. *Social Work Education, 37*(3), 328-341. https://doi.org/ 10.1080/02615479.2017.1406466

41. Webber, R. (1999). Is there a difference between bungee jumping and field supervision? Paper presented to the HERDSA Annual Conference. Melbourne, 12–15 July, 1999.

42. White, V., & Queener, J. (2003). Supervisor and Supervisee Attachments and Social Provisions Related to the Supervisory Working Alliance. *Counsellor Education & Supervision, 42*(3), 203–218. https://doi.org/10.1002/j.1556-6978. 2003.tb01812.x

QR – Issue                    QR – Article

**Sukhrob Sharipov**
Tashkent State University of Economics
MMV-01, Master's degree student
Department of Foreign Economic Activity

**Shavkat Begmatov**
Tashkent State University of Economics
MMRT-10, Master's degree student
Department of Marketing

**Saodat Sa'dullayeva**
Tashkent State University of Economics
TU-02, Bachelor's degree student
Faculty of International Tourism

**Nilufar Ismailova**
Tashkent State University of Economics
Head of Department of World Economy

# INFORMATION TECHNOLOGY OR INFORMATION SYSTEM: SOLUTION FOR EFFECTIVE BUSINESS COMMUNICATION IN OPERATION, MANAGEMENT AND DECISION MAKING

*Abstract: Today, managing a business without a computer is simply unthinkable. Computers have long been firmly established in such areas of management as accounting, warehouse management, assortment and procurement. However, modern business requires a much wider application of information system in enterprise management beforehand. The viability and development of information technology is due to the fact that modern business is extremely sensitive to errors in management. Improving experiences in operation, managing system and high level of decision making extremely important modern problems in global economy. Capital transfer, investment, transfer technology and idea, stable economic growth and human capital index can be raised in international standard while held reforms in these fields. In order to make any competent growth in any sectors decision making in conditions of uncertainty and risk, misunderstanding it is necessary to constantly keep under control various aspects of technical, financial and economic activity. Therefore modern management approach involves investing in both fields simultaneously.*

*Key words: information technology, information system, business, management, human capital, effectiveness.*
*Language: English*
*Citation: Sharipov, S., Begmatov, S., Sa'dullayeva, S., & Ismailova, N. (2019). Information technology or information system: solution for effective business communication in operation, management and decision making. ISJ Theoretical & Applied Science, 06 (74), 551-558.*
*Soi: http://s-o-i.org/1.1/TAS-06-74-66    Doi: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.66*

**Introduction**

At the age of science and technology widespread introduction of information technologies and systems are major factor of socio-economic development of any countries. The role of information and communication services in the development of economic prospective society for the living style in prosperity is predominantly actual. In modern emerging economies production, service and other sectors expansion and growing of division of labor and capital, the development of society and meeting the needs of the population are growing sharply.

Several years of operation of the system has led to many interesting insights, both in the use of

Clarivate
Analytics indexed

technical solutions and software. They can be useful both in its further development as well as in the creation of a new system from the ground up by other cities or regions that will want to use this type of tools to promote their values [1].

Since the application of computers in administrative information processing began in 1954 [Davis and Olson 19851, computers have become a key instrument in the development of organizations' formal information processing. The rapid development of information technology has helped to firmly establish the general attitude that information systems (ISS) are a powerful instrument for organizational problem solving. This opinion has been strengthened by popular theories of organizational behavior, which view organizations primarily as information-processing systems [March and Simon 1958; Galbraith 1977 or control systems [Landry and Le Moigne 1977; Verrijn-Stuart 1979] [2].

Whereas the above opinion is widely held in the IS community, it is not, however, in line with the evidence gained from studies on how computer technology changes organizational performance [Cron and Sobol 1983; Earl and Hopwood 1980; Ouchi 1978]. In many empirical investigations information systems have been found to be perceiving and understanding these problems. We classify major IS problems and explore a number of approaches and perspectives that have been suggested for resolving these problems. Each perspective is reflected in theories, models, and research results. In this way, we evaluate the success of various perspectives in coping with particular IS problems and indicate what sort of empirical support exists for such evaluations. The reader is expected to have a general exposure to the problems and issues of systems design as, for example, covered in standard textbooks on information systems [Davis and Olson 1985] [3].

The concept of information has not been defined unambiguously yet [4]. The interpretation of this word cause a lot of trouble in terminology and agreement between professionals in this area can be reduced to saying that there is no strict, unambiguous and comprehensive definition of information [5]. The researchers often abandon analyzing the definition of the term, and stay with intuitive, common understanding, or supplementing it with auxiliary terms [6] N. Wiener, as the father of cybernetics, introducing the concept of information, stated "(...) it is the name of the contents of the external world [7]. In turn, R. Ashby, contented himself with saying that "(...) information is a transfer of diversity" [8], and S. Beer, author of one of the first work on applications of cybernetics in management, although in his work often refers to the concept of information - did not specify it [9]. Polish Standard PN-71-T-01016 adopted the term, according to which "information is the meaning (content) used in the relevant conventions assigned to data" [10] and E. Niedzielska cites French saying that: "With no matter, there is nothing, without power all is still, with no information there is chaos.

"In any case, it is true to say that, the information is a factor increasing the knowledge of reality. The aim should be to achieve full knowledge on the topic, which in the case of huge complexity of the problem is in fact impossible [11]. Information theory states that lack of knowledge is the greater, the greater the complexity and diversity of considered fragments of reality. In general, a gap between the full knowledge and the knowledge generally available is formed [12,13]. The superior goal of information is to provide news from news source to the object of their destination. Forwarding a message consists of sending them in space from one place to another or moving it in time (remembering, recording) [14,15].

**Table 1. Value of Information Factors.**

| Correctness | Accessibility | Timeliness |
|---|---|---|
| **Precision:** What is expected is what is collected. | **Security:** Information available to users who need it. | **Response time:** Information retrieval from request to delivery is reasonable time. |
| **Accuracy:** What is collected is what is entered. | **On-line:** Information can be accessed from user's workstation. | **Up-to-date:** Information is current. |
| **Bug-free:** What is entered is what is reported. | **Barrier-free:** Information in not requested through another. | **Work flow:** Data entry to information output is efficient. |
| **Utility:** What is entered can be used for information. | **Equipment:** Appropriate hardware for information processing for user. | **Reliable:** Information is available when needed. |

*Source: Valerie Bryan, Information Technology Management, Florida Atlantic University, p 312.*

The concept of an information system is interpreted differently, depending on the context. A fairly broad understanding of the information system implies that its integral components are data, hardware and software, as well as personnel and organizational measures. The concept of "information system" is widely interpreted by the information system the totality of information contained in databases and information technologies and technical means ensuring its processing.

## RESULTS

In an organization, an information system is considered as software that implements an organization's business strategy. The goal is to create and deploy a unified corporate information system that satisfies the information needs of all employees, services and departments of the organization. However, in practice, the creation of such a comprehensive information system is too difficult or even impossible, as a result of which the enterprise usually operates several different systems that solve particular groups of tasks: production management, financial and economic activities, electronic document management, etc.

**Information systems are also classified:**

o Functional purpose: production, commercial, financial, marketing;

o Objects of management: information systems for computer-aided design, process control, enterprise management (office, firm, corporation, organization);

o Nature of the use of the resulting information: information retrieval, designed to collect, store and issue information at the request of the user; information advisors, offering the user specific recommendations for decision-making (decision support systems); information managers, whose result information directly participates in the formation of control actions.

The information management concept Information management has been defined as the organization-wide capability of creating, maintaining, retrieving and making immediately available the right information, in the right place, at the right time, in hands of the right people, at the lowest cost, in the best media, for use in decision making (Langemo, 1980).

In the same vein, Best (1988) defines information management as the economic, efficient and effective co-ordination of the production, control, storage and retrieval and dissemination of information from external and internal sources, in order to improve the performance of the organization.

Management information system (MIS), are regarded as valuable organizational resources. Simply put, an information system is a system for accepting data/information as a raw material and through one or more transmutation processes, generating information as a product.

o perception – initial entry of data whether captured or generated, into the organization;

o recording – physical capture of data;

o processing – transformation according to the "specific" needs of the organization;

o transmission – the flows which occur in an information system;

o storage – presupposes some expected future use;

o retrieval – search for recorded data;

o presentation – reporting, communication; and

o decision making – a controversial inclusion, except to the extent that the information system engages in decision making that concerns itself [16]

The attributes indicated above can be considered as major attributes or essential elements for developing an information system concept in an organizational context. In order to understand the information system concept further, Salton (1975) highlighted the most important computer-based information systems as follows:

**Information Types**
o Personal information;
o Operational information;
o Administrative information;

**Departmental information**
o information retrieval system (IR);
o question-answering system;
o database system (DBS);
o management information system (MIS);
o decision support system (DSS). [17]
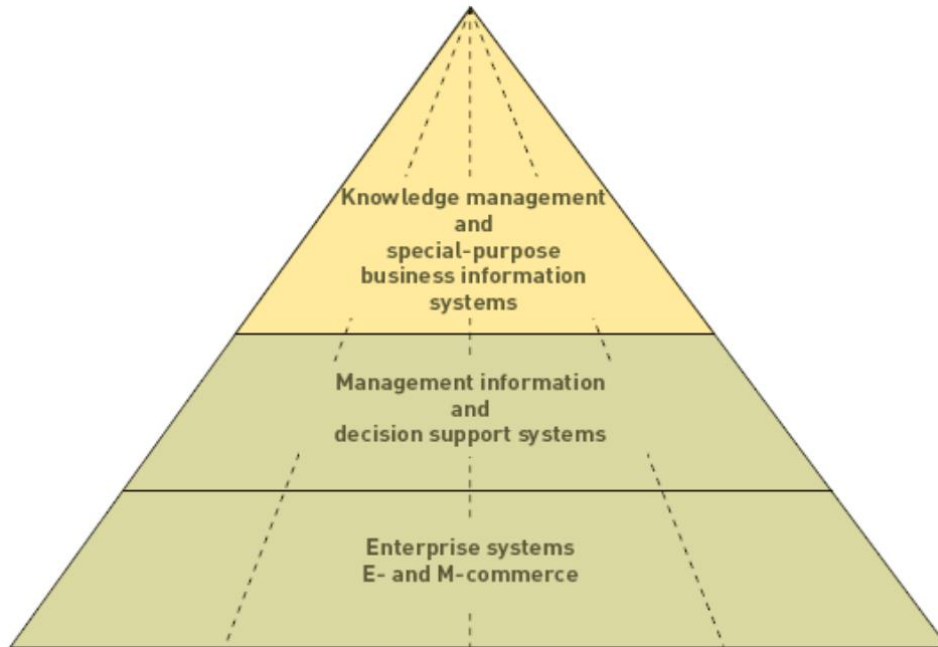
**Figure 1. Business Information Systems** [18]

**Source:** Fundamentals of Information  Systems, Fifth Edition, Chapter 1 An Introduction to Information Systems in Organizations, Course technology, Cengage learning, P 22.

## DISCUSSION

**Information Systems and Information Technologies as a Strategic Weapon**

Some essential capabilities such as business system thinking, architecture planning, and informed buying are the core requirement to address these challenges. These capabilities along with technical, business and interpersonal skills are necessary for a company to sustain a competitive advantage by means of its IT.

IT has changed the competitive environment in six basic ways:

o Products and services enhanced with computer capability,

o Cost displacement,

o Enhanced decision support,

o Revision of the mission or objectives of the enterprise,

o Business interrelationships, and

o Creation of new products and services [19]

**Problems with MIS**

There is abundant evidence from numerous surveys conducted in developed countries, particularly in the UK and USA, that existing MIS, often using advanced computer equipment, have had relatively little success in providing management with the information it needs. Reasons discovered include the following:

o lack of management involvement with the design of the MIS;

o narrow or inappropriate emphasis of the computer system;

o undue concentration on low-level data processing applications particularly in the accounting area;

o poor appreciation by information specialists of management's true information requirements and of organizational problems; and

o lack of top management support. [20]
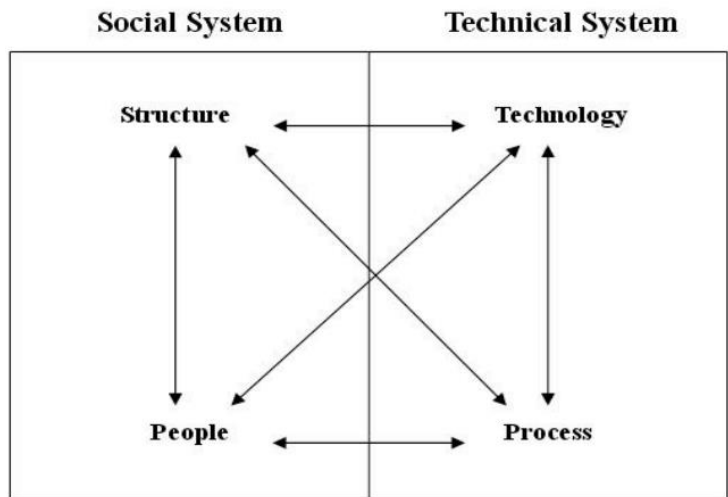
**Figure 1. The four components of an information system**

An information system is defined as a socio-technical system comprised of two sub-systems: a technical sub-system and a social sub-system. The technical sub-system encompasses the technology and process components, while the social sub-system encompasses the people and structure components. The critical insight from the examples introduced earlier is that for an information system to perform and achieve its objectives, all four components have to be present and working together. We now define and describe the four components of a modern information system [21]

Consciously or unconsciously promoting a falsely positive image of IT:

o all of the hardware and software and training companies that survive through the trade in IT;

o all of the IT consultants whose jobs depend on IT;

o all of the academics who work in computer science or information systems departments;

o all of the journalists and other workers who produce IT magazines;

o all of the staff within organizational IT or DP departments whose jobs depend on IT;

o all of the managers who want a 'quick fix' for their problems and/or who want themselves or their organizations to appear up-to-date and proficient with the latest technologies. [22]
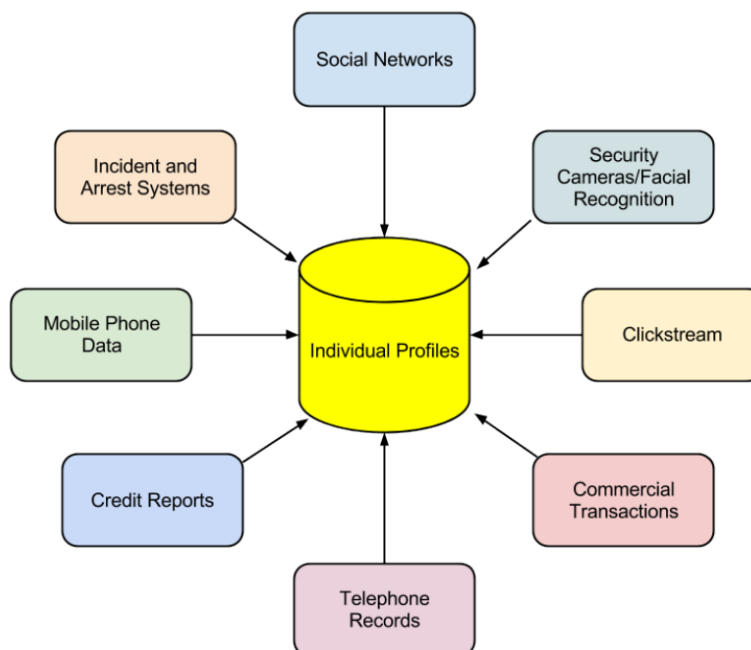


**Figure 2. Information system structure [23]**
**Source:** David T. Bourgeois, PhD, Information Systems for Business and Beyond, Saylor P 146, URL: http://www.saylor.org/courses/bus20

The structure of information systems is a collection of its individual parts, called subsystems. Functional subsystems implement and maintain models, methods and algorithms for obtaining control information. The composition of functional subsystems is very diverse and depends on the subject area of use of the information system, the specifics of the economic activity of the object, and management.

The composition of providing subsystems usually includes:

o  information support - methods and means of building the information base of the system, including information classification and coding systems, unified

document systems, information flow diagrams, principles and methods for creating databases;

o  technical support - a set of technical means involved in the technological process of converting information in the system. First of all, these are computers, peripheral equipment, equipment and data transmission channels;

o  the software includes a set of regular use programs needed to solve functional problems, and programs that make the most efficient use of computing equipment, mathematical software ;

o  linguistic support - a set of language tools used in the system in order to improve the quality of its development.
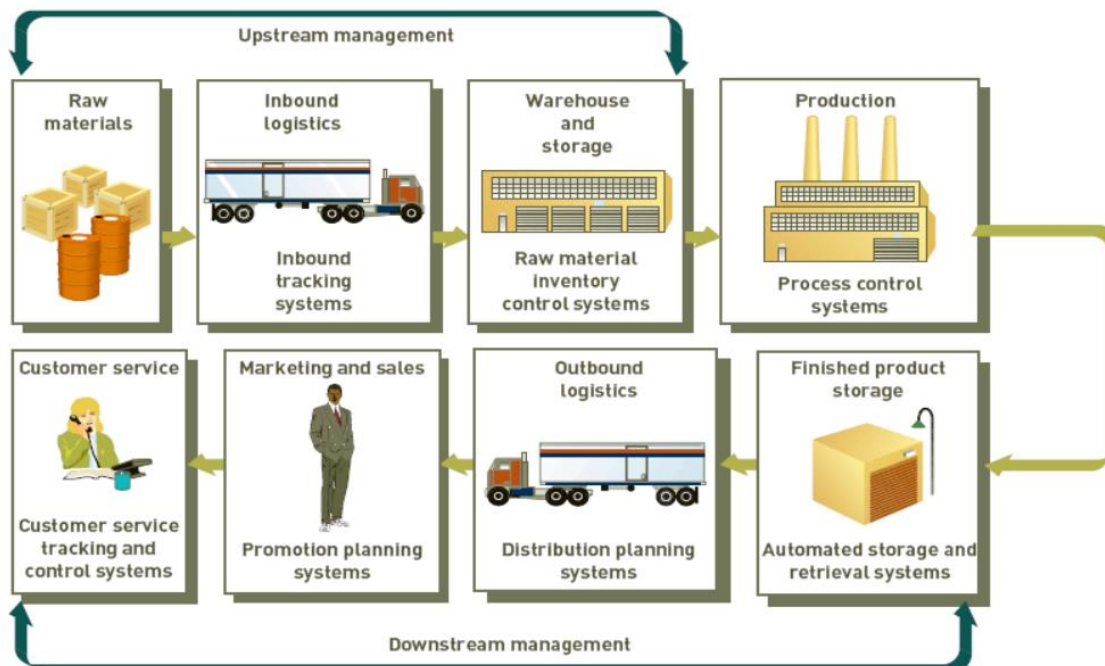


**Figure 3. Organizations and Information Systems [24]**

**Source:** Fundamentals of Information Systems, Fifth Edition, Chapter 1 An Introduction to Information Systems in Organizations, Course technology, Cengage learning, P 43.

Organizational subsystems essentially as figure 3 also refer to supporting subsystems, but are primarily aimed at ensuring the effective work of the staff, and therefore they can be allocated separately. These include:

o  staffing - the composition of the specialists involved in the creation and operation of the system, staffing and functional responsibilities;

o  ergonomic support - a set of methods and tools used in the development and operation of an information system, creating optimal conditions for the activities of staff, for the rapid development of the system;

o  legal support - a set of legal norms governing the creation and operation of an information system, the procedure for obtaining, converting and using information;

o  organizational support - a set of solutions that regulate the processes of creation and functioning of both the system as a whole and its staff. [25]

**Information Systems. Structure and classification of information systems,**

In this case, the end user is provided with a number of analytical and navigation functions:

o  calculations and calculations for several dimensions, hierarchies and / or members;

o  trend analysis;

o  selection of subsets of data for viewing on the screen;

o  data deepening, to view information at a more detailed level;

o  transition to the detailed data underlying the analysis;

o rotation of the table of displayed data. [26]

**Comparison of Information System and Information Technology**

Information system and information technology are similar in many ways but at the same time they are different. Following are some aspects about information system as well as information technology.

o **Origin:** Information systems have been in existence since pre-mechanical era in form of books, drawings, etc. However, the origin of information technology is mostly associated with invention of computers.

o **Development:** Information systems have undergone great deal of evolution, i.e. from manual record keeping to the current cloud storage system. Similarly, information technology is seeing constant changes with evermore faster processor and constantly shrinking size of storage devices.

o **Business Application:** Businesses have been using information systems for example in form of manual books of accounts to modern TALLY. The mode of communication has also gone under big change, for example, from a letter to email. Information technology has helped drive efficiency across organization with improved productivity and precision manufacturing [27].

**Future of Information System and Information Technology**

Information technology has shown exponential growth in the last decade, leading to more sophisticated information systems. Today's information technology has tremendously improved quality of life. Modern medicine has benefited the most with better information system using the latest information technology. Information systems have been known to mankind in one form or the other as a resource for decision making. However, with the advent of information technology information systems have become sophisticated, and their usage proliferated across all walks of life. Information technology has helped managed large amount of data into useful and valuable information. [28]

When it comes to available careers in the field of information systems, the opportunities are plentiful. Actuarial sciences, analytics and programming, communications, computer security and auditing are a few common fields.

**CONCLUSION**

IT is a subset of IS. The fields are certainly related, but those interested in a career in technology should research and understand the difference in the two fields. Careers in each area require separate degrees and preparation. While both deal with computers the majority of the time, they have very distinct paths that demand separate education and training [29]. If we analyze current outcomes and findings we can to conclusion that Information system cannot be effective results without information technology and controversy the same. It means in science and technology stage of integration effective business communication can be obtain best results both of the modern achievements of this sectors. Under innovation and transfer innovative technology we will expect more effective standards and reforms in IT and IS sectors.

**References:**

1. Biadacz, R., & Biadacz, M. (2015). *The use of modern information technology in tourist information systems on the example of city of Czestochowa*. International Conference on Communication, Management and Information Technology (ICCMIT 2015), Procedia Computer Science 65 ( 2015 ) 1105 – 1113. Czestochowa University of Technology, Dabrowskiego 69, 42-201 Czestochowa, Poland.

2. (1977). March and Simon 1958; Galbraith 19771, Landry and Le Moigne 1977; Verrijn-Stuart.

3. (1980). Cron and Sobol 1983; Earl and Hopwood 1980; Ouchi 1978, Davis and Olson 19851.

4. Flakiewicz, W. (2002). *Management information systems.* (p.17). Warsaw: Conditions, technologies, types, Publishing House C.H. Beck.

5. Rojek, T. (2001). Cognitive value of information as a strategic resource in an integrated business management system, Information resources management in the enterprise to future enterprise, ed. by Borowiecki R., Kwieciński M. (Eds.). (p.174). Warsaw: Scientific Technical Publishing House.

6. Sopińska, A. (2002). *Information in strategic management*. [in:] Strategic information system-a key factor for business success, Documents of the Scientific Symposium. (p.126). Radom: Publishing House of the Radom Academy of Economics.

Clarivate Analytics indexed

7. Wiener, N. (1999). *Cibernetics*, PWN Warsaw 1968; cit. after Kisielnicki J., Sroka H., Business information systems. (p.13). Warsaw: Information Technology for Management, Publishing House Placet.

8. Ashby, W. R. (1961). *Introduction to cybernetics*. WNT; cit. after Kisielnicki J., Sroka H. (p.13). Warsaw Business information systems.

9. Beer, S. (2002). *Cibernetics and management*. PWN Warsaw 1966; cit. after Sopińska A., Information in strategic management, Strategic information system- a key factor for business success, Documents of the Scientific Symposium. (p.126). Radom: Publishing House of the Radom Academy of Economics.

10. Brzezin, W. (1998). *Generall Theory of Accounting*. (p.54). Czestochowa: Czestochowa University of Technology Press.

11. (1998). *Economic Informatics.* ed. by Niedzielska E. (Eds.). (p.14). Wroclaw: Publishing House of the Wroclaw University of Economics.

12. Kieżun, W. (1997). *Efficient management of the organization.* (p.350). Warsaw: Warsaw School of Economics – Publishing.

13. Jelonek, D. (2000) *The analysis of the information needs of the business environment on the example of Czestochowa industrial construction company „Przemysłówka” S.A.* Problems of information systems in business management, Scientific Papers of the MF of the Czestochowa University of Technology, a series of Informatics, Statistics and Econometrics, No. 1, Czestochowa, p. 75.

14. Kiełtyka, L. (2001). *How to understand the information technology.* Technology of information, Scientific Papers of the MF of the Czestochowa University of Technology, a series Informatics In Management, No 2, Częstochowa 2001, p. 9.

15. Milian, L. (2008). *Causing base of information and its importance in shaping the culture of the future society.* From the factory hand to the Internet surfer. Towards the information society, ed. by Siwik A., Haber L. (Eds.). Cracow: AGH University of science and technology Press.

16. Adeoti-Adekeye, W. B. (n.d.). *The importance of management information systems*. (p.321). Ilorin, Nigeria: Library Department, University of Ilorin.

17. (n.d.). Retrieved 2019, from http://www.vra.com/kmportal/online_resources/mis/The%20importance%20of%20MIS

18. (n.d.). Fundamentals of Information Systems, Fifth Edition, Chapter 1 An Introduction to Information Systems in Organizations, Course technology, Cengage learning, p.22.

19. Bobb, L. M., & Harris, P. (n.d.). *Information Technology and Information Systems: Its Use as a Competitive and Strategic Weapon.* USA: School of Management, New York Institute of Technology.

20. (n.d.). Retrieved 2019, from https://www.emeraldinsight.com/doi/full/10.1108/00242539710178452?fullSc

21. Watson, R. T. (2007). Information Systems, University of Georgia, 2007 by the Global Text Project, p.18.

22. Heeks, R. (1998). *Information Systems Without Information Technology*. IDPM. UK: University of Manchester.

23. Bourgeois, D. T. (n.d.). Ph.D, *Information Systems for Business and Beyond, Saylor.* (p.146). Retrieved 2019, from http://www.saylor.org/courses/bus20

24. (n.d.). Fundamentals of Information Systems, Fifth Edition, Chapter 1 An Introduction to Information Systems in Organizations, Course technology, Cengage learning, p.43.

25. (n.d.). Retrieved 2019, from https://www.yaklass.ru/materiali?chtid=455&mode=cht

26. Chudinov, I. L., & Osipova, V. V. (n.d.). *Information Systems and Technologies* "National Research Tomsk Polytechnical University, p. 81.

27. (n.d.). Retrieved 2019, from https://www.managementstudyguide.com/information-system-and-information-technology.htm

28. (2019). MSG management Guide, Information Systems vs Information Technology.

29. (n.d.). Program Resources, Information Systems vs. Information Technology. Retrieved 2019, from https://online.csp.edu/program-resources/information-systems-vs-information-technology

30. (n.d.). Retrieved 2019, from https://www.aiuniv.edu/blog/2015/december/information-systems-vs-information-technology

31. (n.d.). Retrieved 2019, from https://www.floridatechonline.com/blog/information-technology/information-systems-vs-information-technology/

**A.S. Seitkaziev**
Taraz State University. M.H. Dulati
Doctor of Technical Sciences, Professor
+87026151279
adeubai@mail.ru

**S.Zh. Salybaev**
Taraz State University. M.H. Dulati
Candidate of Technical Sciences

**R. Baisalbayeva**
Taraz State University. M.H. Dulati
Master student

# DETERMINATION OF EVAPORATION FROM THE SURFACE OF GROUND WATER DEPENDING ON THE MECHANICAL COMPOSITION OF A GROUND SOIL

*Abstract*: *Salt reserves from evaporation from the surface of groundwater are determined, and the water-physical properties of the studied area are established. a certain salt content of the soil corresponds to a certain salinity of groundwater. For various groups of soils, water-lifting capacity is determined.*
*Key words*: *groundwater, hydrochemistry, saline soils, evaporation, soil moisture.*
*Language*: *Russian*
*Citation*: Seitkaziev, A. S., Salybaev, S. Z., & Baisalbayeva, R. (2019). Determination of evaporation from the surface of ground water depending on the mechanical composition of a ground soil. *ISJ Theoretical & Applied Science, 06 (74)*, 559-562.
*Soi*: http://s-o-i.org/1.1/TAS-06-74-67    *Doi*: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.67

## ОПРЕДЕЛЕНИЯ ИСПАРЕНИЯ С ПОВЕРХНОСТИ ГРУНТОВЫХ ВОД В ЗАВИСИМОСТИ ОТ МЕХАНИЧЕСКОГО СОСТАВА ПОЧВОГРУНТА

*Аннотация*: *Определены запасс солей от испарения с поверхности грунтовых вод, а также установлены водно-физического свойства исследуемого участка. определенному солесодержанию почвогрунтов соответствует определенная минерализации грунтовых вод. Для различных групп почв определены водоподъемная способность.*
*Ключевые слова*: *грунтовые воды, гидрохимия, засоленные почвы, испарения, влажность почвы.*

**Introduction**

UDC 631.42

Решение ряда важных экологических и мелиоративных проблем связано с необходимостью надежного количественного прогноза продуктивности растений при различных климатических условиях и режимах питания. Основными такими проблемами являются следующее: обоснования решений по рациональному использованию ресурсов биосферы, мероприятии по охране окружающей среды, разработка водосберегающей технологии засоленных и орошаемых земель, совершенствования обоснновании систем мелиорации земель и др.

Целью создания условий для улучшения почвообразовательного процесса обеспечивающих возможность расширенного воспроизводства плодородия почв в процессе геоэкосистеме. Для этого необходимо сохранять автоморфный режим почвообразования,

Clarivate
Analytics indexed

грунтовые воды поддерживать на достаточно большой глубине, чтобы предупредить возможность вторичного засоления почв при минимальных затратах поливной воды.

В настоящее время в мелиорации почв есть некоторые проблемные вопросы ,которые являются не полностью решенными и требуют специального исследования для уточнения их значений.Они следующие :определение значений испарения с поверхности грунтовых вод; прогноз солевого режима в межполивной период; определение значений критического залегания уровня грунтовых вод и другие[1-2].

Испарение с поверхности грунтовых вод(ИПГВ) является самым важным фактором засоления почв. Поэтому количественное определение ее значений для почвогрунтов ,имеющие разные водно-физические свойства имеет большое научное и практическое значение.

**Materials and Methods**

Для изучения испарение с поверхности грунтовых вод на каждом опытном участке выделено 5 площадок, лищенных растительности. Площадки отличались друг от друга по солесодержанию почвогрунтов и минерализации грунтовых вод. Проведенные многолетние исследования показывают, что определенному солесодержанию почвогрунтов соответствует определенная минерализации грунтовых вод. Так, например, если среднее солесодержание в верхнем метровом слое почвогрунтов составляет не более 0,30% и на трехметровой глубине не превышает 0,6%(по плотному остатку), то в таких местах минерализация грунтовых вод колеблется в пределах от 2 до 5 г/л .

Испарение с поверхности грунтовых вод определялось по методу водного баланса. Для этой цели также использовались материалы полевых лизиметрических определений[1]. Полученные данные внесены в таблицу 1 и изображены на рисунке1. Из таблицы и рисунки видно ,что наиболее высокие значения испарение с поверхности грунтовых вод наблюдается, когда уровень грунтовых вод залегает на глубине выше одного метра от поверхности земли, а наименьшие значения на глубине около 2.0- для 1гр. и около 3. 0-для остальных групп почв.

Обработка материалов , проведенных в таблице 1 показала , что связь испарения грунтовых вод с глубиной залегания их уровня имеет экспансиональный характер и подчиняется следущему уравнению[1-3 ]:

$$E_{ИПГВ} = E_0 \left( 1 - \frac{h}{H_{тск}} \right) e^{-nh}, \qquad (1)$$

где $E_0$-испаряемость, м;h- глубина залегания грунтовых вод, м; $H_{впс}$-водоподьемная способность почво грунтов, м; е-основание натуральных логарифмов; n-параметр, учитывающий водно-физические свойства почвогрунтов.

Испаряемость поверхность почвы в условиях Средней Азии определяется по следующим формулам[ 2-5]:

$$E_0 = 0,0018(25+t)^2.(100-a), \qquad (2)$$

где t-температура воздуха, $^0C$; a-относстельная влажность воздуха, % .

Величины водоподьемной спсобности определены в зависимости от механического состава почвогрунтов. Для этой цели использованы лиературные и интернетные данные (Ковда В.А, Качинский А.А., Мамедов А. и др.). Выявлено, что для 1-5 групп почв водоподьемная способность составляет соотвественно: 2;3;3.5;5; 6.

Параметр, учитывающий водно-физические свойства почвогрунтов увеличивается от почвы, имеющей легкий механический состав к тяжелым, и по пяти группам почв составляет соотвественно: 0.7;0.9;1.1;1.3;1.5.

Количество поднявщихся солей на верхние слои почв за счет грунтовых вод ($C_{гр}$) можно определить следующей формулой[1,6-9]:

$$C_{гр} = E_{ипгв} . h.d.M/10^3, \qquad (3)$$

где $E_{ипгв}$- испарение с поверхности грунтовых вод, $м^3/га$; М-минерализация грунтовых вод, $т/м^3$; d-плотность почвы, $т/м^3$; h-слой почвогрунтов, в котором идет накопление солей, м.

Результаты исследования внесены в таблицу и график 1.

**Таблица 1 – Зависимость содержания солей** $\left( \frac{m/га}{\%} \right)$ **от испарения с поверхности, глубины залегания**

**грунтовых вод и их минерализации**

| Минерализация грунтовых вод, М, г/л | Исходное засоление с 0-1,0 м | | Глубина грунтовых вод, м | | | | | | | | Примечания |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | $S_0$, % | т/га | 0,50 | 0,75 | 1,0 | 1,5 | 2,0 | 3,0 | 3,5 | 4,0 | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |

| Средний суглинок | | | Испарение с поверхности грунтовых вод, м³ | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1527 | 1083 | 740 | 337 | 147 | 13 | 0 | - | |
| 3 | 0,25 | 35 | 4,58 | 3,25 | 2,22 | 1,01 | 0,44 | 0,04 | 0 | - | |
| | | | 0,54 | 0,38 | 0,26 | 0,12 | 0,05 | 0,005 | 0 | - | |
| 6 | 0,45 | 64 | 9,16 | 6,49 | 4,44 | 2,02 | 0,88 | 0,08 | 0 | - | $\gamma=1{,}42$ т/м³; |
| | | | 0,97 | 0,69 | 0,47 | 0,21 | 0,09 | 0,009 | 0 | - | $n=1{,}1$; |
| 8 | 0,60 | 85 | 12,21 | 8,66 | 5,92 | 2,69 | 1,17 | 0,1 | 0 | - | $H_{впс}=3{,}5$ м. |
| | | | 1,3 | 0,92 | 0,63 | 0,29 | 0,12 | 0,012 | 0 | - | |
| 12 | 1,2 | 170 | 18,32 | 12,99 | 8,88 | 4,04 | 1,76 | 0,15 | 0 | - | |
| | | | 2,6 | 1,85 | 1,26 | 0,57 | 0,25 | 0,024 | 0 | - | |
| 15 | 1,5 | 213 | 22,9 | 16,24 | 11,1 | 5,05 | 2,2 | 0,19 | 0 | - | |
| | | | 3,25 | 2,31 | 1,57 | 0,72 | 0,31 | 0,03 | 0 | - | |
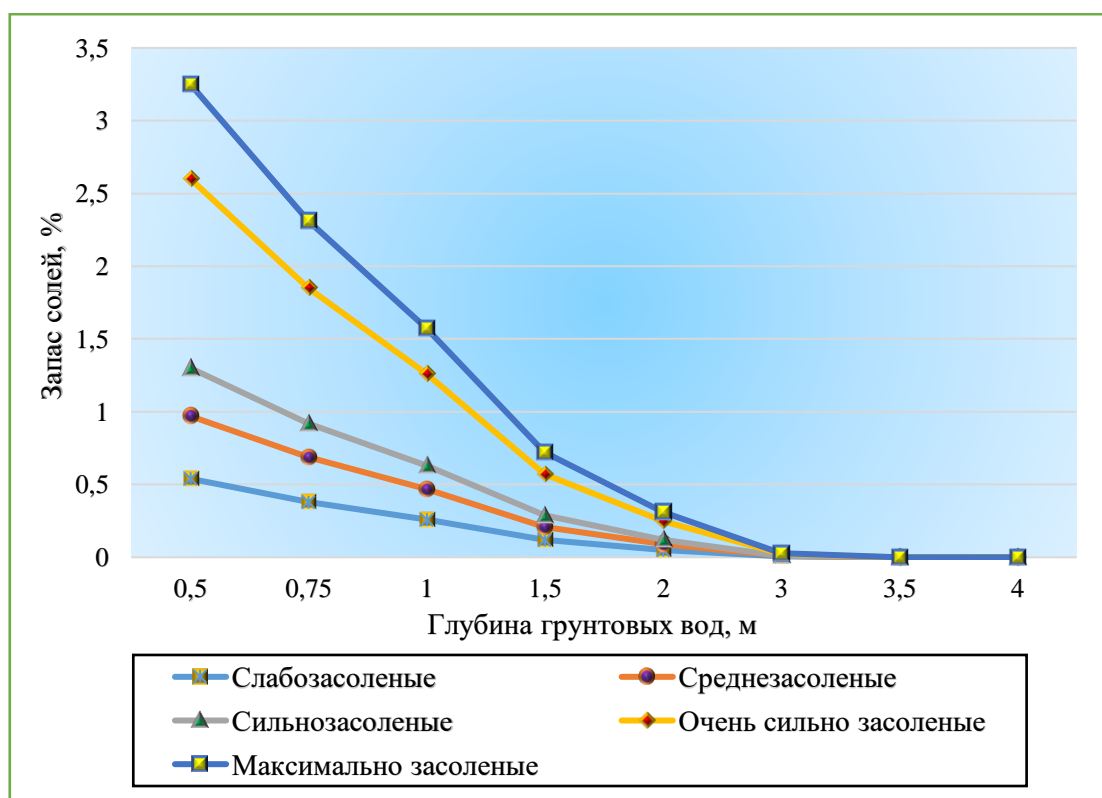


**График 1. Зависимость содержания солей от испарения с поверхности и глубине залегания грунтовых вод.**

### Conclusion

Основывая многолетник исследования сероземно-луговых засоленных почв, а именно, анализируя почвенно – экологические и мелиоративные состояния изучаемого массива орошения пришли к следующему выводу:

- на основе изученных данных по почвенно-климатическим условиям для сероземно-луговых карбонатных почв, а также недостаточной влажности необходимо регулирование водного режима корнеобитаемого слоя.

- проведена экологическая оценка методов улучшения засоленных земель с учетом тепло- и влагообеспеченности на основе изучения водно-физического режима и по степени засоленности с различным технологиям полива, которое дают возможность для определения уровень экологической коэффициент опасности.

Значимость исследований заключается в том, что в зависимости от глубины залегания грунтовых вод определены запасы солей в почве и объем испарения с поверхности грунтовых вод. При этом учитывались водно-физические свойства группы почв и, соответственно, содержание солей и минерализация грунтовых вод.

**References:**

1. Aver'yanov, S. F. (1978). *Bor'ba s zasoleniem oroshaemykh zemel'*. (p.278). Moscow.
2. Seytkaziev, A. S. (2000). Opredelenie promyvnykh normy. *Nauki i obrazovanie Yuzhnogo-Kazakhstana, №21,* pp.20-22.
3. Seytkaziev, A. S. (2003). *Obosnovanie vodno-solevogo rezhima zasolennykh pochv geoekosistem Yugo-Vostoko Kazakhstana.* Avtoreferat dokt.tekh.nauk. Taraz, p.50.
4. Seytkaziev, A. S., & Bayzakova, A. E. (2005). Metod opredeleniya promyvnykh norm zasolennykh pochv. *Poisk, №3,* pp.199-202.
5. Seytkaziev, A. S. (2006). Matematicheskaya model' promyvki zasolennykh zemel' geoekosistem (na kazakhskom yazyke). *Vestnik TarGU im. M.Kh.Dulati, №3 (23)*, pp.64-68
6. Seytkaziev, A. S., & Bayzakova, A. E. (2003). Rezhim gruntovykh vod, priurochennykh k

basseynam rek. *Voprosy melioratsii № 5-6.* Moskva, pp.93-98.
7. Seytkaziev, A. S., Salybaev, S. Z., Bayzakova, A. E., & Muzbaeva, K. M. (2011). *Ekologicheskaya otsenka produktivnosti uluchsheniya zasolennykh zemel' v pustynnykh zonakh respubliki Kazakhstan.* (p.274). Taraz.
8. Seytkaziev, A. S., Muzbaeva, K. M., & Salybaev, S. Z. (2011). *Modelirovanie vodno-solevogo i teplovogo rezhimov degradirovennykh pochv.* (p.356). Taraz.
9. Seytkaziev, A. S., & Budantsev, K. L. (2002). *Modelirovanie vodno-solevogo rezhima pochv na zasolennykh zemlyakh.* Mezhvuzovskiy sb.nauchn.trudov po gidrotekhnicheskomu spetsial'nomu stroitel'stvu. (pp.72-79). Moscow.

Clarivate Analytics *indexed*

**Yusufbek Sobirjonovich Jakhongirov**
Andizhan State University
Senior teacher of the chair of Theory of civil society,
Republic of Uzbekistan

SECTION 13. Geography. History. Oceanology. Meteorology.

# THE ROLE OF ISLAMIC EDUCATION INSTITUTIONS IN ENSURING SOCIAL STABILITY

*Abstract*: *The article investigates the progress of large-scale performs in the field of religious education in the Republic of Uzbekistan during the years of Independence by the helping main and the internet sources.*
*Key words*: *religion, Islam, tolerance, freedom of conscience, religious confession, mosque, madrasah.*
*Language*: *English*
*Citation*: Jakhongirov, Y. S. (2019). The role of Islamic education institutions in ensuring social stability. *ISJ Theoretical & Applied Science, 06 (74), 563-565.*
*Soi*: http://s-o-i.org/1.1/TAS-06-74-68     *Doi*: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.68

**Introduction.**

It is well known from the history that the development and development of the system of religious education in our country has a centuries-old history. The word madrasah (Arabic - a place of study, a classroom) is a medium-sized religious school in Islam, and it has prepared scholars, schoolchildren and madrassahs and religious leaders. Madrassahs, having been higher educational institutions long since, took an important place in moral educational life of the Uzbek people. The history of madrassahs which were scientific and educational institutions in the East, traces back several centuries. According to the fact by Narshahiy, a historian, the first madrassah in Mavarannahr was Farayj built in Bukhara at the beginning of X century. In these educational institutions, along with religious knowledge, special attention is paid to secular subjects. These topics were further explored after the independence of Uzbekistan [1, p.4]. It is a fact that the great scientists who contributed to the development of worldly and secular progress from these fields of science to the world's development. In the years of independence, we have been strengthening the spiritual and enlightenment fundamentals of society, introducing the basic concepts and principles of national independence, increasing the sense of responsibility and responsibility for the fate and future of our compatriots, especially the younger generation, in order to strengthen the ideological immunity against the verses, a great deal of attention has been paid to educational and educational issues, as well as

significant work. Today, the challenge of combating globalism with a global educational system, while the globalization processes are increasingly increasing in the face of new threats and challenges to peace and stability. In such circumstances, the spread of information about the youth of our republic in different places, the information disseminated on our ancient Islamic religion and sacred values, spreading on the Internet and social networks, leads to such situations as the false interpretation of the sacred Islamic religion's true humanistic essence is going on [2].

**Research methods.**

The Qoran and hadises, muslim rights and the attitude towards the religion has a great importance in the period of the refreshment of the society. The law "on free consciousness and religious establishments"[3, p.33], adopted in 1991, determined the basis of the activity of the religious establishments and the relation of them with the state establishments, as well. In the law it has been determined that the state bodies don't interfere with the activity of the religious establishments and religious ceremonies and rights are not limited. In article 31 of our Constitution free consciousness is guaranteed. Everyone has a right to believe to any religion on not to believe according to it. And absorbing religious points is prohibited as well. On the eve of Independence, in 1989, the Uzbek language became the state language and, it was beginning of the national awakening. This step was one of the first results of independence. Attempts to

learn our moral heritage increased. Articles commenting shariat and ethics and muslim rights began to be published in press, for the first time. Trampling human rights in the Soviet period was abolished. We can see it in resetting their religious rights. Preying in the mosques, keeping "Roza" (fasting) , going to "Haj visit" became usual in our life again.

A great attention is being paid to morality and enlightenment matters in Uzbekistan in the period of independence. Islam Karimov, First president of the Republic of Uzbekistan gave his thoughts thoroughly on this matter in his book "There is no future without historical memory" and emphasized the following: "The bases of the progress of the society and the only power that saves it from an inevitable destruction is enlightenment. Let's remember the events happened in Turkestan at the beginning of the century. Why did enlightenment action become stronger than ever in the country during those years? Because, the only way was enlightenment to achieve to wake up the country fell completely into decay, having been under the influence of the tsarist Russia and to raise the people".

Particularly, reforms protecting national interests and desires began to be carried out in this sphere offer Islam Karimov had been elected as the First President of Uzbek Republic. The decree of the First President of Uzbek Republic Islam Karimov "On going to "Haj visit" to Saudi Arabia". Adopted on June 2, 1990 was an important step in resetting religious rights of the Muslim and in becoming the desire of the nation true.

At the same time, the task of further developing the socio-spiritual sphere, strengthening the healthy environment in families[3], makhallas, in the whole society, the task of preserving the purity of our youth, our peaceful life and the sacred religion is of great importance today In order to regulate the essence of these issues, to solve the problems of the relevant branch system at a higher level, to ensure social stability in the country, the Presidential Decree of 16 April 2018 "On radical improvement of the religious and enlightenment sphere Resolution of the Cabinet of Ministers of the Republic of Uzbekistan from May 31, 2018 "On approval of Regulations on re-registration and liquidation of state registration of religious organizations in the Republic of Uzbekistan""On Measures to Create Additional Conditions for the Study of Foreign and Religious Education Institutions" of August 13, 2018, adopted by the Legislative Assembly - The legal documents contain a number of tasks [4]. The main problem is that we all know our community. In today's dismal period, various currents are influencing young people in their field of influence on migrants from abroad, promoting propaganda through social networking, unofficial telegraph channels, family members, neighbors. The group is engaged in the creation of secret "dormitories", publishing sources of extremist

content, disseminating it electronically, and promoting missionary work [5].

According to experts, there are currently more than 100,000 websites with ideas that promote different types of extremism. Throughout the Internet, ideas such as migrating to the young, migration, martyrdom, and caliphate are being developed, and they are involved in various conflicts and conflicts. The use of extremist and terrorist movements seized by certain political powers, and the use of any commandment by the rulers in the peaceful neighborhoods of law-breaking zombie battles, the truth. The main question is, firstly, that misinterpretation of these issues is reflected in the minds of young people in educational institutions in our country, and secondly, those who contributed to world civilization in our country are still studying and In order to carry out these important tasks, the need for appropriate personnel is needed to learn the heritage of manuscripts. Particular attention should be paid to the responsibilities of the faculty, researchers, assistant students, imam-worshipers, and scholars, especially those working in religious education institutions [6].

The land of Uzbekistan is one of the ancient places of Islamic science and culture. In order to thoroughly study such rich historical, scientific, spiritual heritage of our people, to introduce them to the world public opinion, and most importantly to deeply reveal the true essence of Islam, the center of Islamic culture in Uzbekistan, the foundation of the Islamic Civilization Center in Tashkent, initiated by the President of the country, has started a new approach to the development of this sphere. In particular, the President of the Republic of Uzbekistan Sh. Mirziyoyev's initiative aims at maintaining the central architecture of the building and preserving, studying and propagating the rich scientific and spiritual heritage of great ancestors, in the future of the Islamic religion, its historical peace, and the ability to convey the essence of kindness, humanity, creativity and high morals to the members of society. Also, in the Ferghana Valley of the Central Asian region during the first years of independence, various conflicts were followed by various movements in the form of extremist, terrorist attacks, the presence of many young people, the tendency to acquire Islamic knowledge, and the great responsibility of the valley are explained. Today, there are two Islamic educational institutions in the Fergana valley [7]. "Mulla Qirg'iz" madrasah in Namangan region and Said Muhyidin Mahdum madrassah in Andizhan.

Mulla Kyrgyz Madrasa is an architectural monument to the Chorsu Square in Namangan, built in 1910-1912 due to the funds of the investor and scholar Mulla Kyrgyz Ohun Mashrabboy ugli (1850-1922). The Kyrgyz Madrasa, built in the central part of the city, is surrounded by five faces. The mosque

Clarivate Analytics *indexed*

and the lecture hall were built together with one another, and they were covered with dome [8].

Andizhan "Said Muhyiddin Mahdum" Secondary Special Islamic School In 1992 the secondary specialized educational institution "Said Muhyiddin Mahdum" was established in Andizhan region. The educational institution is located in the village of Jalavek in the Altynkul district of Andizhan region, lib began his eight-year building in an uncompleted yet unfinished building [9]. Shortly afterwards, this building was fully equipped and commissioned with the help of mahallas. In these educational institutions, students are taught the secular knowledge of Islamic religion with the knowledge of the Qur'an, tajwid, fiqh, tafsir, hadith and aqeedah. Experienced teachers with many years of experience in these subjects, teachers and mentors teach. At the same time, there are a lot of initiatives for opening a school of hadeeth on separate studies and fiqh schools that are taught in the country in Islamic education. Today, special attention is paid to the activities of Islamic educational institutions in order to ensure social stability in the country and to study the themes of the scholars. As a result of this attention, one of the regional centers of professional development in the Republic of Uzbekistan was established in the valley for the purpose of improving the qualification of the imam-teachers and horsemen of the Ferghana Valley. In the first quarter of 2019, more than 500 "anti-agitation campaigns" were held in Fergana valley, in particular, in Andizhan. The event was organized in various educational institutions, various organizations, as a round table, seminars, trainings. Families with needy families were interviewed. For the purpose of holding these events at the highest level and achieving the results, 54 representatives from different spheres from the Ferghana Valley have been trained at a specially established 15-day training course in Tashkent [10].

**Conclusion.**

In summary, the role of the sacred religion of Islam and Islamic, educational institutions is remarkable in the country's stability, its peace, and its enlightenment. Therefore, the issue of skilled staff, which is responsible for bringing up the worthy successors in bringing up the worthy heroes of this noble work, bringing up the heritage of the world's heroes who have grown up in the Uzbek land, will be of interest today and tomorrow.

**References:**

1. Alimov, I. A. (2017). *Madrasahs and schools in Kokand Khanate*. (p.304). Tashkent.
2. (2018). National database of legislation date 18.04.2018 y 16/18/5416/1079 numb.
3. Karimov, I. A. (1997). *Uzbekistan at the gateway of the XXI century: trouble of safety, needs of steadiness and development guarantees.* (p.33). Tashkent, Uzbekistan.
4. (2018) National database of legislation date 05.06.2018/ 09/18/409/1296 numb.
5. (2018) National database of legislation date 15.08.2018/ 09/18/651/1701 numb.
6. (2019) National database of legislation date 02.02.2019 / 10/18/651/1701 numb.
7. (2019) National database of legislation date 02.02.2019/ 09/18/651/1701 numb.
8. (n.d.). Retrieved 2019, from http://madrasa.uz/uzbda-ishlab-turgan-madrasalar.html

Clarivate Analytics indexed

QR – Issue        QR – Article

**T.U. Salimov**
National University of Uzbekistan
Associate professor,
Tashkent, Republic of Uzbekistan

**SECTION 13. Geography. History. Oceanology. Meteorology.**

# ECONOMIC AND CULTURAL TRADITIONS OF THE POPULATION OF THE NURATA MOUNTAINS AND ADJUSTING TERRITORY: IN THE PAST AND PRESENT

*Abstract*: *This article analyzes geographical position, population of Nurata Mountains and their economical and cultural traditions based on archive sources and scientific literatures. Statistical materials are analyzed in this article.*

*Key words*: *Nurata Mountains, society, economy, economical life, irrigated farming, collective farms, ethnographic research.*

*Language*: *English*

*Citation*: Salimov, T. U. (2019). Economic and cultural traditions of the population of the Nurata mountains and adjusting territory: in the past and present. *ISJ Theoretical & Applied Science, 06 (74),* 566-569.

*Soi*: http://s-o-i.org/1.1/TAS-06-74-69    *Doi*: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.69

**Introduction**

The Nurata mountains covered the territory of the ancient Sogd and the Bukhara oasis with the hot Kyzylkum sands. In the distant past, access to the Zeravshan valley was possible only through the Ilanutta mountain gorge (because of the winding road, it was compared to the serpent track) at Dzhizak and Nurata as the most important points were protected by fortress walls [1].

The northern slopes of the Nurata mountain range facing the endless expanses of the Kyzyl Kum region abound in numerous mountain streams along which spring waters flow. Thanks to the latter, in the gorges and in front of them there were settlements, whose inhabitants are engaged in farming and animal husbandry. Uzbeks live in the gorges located to the south-east of Jizzakh to the center of Farish district of Yangikishlak, and to the west of it to Nurata live Tajiks. They are engaged in farming and partly animal husbandry, their lifestyle is mostly similar. The villages are located on the slopes of the main Saya, inside the gorge. Dwellings are built of stone and beams [2].

15–20 km north of the foothills of the Nurata mountains, parallel to it is a large ancient steppe road connecting Bukhara through the Nurata with the regions of South Kazakhstan, Semirechiy, etc. At one time, there was a ferry on Syrdarya near Chardara.

From there the path to the west lay across the steppe. For each approximately 30 km, a fortified rabat with a well was built. The ruins of these shops remained until the middle of the XX century. Nurata is an extreme city in the north of the Bukhara (now Navoi) region, from there to the north and northeast to the lower reaches of the Syr Darya, steppes and sands of the Kyzyl Kum region extend. Until the beginning of the twentieth century, Nurata was a frontier trade and craft town with a fortress, where the Bek, a protege of the Emir of Bukhara, was located.

**Materials and methods**

Under a treaty of 1868, Russia and the emir of the Bukhara steppes of the northern part of the Nurata Mountains were transferred to the Russians. According to the head of the Jizzakh district, in all the villages of the Bogdanatins volost can be combined up to 1300 inches [3]. Owing to the unfavorable conditions of the area, the population of the northern slope of the mountains, which does not allow widespread development of agriculture, can be called far from rich. Insignificant crops and not particularly high yields do not satisfy the needs of the population and, as a result, they are forced to seek support for cattle breeding, which, nevertheless, is not particularly developed, materially unsatisfied Uzbeks of the Nurata Mountains are far behind culturally as

well. Of the inhabitants of the Bogdanatinsvolost, only those who have gardens and irrigated lands are firmly confined to the place, the rest are almost always in absenteeism, seeking earnings in Miankale.

Sintab, Ustuk, Temirkauk, Turkmen rural communities are located in the northern part of the Nurata mountains. If the population of the Kyzyl Kum region was mainly engaged in cattle breeding and only partially sowed grain on non-irrigated lands under natural rainfall, the residents of mountain villages, on the contrary, mainly engaged in irrigated and non-irrigated farming, and their cattle breeding had an auxiliary character.

Table 1 shows the economic census. The population of 13 villages in the late XIX-early XX centuries. So from the table it can be seen that out of 486 farms of the village, only 326 have land plots, the number of landless 160 farms. These farms have 88 horses, 180 bulls, 140 cows, 186 donkeys, 4000 heads of cattle. In the villages of Mozhirim and Andagon there are 382 farms, including landowners 269, 113 landless, 30 horses, 64 bulls, 20 cows, 120 donkeys, 2600 small cattle.

If we analyze in general, the number of landless farms is from 20% to 30%, horses 1 for every 5 farms, bulls for 3 farms, even fewer cows, small-sized cattle, on average, less than 10 farms per farm. At the same time, in the villages there were also rich, average people, meaning a very large number of farms did not have not only land, but also domestic animals. In the villages of Sof and Temirkauk, the situation was even worse; about half of their farms did not have their own land plots.

Prior to the establishment of Soviet power, the lifestyle of the three groups of people in the Nurata mountain-Tajiks, the Uzbeks-Turkman highlands and the Uzbeks-Turkman Dzhadir had differences related to the existing climatic conditions.

The Tajiks were mainly engaged in irrigated farming, on the irrigated lands they sowed only prosperous peasants who had a sufficient number of animals [4]. The irrigated lands were divided: 1) location in the gorge and its slopes, and 2) loika - located in the piedmont zone. On the lands of the first species were grown: here, walnuts, fruit trees, garden crops and alfalfa, in the lower part of the gorge, there were also crops of Asian cotton-Guza. Fruits (apricots, peaches, apples, jida, figs) were consumed not only fresh but also dried. Talcon (sweet flour) was made from dried mulberries and apples. Sugar varieties of mulberries went to boil-Kiyom, a type of jam.

In the lands of the second type, the Tajiks grew grains, oilseeds and melons, and cotton. These lands were located at a distance of 5 km or more, where the piedmont plain descending from the mountains, which is a stony steppe with semi-desert vegetation, merges with the desert. Here on a flat plain, where the water of mudflows, rushing from the mountains during the spring tides and with the intensified melting of snow,

spreading evenly, flooded its entire surface as such. Unlike takyr, as the water gradually absorbs into the soil and partially evaporates it, the earth does not become covered with a hard crust and does not crack, as this is prevented by the finest fine sand contained in fertile silt brought by mudslides and settling in the fields [5].

The plane flooded by mud of mudflows was called loika-silt. It can be said that the kukpoy or loika-il is one of the varieties of estuary irrigation. In order for the mudslide not to go far into the sand (as it flows but to a shallow rocky bed) and spread over the fields, beforehand, immediately after completion of sowing (sowed in February-March), a dam (gangs) of stone were erected on a dry bed, camel spines and other dried herbs last year.

The dam was constructed not across sai, i.e. not at a right angle (so that he did not pick it up), but obliquely, at an acute angle towards the irrigated field. In the past, several villagers (up to 10 people) built a dam together.

Sowing ten poods of seeds of various crops: wheat, barley, millet, flax and sesame was common for the average farmer who had a couple of oxen.

Wheat yielded the greatest yield of up to 8 centners. According to informer O. Rajabova [6], cotton and melons were also grown there. The area intended for melons was usually watered in the autumn-winter period when, after falling rain and snow, the water in the mountainous rivers arrived and sometimes reached the harbor. This water was allowed on a plot that was plowed once. The soil was so saturated with moisture that melons and watermelons sown in spring had abundant fruit without watering [10]. Melons sunk into the sun (they were hung up by cutting into long slices and removing the crust with a knife) were a tangible help in the nutrition of the population in the winter-spring period [7].

The short winter and the availability of seasonal pastures made it possible for the sedentary population to engage in livestock farming other than farming. A middle-income villager usually had two working oxen, a horse, a donkey, two or three cows and a dozen or a little more sheep and goats. The cattle were kept in the stall only in winter, on snowy days, for a total of 2-3 months. Only cattle and horses received lure. From March to May, the inhabitants of the mountain villages migrated along with the cattle to the steppe — to the piedmont hills and the piedmont plain. On spring pastures, women were engaged in harvesting dairy products for rent. During the field ethnographic research, we learned that the cattle of the population of the village of Sintab is still in the summer pastures in the mountain pastures around Lake Fazilman and the women of the village several people take turns going to the mountains to prepare butter for the winter. All summer and most of the autumn, the population lived in gardens, and cattle grazed in the mountains.

Until the beginning of the 20th century, people lived in the village only in winter.

The subsidiary occupations of residents of all the villages of the northern part of the Nuratau Mountains were spinning cotton threads, on manual spinning and weaving on machines with pedals. Spinning was a feminine matter, and weaving was masculine. According to the recollections of Tajik residents, and in some cases, Uzbeks continued to engage in weaving until the middle of the twentieth century [8]. The missing cotton was acquired at the bazaars in Kattakurgan and Khatirchi. Each village had its own blacksmiths, carpenters, shoemakers, and parikhmakhery. Some masters owned several specialties that is an indicator of the weak development of rural crafts.

Cattle breeding is the basis of the Uzbek-Turkmen economy of the Nurata Mountains. In the archival materials of the 70s of the nineteenth centuries. there is such data. In the south-west of the Temirkauk kishlak in the mountains are a small number of Uzbek-Turkmen about 200 houses. They are semi-settled people, their main occupation is cattle breeding and only the excellent quality of land on the eastern slopes and in rainy years significant yields cause them to tillage. Most Uzbek-Turkmen live in yurts all year round and feed their sheep in the steppe, where they have their own wells. Western Turkmen, as well as to the north of the mountains in the direction of the Syr Darya, begins a purely nomadic population consisting of Kirghiz (Cossacks) and Karakalpak [9].

The basis of the Uzbek-Turkmen Highlands and Jadir economy was non-irrigated agriculture and cattle breeding. The proper representatives of the Uzbek-Turkmens of the highlands also had land on the harbor. Grain, oilseeds and melons were grown there. Small plots of irrigated land and springs occupied exclusively for alfalfa, which was the main feed for horses.

Following the sowing in March, Uzbek-Turkmen migrated with livestock to the steppe. In the piedmont hills were special tracts where sheep lambing occurred. The Kazakh breed of sheep was bred for wool and meat, only a few bais of jadirs in the early twentieth century had ateye of astrakhan sheep. In dry years, cattle were kept in the sands near wells located 20-30 km from the villages. In June, after harvesting from the fields, they returned to the villages, where cattle were grazing along stubble and on mountain pastures. The considered groups of Uzbeks-Turkmen were bred: sheep, goats, cattle, horses, donkeys and camels. The Jadirs who had little land suitable for agriculture had more camels and less cattle compared to the highland Turkmen. These groups, in contrast to the Temirkauks, the only type of dwelling was a trellised yurt, covered with felt. Permanent premises (made of clay-bonded stone) were erected only for horses and for the storage of fuel.

We can assume that until the beginning of the twentieth century, the economy and way of life of the Uzbeks, the Turkmen of the north-western tip of the Nuratau Mountains, were typical of the semi-nomadic Uzbeks.

The economic and cultural types of the population of the Nurata oasis in the twentieth century endured a number of significant changes. So with the establishment of Soviet power, the land and property of rich people were confiscated by the 1930s, collective farms were formed, and they gradually included almost all of the population, except for the dispossessed middle peasants and the rich. During the war, the population employed in the collective farms grew not only grain but also cotton. According to informants, cotton was grown on grass.

At the end of the 50s, a transformation began in the management system and on the site of low-power collective farms, large karakul-breeding state farms were created. They began to provide transport: tractors, trucks, cars. Sheep herding flocks were shepherds, grain crops were grown on irrigated land, and in rainy years, 10-15 centners per hectare of good yields were obtained.

It should be noted that the living standards of the majority of the population increased. The whole population was covered by education, hospitals and other cultural institutions were built in large villages and in the city of Nurata. At the same time, cases that led to the violation of traditional economic and cultural types have become frequent. With the formation of state farms (state farms), loika were abandoned, karezes (each of which irrigated several hectares of land). The population basically lived at the expense of their gardens and livestock. They began to grow the grape "hatirchi uchkorasi" without the stone dried them and the raisins were sold on the markets of close and distant cities. As a result, this type of raisin (dried grapes) is still highly valued by lovers of this type of dried fruit. To this day, in the Nurata oasis, the main income items are raisins, fruits, vegetable crops and domestic animals: cattle, sheep breeding. If in the Tadzhik villages of the north of the Nurata mountains the agricultural products of agriculture prevail in incomes, then among the former semi-nomads the main part of family expenses is covered by sheep farming.

**Conclusion**

Over the past 2-3 years in Uzbekistan, including in the Nurata district, they began to develop the foothill strip adjacent to the desert in order to grow walnuts, pistachios and other fruit trees on these lands. To water these lands water is extracted by electric pumps. The state provides farmers with loans on a long-term and medium-term basis. Who knows it will take several years and the once vacant land where grazing cattle will probably become beautiful gardens. By the way, those state farms that were engaged in

karakul have sunk into history. With the collapse of the former Soviet Union and the beginning of the transition to market relations, they gradually disbanded.

The main problem that traditionally remains for the mountain population is unemployment. Young men travel to the city, sometimes to the CIS countries in search of work and decent earnings. This trend will continue for some time until the construction of industrial facilities in rural areas, including the Nurata district, is imposed.

## References:

1. (1991). Polevye materialy avtora.
2. Gulyamov, Y. G. (1979). *Nur Bukharskiy. Etnografiya i arkheologiya Sredney Azii.* (p.133). Moscow: Nauka.
3. (1971). TsGA RUz. I.1, op. 22, d. 15, 1869-1873 gg. Raport nachal'nika Syrdar'inskoy oblasti ob osmotre zapadnoy chasti Dzhizakskogo uezda i naseleniya Kyzylkuma i perepiska po voprosu ob ustroystve kirgizov(kazakhov) na obshchikh, s prochim naseleniem osnovaniyakh. Raport ot 12 yanv. 1871 goda.
4. Khoroshkhin, A. P. (1876). Kyzylkumskiy dnevnik. V pn. Khoroshkin A.P . Sbornik statey, kasayushchikhsya do Turkestanskogo kraya SPb, pp. 398-402.
5. Karmysheva, B. K., & Peshcherova, E. M. (1964). Materialy etnograficheskogo obsledovaniya tadzhikov Nuratinskogo khrebta. *SE., №1*, pp.10-11.
6. Mukhammadzhanov, A. R. (1968). *Ḳadimgi suv inshootlari tarikhidan*. (p.6). Tashkent.
7. (1991). Materialy polevykh issledovanii k. Katta Ezh.
8. Khoroshkin, A. P. (n.d.). *Kyzylkumskiy dnevnik.* p. 407.
9. (1991). Polevye zapisi avtora k. Sintab.
10. (1871). I.f. 1 op 22, do 15, 1869-1973 gg. Raport nach. Syrdar'inskoy oblasti ot 12 yanv. 1871 g.
11. Karmysheva, B. K. (1976). *Novye materialy po naseleniyu Nuratinskogo khrebta.* Polevye issledovaniya Instituta etnografii AN SSSR. (pp.142-158). Moscow.

Clarivate Analytics **indexed**

**A. S. Yusupov**
TSUE
PhD in Economic, Doctoral student (DSc)

# ACTION STRATEGY: SUSTAINABLE DEVELOPMENT GOALS AND PARADIGM OF FOREIGN ECONOMIC POLICY

*Abstract*: Uzbekistan is a country that literally builds its bright future. The action strategy serves as a practical software tool for raising Uzbekistan to the level of the rapidly developing countries of the world. Action Strategy defined the conceptual issues of the complex development of the country and reflected the priorities of further deepening democratic reforms in accordance with modern requirements. External economic strategy is recognized as an important factor in achieving sustainable development. Accordingly, the essence, goals, and objectives of the foreign economic strategy have been carefully analyzed by the author in the study. The development of conclusions and recommendations for presenting the perspectives of Uzbekistan's foreign economic strategy, in turn, determines the expediency and relevance of the idea put forward in this article.

*Key words*: democratic reforms, priority directions, structural changes, economic liberalization, foreign economic strategy, sustainable development.

*Language*: English

*Citation*: Yusupov, A. S. (2019). Action Strategy: Sustainable Development Goals and Paradigm of Foreign Economic Policy. *ISJ Theoretical & Applied Science, 06 (74),* 570-576.

*Soi*: http://s-o-i.org/1.1/TAS-06-74-70    *Doi*: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.70

**Introduction.**

**The relevance of the topic:** The goal of the strategy, designed for 2017–2021, is to radically increase the effectiveness of the reforms, create conditions for ensuring the comprehensive and accelerated development of the state and society, implement priority directions for modernizing the country and liberalizing all spheres of life.

The Strategic Action Plan includes and clearly defines five key priorities for sustainable socio-economic development in Uzbekistan for the next 5 years [2], [3], [4]: Pic.1.

The strategy of action was not only a clear expression of the aspiration of the leadership of the Republic of Uzbekistan to accelerate the development and modernization of the country, but also to bring Uzbekistan to the top of the list of countries with high per capita income by 2030 by deeper reforming of all spheres of life. was an important step.

The strategy of action is distinguished by its purpose and objectives, timeliness and viability. According to experts, "the main objective of the strategy of action is to ensure the interests of the people".

International experts point out that the principles set out in the Action Strategy are in line with the United Nations Global Development Goals (Sustainable Development Goals) until 2030 and the Priorities for Development Assistance Framework for 2016-2020.

The adoption of this document based on public discussion has made it possible for the civil society institutions, intellectuals, scholars and public to publicize the "action strategy" and bring the country's development to the modern stage. In our view, this is a sign that sustainable development goals are in line with advanced ideas and human interests.

## The Development Strategy for 2017–2021 (adopted in Feb '17) gave start of 5 priority reforms, including one for investors

It is envisaged that a separate state program for the implementation of initiatives in 5 reform areas will be approved yearly

**Development of state governance**

**Rule of law & legal reforms**

Development and **liberalization** of economy

Development of **social sphere**

**Security**, religious tolerance and interethnic harmony, foreign policy

*The area, in which priority is given to attracting investments*

**Pic.1.**

**Source:** http://www.strategy.gov.uz/en

Taking into account the urgency of the administrative and legal, socio-economic reforms identified in the strategy of action in Uzbekistan:

- 2017 "The year of Dialogue with the People and Human Interests";

- 2018 - "The year of supporting the active entrepreneurship, innovative ideas and technologies";

- 2019 has been declared as "The year of Active Investments and Social Development".

During 2017-2019, state programs were developed to meet the requirements of time.

**Analysis and results:** The third direction of the strategy of action is the definition of urgent tasks of the "fast development and liberalization of the national economy", which plays an important role in the process of deepening democratic reforms and modernization of the country [2], [3], [4], [6], [7].

Its main objective is to further improve macroeconomic stability in the republic and to improve the competitiveness of the economy through maintaining high economic growth rates, deepening structural transformations, modernization and diversification of key sectors.

Strategic projects and projects aimed at enhancing the competitiveness of the national economy are aimed at the implementation of investment projects based on innovation

achievements and modern technologies in leading sectors of the economy.

In particular, the Program of Complex Measures in the Program envisages increasing profitability and competitiveness of more than 4,400 enterprises [4] in key sectors of the economy, focusing on the following priorities:

• renewing and modernizing of spiritually and physically obsolete equipment, increasing energy efficiency in production, optimizing technological processes;

• creating an effective competitive environment for sectors of the economy and gradual reduction of monopoly on the market of products and services.

In today's world market conditions are sharply changed, in a complicated situation in the conditions of globalization, it is necessary to create a completely new approach and the development of the principles for the development of the foreign economic cooperation at a steady and rapid pace.

In December 2016, the Committee on Foreign Affairs, Committee on Foreign Relations and Foreign Investments and Tourism of the Senate of the Oliy Majlis of the Republic of Uzbekistan was established on the basis of the Committee on Foreign Affairs. The main objective of the Senate was to address the following strategic objectives:

- strengthening the role and control of the parliament in the implementation of foreign policy activities on the protection and promotion of national interests around the world;

- expansion of international economic cooperation, attraction of foreign investment and modern technologies into the country's regions;

- further expansion of its structure and scope of activities for the purpose of tourism development, further enhancement of the authority of the state in the world arena.

The United Nations International Legal Framework was a programmatic tool for determining the direction of the foreign policy vector based on neighborhood, friendship and interethnic tolerance in the strategy of action. Accordingly, the necessary recommendations on identifying the current and perspective directions of international legal cooperation have been developed.

Integration of Uzbekistan into the international economic system and the modernization of the economy in the context of globalization, its international competitiveness through the implementation of structural changes and increasing the national export potential are becoming more and more urgent.

Consequently, in the context of Uzbekistan, effective implementation of the Concept of Export

Activity Development for 2018-2021 is regarded as an acute issue at the national and government levels.

It is known that the abolition of the administrative and command-oriented management system has ended the monopoly of the Union in the implementation of the foreign economic policy of the republic. The following principles are prioritized in the implementation of foreign economic policy:

- eliminating the external scarcity of the economy and forming an open economy based on market relations;

- liberalization of foreign economic activity and formation of a unique system of management of foreign economic relations of the republic;

- Implementation of an equitable foreign policy aimed at ensuring the independent entry of the republic into the world community;

- promoting mutually advantageous economic cooperation on the basis of bilateral and multilateral agreements with countries of the world;

- orientation of foreign economic relations to the formation of a socially oriented market economy in the republic;

- renewing and expansion of the structure of export and import of the republic, export priority of imports.
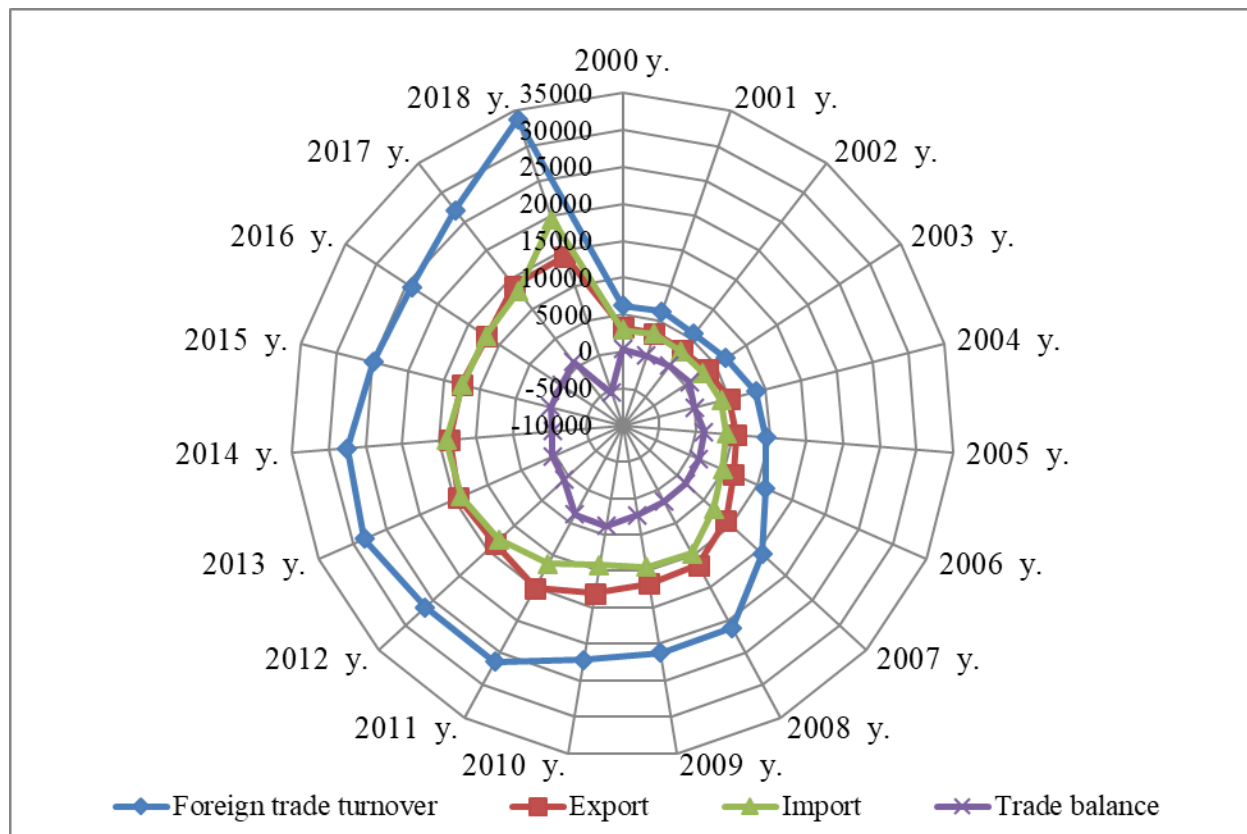


**Figure 1. Dynamics of Foreign Trade of the Republic of Uzbekistan (in mln. dollars)**
**Source:** Designed by the author on the basis of the State Committee data of the Republic of Uzbekistan on Statistics

Clarivate Analytics **indexed**

As a result of these principles, a number of positive results have been achieved in the foreign economic policy of the republic.

In the last decades, as a result of the revival of international trade and, accordingly, diversification of the country's exports, a positive balance was observed in the foreign trade turnover in 2000. The impact of the favorable prices on the global marketplace has also been instrumental in the growth in the volumes of basic export goods. Stage-by-stage liberalization of foreign economic activity has stimulated positive trends in foreign trade development in 2003-2004.

As a result, foreign trade turnover (in comparison with 2000) increased by 52.9% in 2005 and amounted to 9.5 bn. More than USD. The positive balance in foreign trade - 1.3 billion soums. US Dollars. 56.9% of foreign trade volume in 2005 was export operations, 43.1% - import operations.
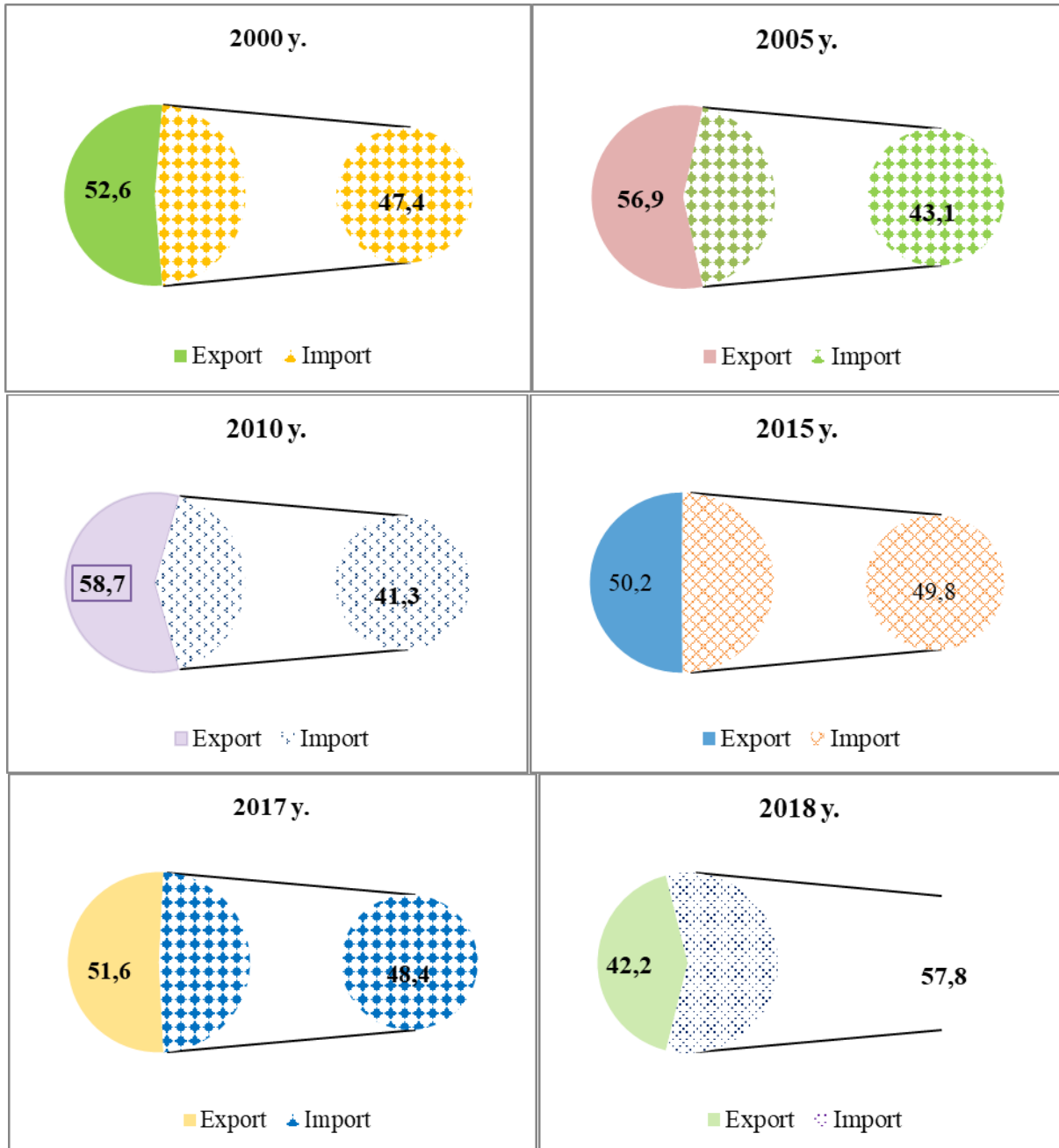


**Fifure 2. Structure of foreign trade of the Republic of Uzbekistan (in percentages)**
**Source:** Designed by the author on the basis of the State Committee data of the Republic of Uzbekistan on Statistics

Foreign trade turnover in 2015 (in comparison with 2000) almost doubled and amounted to 24.9 billion US dollars. More than USD. 50.2% of them were export operations, and 49.8% - import transactions. In 2017, the foreign trade turnover (in comparison with 2000) has grown by almost 4.3 times. Export operations accounted for 51.6%, import transactions - 49.8%.

According to the analysis of the results of 2018, the foreign trade turnover of the country increased by 27.3% compared to the previous year and reached 33 815.3 mln. US dollars. At the same time, the volume of export made USD 14 257.9 million. (13.6% growth) and the volume of imports amounted to 19,557.4 mln. (39.6% growth).Significant changes have been made in the structure of export, thanks to further diversification of the structure of industry and foreign trade, export support, further increase of import-substituting goods and products. It should be noted that the volume of exported goods and services in 2018 will reach $ 330.1 million compared to 2017. The volume of imports reached US $ 6 502.0 million. More than USD. By the end of 2018, exports were dominated by energy and oil products, and vice versa, cotton fiber exports decreased by 41.5%. This testifies to the fact that in recent years raw cotton has been oriented towards the production and export of textile products with higher added value.

Nevertheless, according to the results of 2018, the foreign trade balance was minus 5 299.5 mill. The negative balance of the US dollar.

In our opinion, for the further growth of foreign trade in the republic, it is desirable to focus on the further improvement of normative legal acts in the following areas and development of medium and long-term state programs in the field:

Firstly, elaborating and approving programs for the development of promising sectors of the economy focused on the high level of localization and competitiveness of exports;

Second, to diversify the existing foreign trade routes and to integrate with their international infrastructure and, first and foremost, take into account national interests of domestic exporters.

At the same time, the issue of further stimulation and improvement of foreign economic activity of business entities, improvement of export-import operations regulation, increase of competitiveness of domestic producers, increase of exports and expansion of geography remains topical.

In the context of the economy, the issue of stimulating the creation of competitive companies through the expansion of small businesses and private entrepreneurship, and increasing the investment attractiveness, as well as improving the position of the World Bank in the international rating Doing Business remains objective.

For this purpose, it is desirable to continue the institutional and structural reforms aimed at reducing state participation in the economy, furthering the protection of private property rights and their priorities, and encouraging the development of small business and private entrepreneurship.

It is necessary to increase the efficiency of the initiated reforms to create a representative for the protection of the rights and legitimate interests of business entities (business ombudsman) under the President of the Republic of Uzbekistan.

It is also desirable to elaborate a set of comprehensive action plans for a comprehensive and balanced socio-economic development of the provinces, towns and cities, their effective and efficient use.

In our opinion, to increase the innovative potential and competitiveness of regions with high unemployment, one needs to focus on their weaknesses:

• expansion of participation of commercial banks and foreign financial-industrial groups in the implementation of new investment projects related to the creation of small industrial zones in the regions;

• creation of small business innovation technoparks;

• organize rationalization of entrepreneurial subjects in the small industrial zones, their specialization, resource potential, and improve accessibility of participants to the necessary engineering and communication networks;

• effective networking of investment projects and systematic monitoring of the implementation of commitments.

The challenge of maintaining macroeconomic stability and maintaining high economic growth rates in the country is identified as one of the priorities in the strategy of action.

However, the main macroeconomic indicators reflecting the level of socio-economic development of the country, particularly the systematic monitoring of the situation with the foreign exchange market, and, if necessary, should further increase the adequacy of analytical data reflecting the stability of the national currency and the domestic market. In particular, it is necessary to improve the methodology of monitoring the changes in the prices of goods and services (tariffs) for the inflation level.

## CONCLUSION AND RECOMMENDATIONS

Deeper analysis of the essence, essence, objectives and tasks of the Action Strategy, proposed by the conceptual issues of socio-political, economic, cultural and humanitarian development of the country, allowed to propose the following conclusions regarding the prospects of its development:

1. The implementation of the five-stage strategy of action and, accordingly, the development of State programs every year plays an important role in raising the effectiveness of its implementation.

2. Increasing the efficiency of the investment climate and creating favorable conditions for the investment program in the State Program on the Year of Active Investments and Social Development - is an important criterion for increasing investment attractiveness in the country. In our opinion, the active involvement of domestic and foreign investments into the leading sectors of the economy plays an important role in the growth and development of the country's international competitiveness.

3. The third direction of the action strategy, devoted to the priorities of economic development and liberalization, is to be of the utmost importance to strengthening the macroeconomic stability and maintaining high economic growth:

3.1. Macroeconomic indicators, in particular the systematic monitoring of the situation on the currency market, and, where necessary, to ensure stability in the national currency and domestic markets, maintain macroeconomic balance and, ultimately, to improve the legislation on economic growth.

3.2. The step-by-step introduction and effective implementation of advanced market mechanisms aimed at regulating currency, further improving the monetary policy instruments and increasing their effectiveness, as well as improving the mechanisms of cash money circulation.

3.3. Creation of conveniences for entrepreneurs through the introduction of modern electronic payment systems in the economy through the introduction of the latest principles and mechanisms

of banking and financial system regulation in the Republic.

3.4. Modernization of the region's economy, further strengthening of their competitiveness and export potential, and the achievement of mass support for efforts to create a sustainable future.

3.5. Improving the effectiveness of tax administration in order to further the development of entrepreneurship and improving the taxation framework to ensure compliance with the market economy principles and improving the legal framework for the elimination of fiscal incentives.

4. Further development of international economic cooperation in the field of deeply thought-out, mutually advantageous and practical foreign policy pursuant to the fifth priority direction of the strategy of action, as well as the expansion of relations with leading international and foreign financial institutions should be focused on the following important aspects:

4.1. Active involvement of grants from foreign governments (European Commission of Cooperation, etc.) and preferential loans of international financial institutions in the implementation of priority socio-economic and infrastructure projects.

4.2. Further strengthening of consultative cooperation with leading international rating agencies and insurance agencies (S & P, FITCN, MOODY'S, etc.) in order to reduce the costs of foreign investment projects financed by international and foreign sources, as well as their timely implementation.

## References:

1. (2000). The Law of the Republic of Uzbekistan "About modification and amendments in the Law of the Republic of Uzbekistan" About foreign economic activity of the Republic of Uzbekistan ", from May 26, 2000, No. 77-II.

2. (2017). The Decree of the President of the Republic of Uzbekistan "On Strategy of Action for Further Development of the Republic of Uzbekistan", February 7, 2017, PF-4947

3. (2017). Strategy of actions in the five priority of development of the republic of uzbekistan for 2017-2021// Annex 1 to the Decree of the President of the Republic of Uzbekistan dated February 7, 2017, N UP-4947.

4. (2017). The State Program on implementation of the Strategy of Action in the five priorities of development of the Republic of Uzbekistan for 2017-2021 years in the The year of Dialogue with the People and Human Interests // Appendix 8 to the Decree of the President of the Republic

of Uzbekistan dated February 7, 2017 N UP-4947.

5. Mirziyoev, S. M. (2016). *We build a free and prosperous democratic state of Uzbekistan. Speech at the joint session of the chambers of the Oliy Majlis on the occasion of the solemn ceremony of assuming the office of the President of the Republic of Uzbekistan*. (p.56). Tashkent: NMUU "Uzbekistan".

6. Mirziyoev, S. (2017). *We will build our great future with our brave and noble people*. (p.488). Tashkent: NMUU "Uzbekistan".

7. Mirziyoev, S. M. (2017). W*e build a free and prosperous democratic state of Uzbekistan. Speech at the Joint Session of the Chambers of the Oliy Majlis on the occasion of the solemn ceremony at the Presidential Palace*. (p.32). Tashkent: NMUU "Uzbekistan".

8. Mirziyoev, S. M. (2017). *The rule of law and the interests of the human being are the basis of the*

*development of the country and the well-being of the people. At the solemn ceremony dedicated to the 24th anniversary of adoption of the Constitution of the Republic of Uzbekistan. December 7, 2016.* (p.32). Tashkent: NMUU "Uzbekistan".

9. (2017). *Scientific-methodical brochure on studying the State Program on the implementation of the Strategy of Action in the five priorities of development of the Republic of Uzbekistan for 2017-2021 in the "Year of People's Communication and Human Interest"* [Text] / Ministry of Higher and Secondary Specialized Education of the Republic of Uzbekistan, Tashkent State University of Economics. (p.244). Tashkent: "Spirituality".

10. Salimov, B. T., Yusupov, M., & Yusupov, A. (2015). *Export of agricultural products. Practical and practical guide.* (p.240). Tashkent: "Science and Technology".

11. Salimov, B. T., Yusupov, M., & Yusupov, A. (2013). *Integration of the agro-industrial complex of Uzbekistan into the world agrarian and food markets*: scientific monograph. (p.173). Tashkent: Economics.

12. (n.d.). Retrieved 2019, from http://kun.uz/uz/news/category/uzbekiston.

13. (n.d.). Retrieved 2019, from www.xs.uz

14. (n.d.). Retrieved 2019, from www.press-service.uz

15. (n.d.). Retrieved 2019, from www.gazeta.uz

16. (n.d.). Retrieved 2019, from www.uza.uz

17. (n.d.). Retrieved 2019, from https://www.sputnik.uz

18. (n.d.). Retrieved 2019, from www.gov.uz

19. (n.d.). Retrieved 2019, from https://pm.gov/uz/uz

20. (n.d.). Retrieved 2019, from www.mineconomy.uz

**Bayali Khanali Atashov**
Azerbaijan University of Cooperation
Doctor of Economic Sciences, Professor,
honored scientist,
Vice-rector for science and innovation,
Baku, Azerbaijan Republic

# MODERN DEVELOPMENT MODELS AND PRIORITIES OF THE STATE SOCIAL INSURANCE SYSTEM IN AZERBAIJAN

*Abstract*: *The main tasks and priorities of ensuring social protection of the population in the context of successive economic reforms in Azerbaijan and the main tasks of the state in these processes are examined in the article. The importance of improving the state social insurance system, which is one of the strategic links in the state socially oriented policy, is noted. The income and expenses of the State Social Protection Fund and the dynamics of growth of labor pensions are analyzed. The important aspects and key issues causing the improvement of the basic mechanisms of the state social insurance system in the context of strategic roadmaps are considered. The use of a more balanced and multifunctional, including investment-oriented system of state social insurance with the aim of creating alternative financial sources and ensuring the financial stability of the fund is substantiated. A number of recommendations and proposals for improving the functioning and improvement of the strategic mechanisms of the State Social Protection Fund in modern conditions are prepared.*

*Key words*: *social insurance, social security of the population, pensions, labor pensions, the pension system, priorities of the social insurance system, prospects for improving the mechanisms of the social insurance system.*

*Language*: *Russian*

*Citation*: Atashov, B. K. (2019). Modern development models and priorities of the state social insurance system in Azerbaijan. *ISJ Theoretical & Applied Science, 06 (74),* 577-585.

*Soi*: http://s-o-i.org/1.1/TAS-06-74-71      *Doi*: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.71

## СОВРЕМЕННЫЕ МОДЕЛИ РАЗВИТИЯ И ПРИОРИТЕТЫ СИСТЕМЫ ГОСУДАРСТВЕННОГО СОЦИАЛЬНОГО СТРАХОВАНИЯ В АЗЕРБАЙДЖАНЕ

*Аннотация*: *В статье исследованы главные задачи и приоритеты обеспечения социальной защиты населения в условиях последовательных экономических реформ в Азербайджане и основные задачи государства в этих процессах. Отмечена важность совершенствования системы государственного социального страхования, которое является одним из стратегических звеньев в государственной социально-ориентированной политике. Анализированы доходы и расходы Государственного Фонда Социальной Защиты и динамика роста трудовых пенсий. Рассмотрены важные аспекты и ключевые вопросы, обуславливающие совершенствование основных механизмов системы государственного социального страхования в контексте стратегических дорожных карт. Обосновано применение более сбалансированной и многофункциональной, в том числе, инвестиционно-ориентированной системы государственного социального страхования с целью создания альтернативных финансовых источников и обеспечения финансовой стабильности фонда. Подготовлен ряд рекомендаций и предложений по улучшению функционирования и совершенствованию стратегических механизмов деятельности Государственного Фонда Социальной Защиты в современных условиях.*

*Ключевые слова*: *социальное страхование, социальное обеспечение населения, пенсионное обеспечение, трудовые пенсии, пенсионная система, приоритеты системы социального страхования, перспективы совершенствования механизмов системы социального страхования.*

Clarivate Analytics *indexed*

**Введение**

*УДК:* 336.71: 336.02: 336.1

Формирование и развитие моделей государственно-социального страхования во всех странах мира считаются одними из важных государственных инструментов обеспечения социальной защиты граждан страны. Процессы формирования национальной системы социального страхования и их экономические модели, безусловно, в каждой стране имеют свои особенности и свойства. Еще в 1890-е годы в Германии по инициативе канцлера О.Бисмарка была сформирована немецкая модель социального страхования, которая известна под названием

«модель Бисмарка». Главным преимуществом данной модели является профессионально-трудовая социальная солидарность граждан страны [1]. В числе других преимуществ системы Бисмарка является свобода деятельности субъектов здравоохранения, принцип солидарной оплаты медицинской помощи, а в качестве недостатков можно отметить сложность системы расчетов с лечебными, профилактическими учреждениями и высокие расходы на содержание страховой инфраструктуры. Другой распространенной моделью социальной системы страхования является система Бевериджа или универсалистская система.
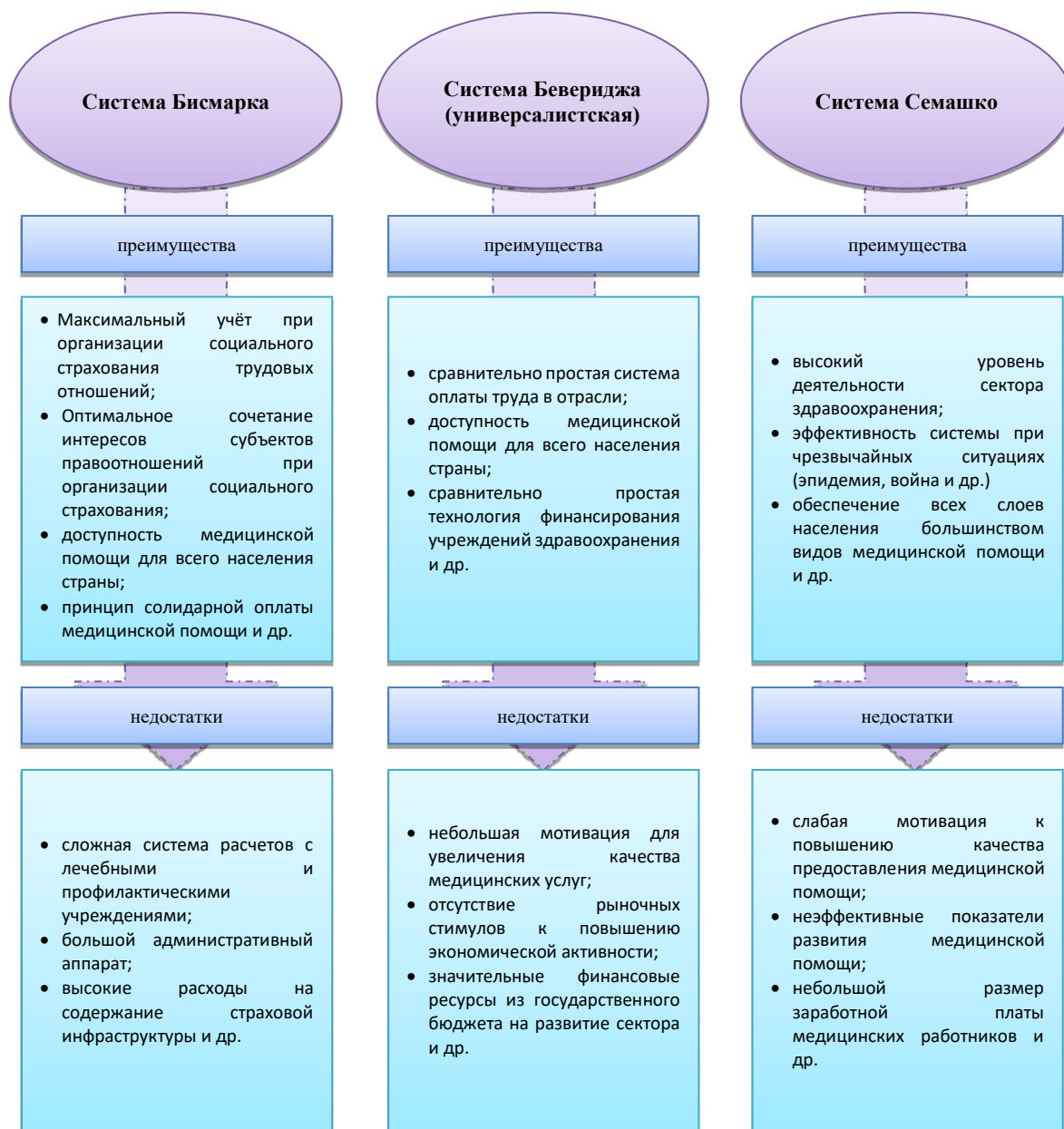


**Рисунок 1. Системы социального страхования, их преимущества и недостатки (составлено автором на основе материалов исследования).**

Суть данной системы заключается в том, что она опирается на государственные средства и характеризуется существенным ограничением рыночных отношений. Система разработана английским экономистом У.Бевериджем и, по его мнению, государство осуществляет трансфертные выплаты, в основном, нуждающимся и трудящимся. Так же в период существования СССР была сформирована система Семашко, преимуществами которой считались высокий уровень деятельности государственного сектора здравоохранения и эффективность этой системы при чрезвычайных ситуациях. Основные преимущества и недостатки данных систем социального страхования даны на Рисунке 1.

Данные подходы характерны многим системам социального обеспечения населения, в том числе системам государственно-социального страхования. Неслучайно, многие страны мира - такие как Германия, Франция, Великобритания, Италия, Испания, Канада и т.д. проявляют приверженность системам социального обеспечения моделей Бисмарка и Бевериджа.

Отметим, что после восстановления независимости Азербайджана одной из стратегических задач стало создание и развитие пенсионной системы, которая имеет важное значение для социальной защиты населения страны. В первую очередь, необходимо было формирование законодательной базы и создание институциональной основы для развития государственной системы социального страхования. Для этого изучался мировой опыт, однако так же учитывались специфические аспекты и особенности развития экономики Азербайджана в условиях проведения продолжительной экономической реформы.. Безусловно, цель государства заключалась в формировании более надежной и работоспособной системы, механизмов функционирования государственной системы социального страхования. Так, 18 февраля 1997 года был принят Закон Азербайджанской Республики «О социальном страховании» [2]. Законом было охвачено регулирование системы социального страхования в стране, ее правовые, экономические и организационные механизмы. В результате принятия этого Закона была создана прочная правовая база по компенсации утраченных трудовых прав граждан страны.

Таким образом, государство обозначило основные принципы и определило важные приоритеты социального страхования в Азербайджане. В числе определяющих принципов социального страхования в стране больше всего выделяется обеспечение государственной гарантии устойчивости механизмов социального страхования. Во всех случаях, в том числе в случае утраты работником трудоспособности. Кроме

того, в числе основных принципов социального страхования так же - соблюдение равноправия субъектов социального страхования и участие представителей общественности в процессах управления системы социального страхования с целью повышения прозрачности. Далее был принят Закон Азербайджанской Республики «О личном учете в системе государственного социального страхования» от 27 ноября 2001 года [3]. В законе предусмотрены правовые основы и принципы организации личного учета данных, необходимых для обеспечения реализации законных прав граждан страны на социальную защиту. Каждый работодатель обязан предоставить необходимые данные о работниках, которые оплатили взносы в фонды государственного социального страхования и при этом они должны соблюдать максимальную объективность и прозрачность. Главная философия данных изменений заключалась в фиксировании оплаченных страховых выплат на персональных счетах застрахованных. Кроме того, в результате данной реформы и последовательных мероприятий был выявлен мощный потенциал развития новых финансовых источников государственной системы социального страхования. Все это свидетельствует об эффективности и важности государственной системы социального страхования в условиях рыночных отношений и углубления рыночных форм хозяйствования [4]. В число участников социального страхования входят страховщики, страхователи и страхуемые. При этом страховщики в качестве юридического лица имеют важное значение в формировании соответствующих страховых фондов и так они способствуют финансовой прочности системы социального страхования в целом. В условиях рыночных отношений и расширения сотрудничества по схеме «государство-предпринимательские субъекты» немаловажную роль играют страхователи, которые на основе Закона выступают в качестве работодателей и осуществляют социальное страхование. Страхуемые же - это те лица, в пользу которых реализуется страховая деятельность.

Следует подчеркнуть, что социальное страхование имеет стратегическое значение в нынешних условиях. Путем обеспечения максимальной эффективности социальной политики государство способствует поддержанию социально-экономической стабильности, обеспечению высокого уровня благосостояния, сохранению общественных ценностей на основе экономической свободы, конкуренции и частной инициативы [5, с.154]. Социальное страхование создает серьезную почву для реализации важных мероприятий по обеспечению социальной защиты людей, по противостоянию любым фактора риска,

по формированию резерва, который поможет эффективно и наименее убыточно возместить последствия любого чрезвычайного случая [6]. В связи с негативными последствиями финансового кризиса в мире в последние годы, системы и механизмы социального страхования подверглись серьезным воздействиям, произошли значительные трансформации существующих механизмов и инструментов. Пенсионные фонды подверглись влиянию сложной ситуации на финансовых рынках и в них образовались немалые проблемы [7]. Кроме того, в связи с интенсификацией глобальных влияний и угроз, стало необходимо требуется основательное совершенствование системы социального страхования на базе современных концепций, технологий и стратегий. То есть, стало необходимо осуществить мероприятия с применением максимально эффективных механизмов, которые могли бы обеспечить повышение доверия населения к государственной системе социального страхования и усиление ответственности работников в данной сфере [8, с.54]. Система социального страхования отличается такими особенностями, как гибкость и адаптивность принципов страхования. Суть данного подхода отражается в совокупности государственных механизмов и инструментария в сфере социальной защиты граждан и в предоставлении множественных льгот по разным категориям населения страны [9]. Государство должно постоянно совершенствовать существующие системы социального страхования и тем самым обеспечить усиление социальной обеспеченности своих граждан, добиться повышения взаимодоверия между государством и обществом. Но для этого государство должно предпринять последовательные и действенные меры по повышению эффективности системы социального страхования и учесть современные вызовы и реалии. Неслучайно ряд исследователей считают, что существующая на текущий момент система социальной защиты еще не в полной мере использует свой потенциал и имеющиеся возможности. Развитие системы социального страхования препятствует сохранению глубоких бюрократических традиций, сокращению численности работающего населения, росту числа пенсионеров и снижению уровня реальных доходов населения страны [10]. Игнорирование любых проблем, ограничивающих темпы развития государственной системы социального страхования, могут привести к негативным последствиям и создать напряженность в экономических процессах и в обществе [11]. Поэтому очень важно предпринимать комплексные меры по повышению эффективности системы социального страхования и обеспечить каждому гражданину страны хотя бы

минимальный уровень необходимой социальной поддержки [12]. Более того, другой важной проблемой считается разработка продуктивных, эффективных путей совершенствования видов и форм социального обеспечения и социальной защиты населения. При этом требуется обеспечение современной сети социальной инфраструктуры, которая способствует духовному обогащению граждан [13].

Отметим, что все вышеприведенные факторы и принципы комплексно рассматривались в процессе формирования законодательной базы и разработки институциональной основы развития системы социального страхования в Азербайджане. Поэтому после создания законодательной базы, была сформирована институциональная основа и создана государственная структура по организации и управлению государственной системы социального страхования. Так, в рамках проведения институциональной реформы по социальной системе страхования и пенсионной обеспеченности в соответствии с европейскими стандартами, с 27 ноября 2001 года в Азербайджане функционирует центрально-исполнительный орган - Государственный Фонд Социальной Защиты. Однако, начиная с 2014 года, Фонд перешел в состав Министерства Труда и Социальной Защиты Азербайджанской Республики. За период существования Фонда были проведены последовательные работы по развитию системы социального страхования, рассматривались разные модели развития основных его механизмов. Система социального страхования играет важную роль в обеспечении повышения жизненного состояния населения страны и его активного участия в развитии национальной экономики. Наряду с развитием экономики страны, государство проводит целенаправленную социально-ориентированную политику с целью развития системы социальной защиты, особенно для совершенствования механизмов государственной системы социального страхования. Такая сбалансированная государственная политика, с одной стороны, укрепляет социальную защиту населения страны, с другой стороны, облегчает социально-экономическую напряженность в обществе, придает уверенность и создает среду взаимодоверия между государством и обществом, а люди, в свою очередь, получив соответствующие гарантии относительно социальной обеспеченности, с большей отдачей и силой вкладывают свое умение, работоспособность и профессиональные навыки в развитие экономики страны. Основная фаза углубления экономической реформы и развития важных механизмов системы социального страхования началась с 2000 года, тогда и было

обеспечено совершенствование законодательной базы, были осуществлены последовательные программы и мероприятия исходя из мирового опыта с целью создания более работоспособной системы социального страхования.

Одной из стратегических задач Государственного Фонда Социальной Защиты страны является обеспечение социальной защиты пенсионеров, численность которых насчитывается около 1,3 млн. человек в стране. На Рисунке 2 дана динамика роста пенсионеров в Азербайджанской Республике за период 2005-2018 годы.
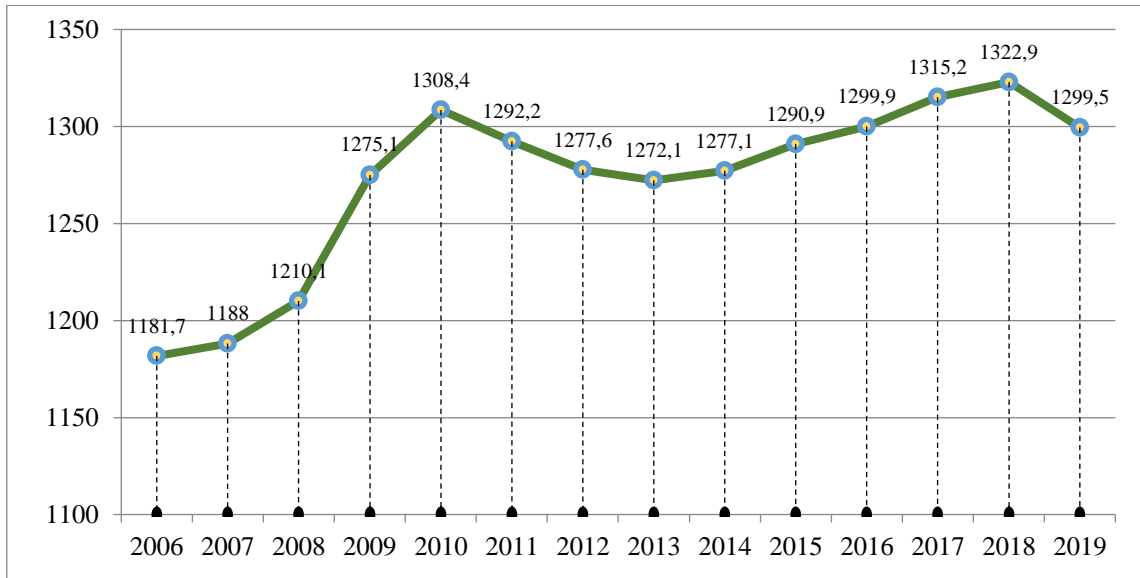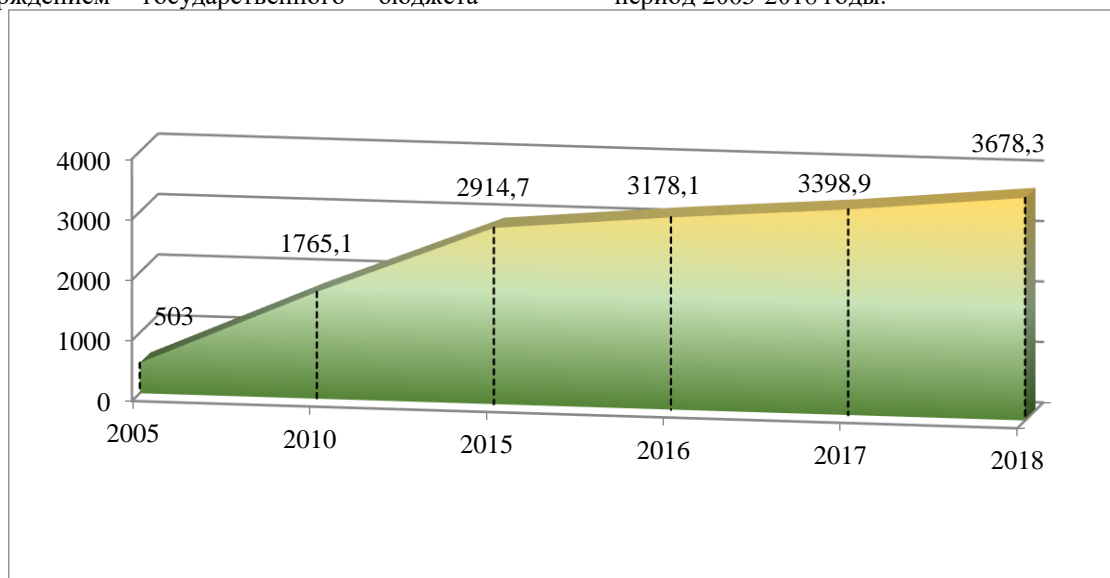


**Рисунок 2. Динамика числа пенсионеров в Азербайджанской Республике за 2006-2019 годы, на начало года, тыс.чел (подготовлено автором на основе отчетов и материалов Министерства Труда и Социальной Защиты Азербайджанской Республики. http://sosial.gov.az/)**

Как видно из Рисунка 2, за период 2006-2019 годы число пенсионеров в Азербайджане выросло почти в 16,2 % и на начало 2019 года составило 1299,5 тыс. человек.

Ежегодно, наряду с подготовкой и утверждением государственного бюджета - основного финансового документа страны, параллельно рассматривается и утверждается бюджет Государственного Фонда Социальной Защиты. На Рисунке 3 даны доходы Государственного Фонда Социальной Защиты за период 2005-2018 годы.



**Рисунок 3. Динамика доходов Государственного Фонда Социальной Защиты Азербайджанской Республики за 2005-2018 годы, млн. манат (подготовлено автором на основе отчетов и материалов Министерства Труда и Социальной Защиты Азербайджанской Республики. http://sosial.gov.az/)**

Если анализировать Рисунок 3, то видно, что уровень доходов Государственного Фонда Социальной Защиты Азербайджанской Республики за 2005-2018 годы вырос в 7,3 раза и по итогам 2018 года составил 3678 млн. манат, а это свидетельствует о серьезном отношении государства к проблемам социальной обеспеченности своих граждан в современных условиях.

На Рисунке 4 дана динамика поступлений по обязательному государственному социальному страхованию в Государственный Фонд Социальной Защиты Азербайджанской Республики за 2005-2018 годы, на которой виден рост 7,38 в раза и в 2018 году общий объем поступлений составил 2332,15 млн. манат.
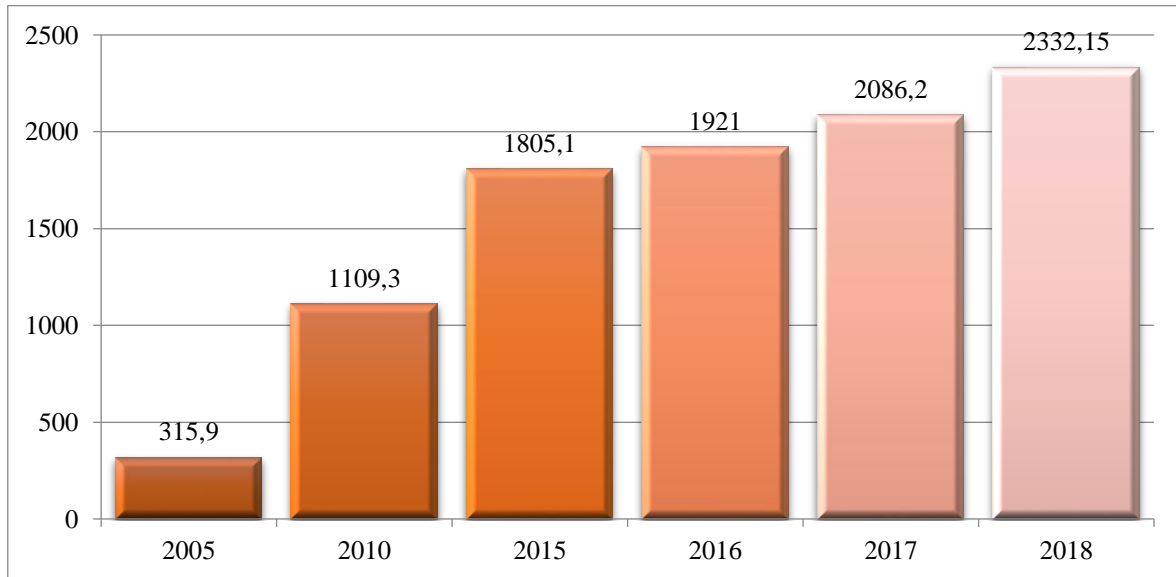


**Рисунок 4. Динамика поступлений по обязательному государственному социальному страхованию в Государственный Фонд Социальной Защиты Азербайджанской Республики за 2005-2018 годы, млн. манат (подготовлено автором на основе отчетов и материалов Министерства Труда и Социальной Защиты Азербайджанской Республики. http://sosial.gov.az/)**

На Рисунке 5 приведен объем общих расходов Государственного Фонда Социальной Защиты Азербайджанской Республики за 2005-2018 годы, в котором наблюдается рост расходов за рассматриваемый период в 7,4 раза (почти равный росту поступлений по обязательному государственному социальному страхованию в стране).
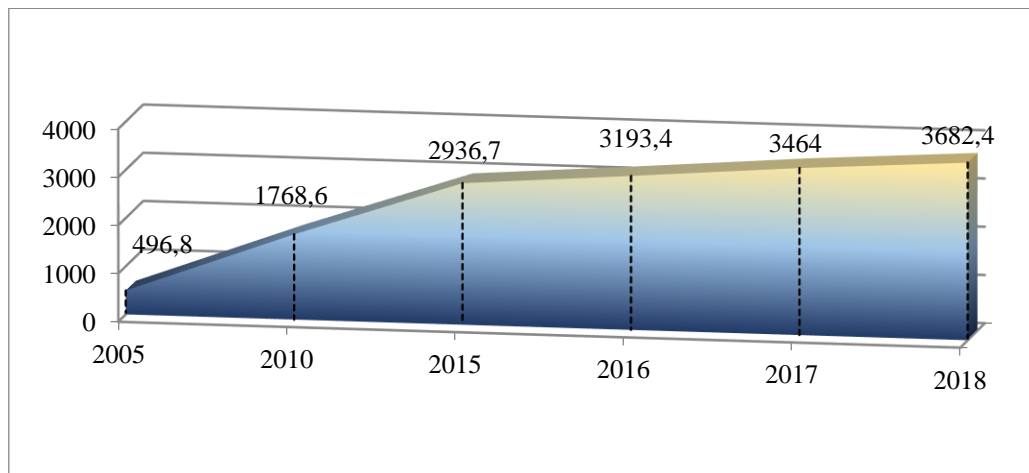


**Рисунок 5. Динамика расходов Государственного Фонда Социальной Защиты Азербайджанской Республики за 2005-2018 годы, млн. манат (подготовлено автором на основе отчетов и материалов Министерства Труда и Социальной Защиты Азербайджанской Республики. http://sosial.gov.az/)**

Clarivate
Analytics indexed

На Рисунке 6 дана динамика суммы среднемесячной трудовой пенсии в Азербайджанской Республике за 2005-2018 годы.
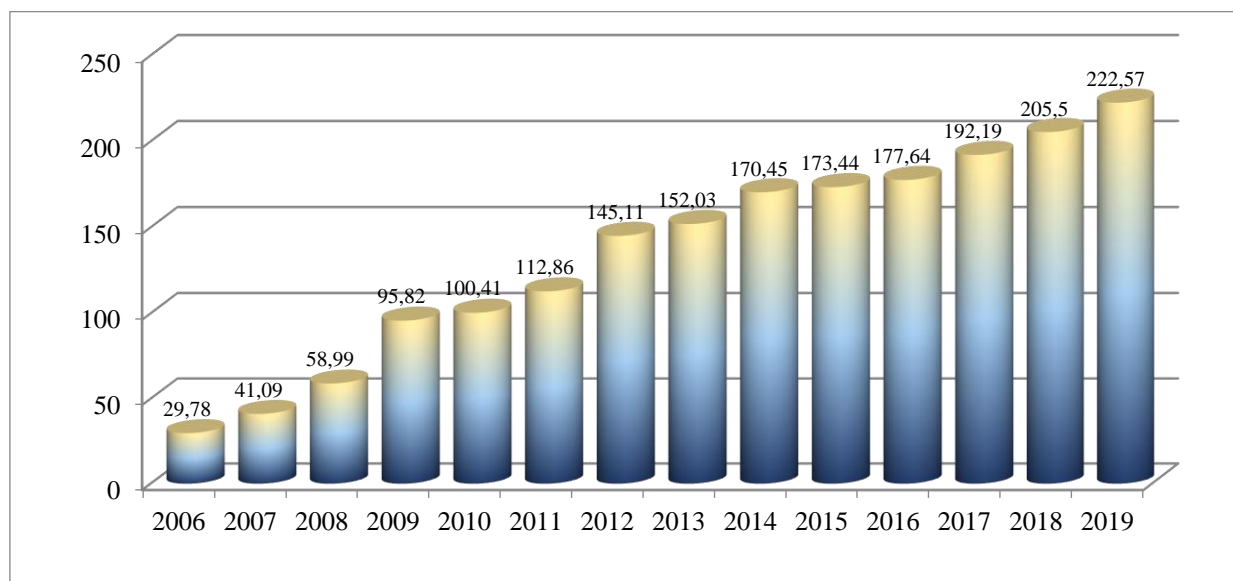


**Рисунок 6. Динамика суммы среднемесячной трудовой пенсии в Азербайджанской Республике за 2005-2018 годы, на начало года, манат (подготовлено автором на основе отчетов и материалов Министерства Труда и Социальной Защиты Азербайджанской Республики. http://sosial.gov.az/)**

Как видно из Рисунка 6, рост суммы среднемесячной трудовой пенсии в стране за 2005-2018 годы составил почти 7,5 раза и на начало 2019 года данный показатель был на уровне 222,57 манат или почти 131 долл. США.

Отметим, что в стране уделяется большое внимание совершенствованию законодательной базы системы государственного страхования, особенно вопросам обеспечения достойных трудовых пенсий. Так, Указом Президента Азербайджана от 7 марта 2006 года началось применение Закона АР «О трудовых пенсиях» [14]. Кроме того, для совершенствования и повышения мотивации граждан страны, для формирования фондов и диверсификации доходов страховых выплат были проведены многочисленные изменения существующих правил и нормативов на основе «Концепции реформы пенсионной системы Азербайджана в 2014-2020 годах», утвержденной Указом Президента Азербайджанской Республики от 12 ноября 2014 года [15]. Так же, Указом Президента страны от 6 марта 2006 года были внесены изменения в Указа Президента "О применении закона Азербайджанской Республики «О трудовых пенсиях» и применении Закона от 30 ноября 2018 года «О трудовых пенсиях Азербайджанской Республики» 21 декабря 2018 года [16]. Кроме того, были внесены соответствующие изменения в Закон АР «О применении Закона АР «О трудовых пенсиях» согласно Указу Президента страны от 22 апреля

2019 года [17]. Так же ежегодно рассматривается и утверждается бюджет социального Фонда страны. Вследствие этого соответствующими государственными исполнителями власти по Указу Президента страны от 21 декабря 2018 года был утвержден государственный бюджет на 2019 год [18]. Одновременно другим Указом Президента страны от 21 декабря 2018 года был внесен ряд изменений в Закон «О социальном страховании» [19]. Руководство страны последовательно проявляет инициативы по усилению социальной защиты и повышению уровня жизненного состояния населения. Об этом свидетельствует и Распоряжение Президента страны от 25 февраля 2019 года «О дополнительных мерах в области усиления социальной защиты населения» [20]. Этим Распоряжением повышен размер социальных пособий разных слоев малообеспеченного населения. Кроме того, Распоряжением Президента страны от 7 февраля 2019 года «Об индексации страховой части трудовых пенсий» было обеспечено повышение страховой части всех видов трудовых пенсий [21]. Согласно Закону Азербайджанской Республики от 30 ноября 2018 года, прожиточный минимум в стране на 2019 год установлен в размере 180 манат: для трудоспособного населения - 191 манат, для пенсионеров 149 манат и для детей 160 манат [22].

Таким образом, можно отметить, что в Азербайджане последовательно совершенствуются основные механизмы и

инструменты системы государственного социального страхования в условиях роста глобальных социальных и экономических угроз. Сейчас интенсивно продолжается реализация стратегических целей по модернизации основных секторов экономики страны, применение новейших технологий, углубление экономических и институциональных реформ, повышение надежности системы социального обеспечения населения страны, эффективное использование финансовых ресурсов, расширение финансовых услуг и укрепление важных механизмов системы государственного социального страхования [23; 24]. В ближайшей перспективе ожидается существенное улучшение механизмов и подходов по совершенствованию моделей развития системы государственного социального страхования в Азербайджане с учетом приоритетных задач и стратегических целей государства по улучшению жизненного состояния населения и, в целом, по устойчивому развитию страны в долгосрочной перспективе.

## References:

1. Volkova, O. A., & Grebennikova, Y. A. (2016). Sotsiologicheskiye modeli sistemy sotsial'noy zashchity naseleniya. *Vestnik Permskogo universiteta. Filosofiya. Psikhologiya. Sotsiologiya, №2 (26)*, pp.51-59.
2. (1997). Zakon Azerbaydzhanskoy Respubliki «O sotsial'nom strakhovanii». Baku, 18 fevralya 1997 goda, № 250-IG.
3. (2001). Zakon Azerbaydzhanskoy Respubliki «O lichnom uchete v sisteme gosudarstvennogo sotsial'nogo strakhovaniya». Baku, 27 noyabrya 2001 goda.
4. Atashov, B. K., Alekberov, A. A., & Khudiyev, N. N. (2018). *Strakhovoye delo.* (p.416). Baku.
5. Kolesnikov, Y. A. (2006). Sotsial'no-ekonomicheskoye znacheniye strakhovaniya. *Sotsiologiya vlasti, №2,* p.154-159.
6. Ivanova, Y. (n.d.). *Sotsial'no-ekonomicheskaya sushchnost' strakhovaniya i yego znacheniye*. Retrieved 2019, from http://www.socstrah23.ru/ekon-i-soc-neobh/
7. Deykin, K. (n.d.). *Vliyaniye global'nogo finansovogo krizisa na sistemy sotsial'nogo strakhovaniya i pensionnoy sistemy.* Retrieved 2019, from http://www.actuaries
8. Gadzhiyasulov, M. M. (2013). Sovershenstvovaniye sistemy obyazatel'nogo sotsial'nogo strakhovaniya na osnove kontseptsii sotsial'no-strakhovogo marketinga. *Finansy i kredit, №36 (564)*, pp.52-56.
9. Yermak, A. L. (2007). *Sovershenstvovaniye sistemy obyazatel'nogo sotsial'nogo strakhovaniya v sovremennoy Rossii*. Diss. kand. ekon. nauk. (p.183). Moscow.
10. Rzhevskaya, M. A., & Stepanenko, V. V. (2018). Problemy sistemy gosudarstvennogo sotsial'nogo strakhovaniya v Rossii. *Vestnik Saratovskogo gosudarstvennogo sotsial'no-ekonomicheskogo universiteta, №3 (72)*, pp.134-138.
11. Vasil'yev, A. V. (2018). Problemy sotsial'nogo strakhovaniya i strategiya yego razvitiya v Rossiyskoy Federatsii. *Molodoy uchenyy, №50*, pp.223-224.
12. Roik, V. D. (2014). *Sotsial'noye strakhovaniye: uchebnik.* (p.17). Moscow: Yurayt.
13. Sharafetdinov, A. A. (2004). *Problemy i puti sovershenstvovaniya vidov i form sotsial'nogo obespecheniya i sotsial'noy zashchity naseleniya v RF*. Diss. kand. ekon. nauk. (p.152). Moskva.
14. (2006). Ukaz Prezidenta Azerbaydzhanskoy Respubliki o primenenii Zakona AR «O trudovykh pensiyakh». Baku.
15. (2014). Kontseptsiya reformy pensionnoy sistemy Azerbaydzhana v 2014-2020 godakh. Utverzhdena Ukazom Prezidenta Azerbaydzhanskoy Respubliki ot 12 noyabrya 2014 goda.
16. (2018). Ukaz Prezidenta Azerbaydzhanskoy Respubliki o vnesenii izmeneniy v Ukaz Prezidenta ot 6 marta 2006 goda, № 377 «O primenenii zakona Azerbaydzhanskoy Respubliki «O trudovykh pensiyakh» i primeneniya Zakona ot 30 noyabrya 2018 goda «O trudovykh pensiyakh Azerbaydzhanskoy Respubliki». 21 dekabrya 2018 goda. Baku.
17. (2019). Ukaz Prezidenta Azerbaydzhanskoy Respubliki «O vnesenii izmeneniy v Ukaz Prezidenta AR ot 6 marta 2006 goda, № 377 «O primenenii Zakona AR «O trudovykh pensiyakh». 22 aprelya 2019 goda. Baku.

18. (2018). Ukaz Prezidenta Azerbaydzhanskoy Respubliki o primenenii Zakona Azerbaydzhanskoy Respubliki ot 30 noyabrya 2018 goda «O gosudarstvennom byudzhete 2019 goda sootvetstvuyushchimi gosudarstvennymi ispolnitelyami vlasti, osushchestvlyayushchimi sotsial'noye obespecheniye i zashchitu». 21 dekabrya 2018 goda. Baku.

19. (2018). Ukaz Prezidenta Azerbaydzhanskoy Respubliki o vnesenii izmeneniy v Ukaz Prezidenta Azerbaydzhanskoy Respubliki ot 7 aprelya 1997 goda, № 568 «O primenenii Zakona AR «O sotsial'nom strakhovanii» i primenenii Zakona AR ot 30 dekabrya 2018 goda, № 1360 «Ob izmeneniyakh Zakona AR «O sotsial'nom strakhovanii»». 21 dekabrya 2018 goda. Baku.

20. (2019). Rasporyazheniye Prezidenta Azerbaydzhanskoy Respubliki «O dopolnitel'nykh merakh v oblasti usileniya sotsial'noy zashchity naseleniya», 25 fevralya 2019 goda. Baku.

21. (2019). Rasporyazheniye Prezidenta Azerbaydzhanskoy Respubliki «Ob indeksatsii strakhovoy chasti trudovykh pensiy», 07 fevralya 2019 goda. Baku.

22. (2018). Zakon Azerbaydzhanskoy Respubliki o prozhitochnom minimume v Azerbaydzhanskoy Respublike na 2019 god. 30 noyabrya 2018 goda. Baku.

23. (2016). Strategicheskiye dorozhnyye karty o razvitii finansovykh uslug v Azerbaydzhanskoy Respublike. Utverzhdeno Ukazom Prezidenta Azerbaydzhankoy Respubliki ot 6 dekabrya 2016 goda.

24. (2016). Strategicheskiye dorozhnyye karty po natsional'noy ekonomike i osnovnym sektoram ekonomiki. Utverzhdeno Ukazom Prezidenta Azerbaydzhankoy Respubliki ot 6 dekabrya 2016 goda.

**SECTION 31. Jurisprudence.**

QR – Issue    QR – Article

**Irina Leonidovna Vishnevskaya**
IP.Pravovaya information and services
Subject image of forensic examination, Russia,
Vishnevskaya4@gmail.com

# THE STRUCTURE OF THE UNIVERSAL ACTIVITIES IN THE FORENSIC EXAMINATION

*Abstract*: The article deals with the main aspects that determine the system relationships that form the structure of all-General activities in forensic examination; reveals the mechanism of preservation of the basic properties of activity, manifested in the dynamics of differences that form the difference of features, the totality of which ensures the integrity of the result, based on scientific methodology.

*Key words*: the action structure of activities, the categories of structure, structural system analysis in sedopro-the production of legal laws judicial-expert activity, concept, process sedopro the production.

*Language*: Russian

*Citation*: Vishnevskaya, I. L. (2019). The structure of the universal activities in the forensic examination. *ISJ Theoretical & Applied Science, 06 (74),* 586-590.

*Soi*: http://s-o-i.org/1.1/TAS-06-74-72    *Doi*: crossref https://dx.doi.org/10.15863/TAS.2019.06.74.72

## СТРУКТУРА ВСЕОБЩЕЙ ДЕЯТЕЛЬНОСТИ В СУДЕБНОЙ ЭКСПЕРТИЗЕ

*Аннотация*: В статье рассмотрены основные аспекты, определяющие системные связи, образующие структуру всеобщей деятельности в судебной экспертизе; раскрывается механизм сохранения основных свойств деятельности, проявляющийся в динамике различий, формирующих разницу признаков, совокупность которых, обеспечивает целостность полученного результата, основанного на научной методологии.

*Ключевые слова*: действие, структура деятельности , категории структуры, структурно-системный анализ в судопроизводстве, правовые закономерности судебно-экспертной деятельности, концепция, процесс в судопроизводстве.

**Introduction**

**УДК 34.037**

Рассматривая понятие структуры, определяются основные критерии судопроизводства, составляющими которых, является судебная экспертиза.

Диалектический метод, являющийся основой судебной экспертной деятельности, определяет категорию структуры, обеспечивающую динамику познания.

В результате, деятельность судебной экспертизы, как процессуального действия, образует систему закономерностей правового и научного характера, определяя упорядоченность и динамику неоспоримости полученных доказательств. Если относиться к деятельности судебной экспертизы как научно-практической с определенным целостным результатом, то формируются её структуры организационного, правового и методологического характера.

**Materials and Methods**

Судебная экспертиза, состоящая из различных видов и форм исследования, определяет систему взаимодействий субъекта, объекта, права, объединяет ее задачи в процессе доказывания. Поэтому в экспертной деятельности важнейшая роль отводится индивидуальным и интеллектуальным качествам эксперта, поскольку, познание осуществимо субъектом, имеющим личностный характер [1, с. 57].

Коммуникативная деятельность возникает во взаимодействии с участниками процесса как и конструктивная, связанная с планированием процесса производства судебной экспертизы [2, с.63].

Организаторская деятельность судебного эксперта связывается с конструктивной, так как учитывает планирование предстоящей работы относительно основного процесса судопроизводства. Это позволяет судебному эксперту реализовать практически планы и решения в проведении профессиональной деятельности относительно её всеобщей структуры. Базисной характеристикой деятельности судебной экспертизы является систематичность, способствующая накоплению опыта практической работы, методик и расчетов. При этом создается возможность прогнозирования заданных действий, причин и следствий. Возникает банк профессиональных умений, исходя из анализа накопленных данных из судебной практики. Профессиональная деятельность судебного эксперта имеет характеристики учебной деятельности, состоящей из действий ориентировочного, исполнительного и контрольного содержания, которые через логической операции определяют мысленный переход от частного к общему заданной модели абстрактного содержания. В итоге система действий, объединенная единым доказательным мотивом обеспечивает достижение цели деятельности судебной экспертизы [3, с.115].

Для всякой деятельности и судебная экспертиза не исключение, посредством логических операций с определенной мотивацией, происходит изменение самого субъекта, в части его умственной и пространственной организации. Из чего следует, что деятельность судебной экспертизы проходит путь интериоризации, то есть, взаимодействия и превращения из внешнего мира реальной деятельности во внутренний мир умственной деятельности. То есть, из определённых операционных действий, объединенных одной мотивацией и целью, происходит преобразование из множества объективных предметов и причин, в единое развитие мировоззрения отдельного субъекта [4, с. 48] .

Таким образом, установлена единая психологическая составляющая всеобщей структуры деятельности судебной экспертизы, поскольку, включает действия по принятию решения, его реализации и контролю [8, с.79].

Рассматривая множество понятий и отношений анализируемого процесса можно определить единство и неоспоримость доказательств в судебной экспертизе, которое формирует действие, как структуру начальной ориентировочной части деятельности. Это приводит к быстрому принятию решения, которое обеспечивает правильное исполнение действий, рациональный выбор единственного решения,

являющегося одним из множества возможных [5, с.247].

Базисность социального познания, составляющего основу всеобщей деятельности судебной экспертизы как научного обобщения, описывает и объясняет факты, которые прогнозируют новые отношения, анализирующих процессы по дифференцированным признакам.

Из этого следует, что наиболее определяющая роль в деятельности судебной экспертизы, как творческого процесса, отводится индивидуальным качествам эксперта с одновременным присутствием закономерностей, последовательностей выстроенной всеобщей структуры деятельности судебной экспертизы [6, с.94].

Судебное заключение основанное на гносеологическом познании субъектом объекта, последовательность действий применения научно-обоснованных методов, в соответствии со статьями 4,5 №73-ФЗ от 31.03.2001 г., является документом, с выраженной системой множеств, исследуемых отношений, следствием которых, является доказательство единого целого, метод дедукции, как одного из средств логических доказательств. В результате, концепция всеобщей деятельности судебной экспертизы, как и ее структура, обозначается определённой системой взаимодействий тождеств или противоположностей [8, с.57].

Руководствуясь выстроенной методологией, упорядоченной динамикой производства судебных экспертиз, выявляются важные составляющие факторы творческого исследования.

Следовательно, объект, вошедший в установленный круг ориентировочной основы действия подвергается аналитическому исследованию [10, с.126].

Таким образом, прикладная основа деятельности судебной экспертизы обуславливает синтез научных и практических знаний, обуславливая динамику исследовательской работы, на уровне внутренних, умственных действий.

Возникающая система отношений определяет, что накопленные профессиональные знания эксперта, формируют адекватную систему умственных действий, характеризуя ее, как единый процесс.

Характеризуя деятельность судебной экспертизы, как адекватную систему действий, при которой происходит накопление необходимых знаний с увеличением их диапазона, в связи с обширной судебной практикой, то формируется система познавательных действий заданной логики. Это определяет характер

Clarivate Analytics *indexed*

процесса экспертной деятельности и приводит к расширению аналитических профессиональных возможностей [12, с.27].

Действие определено единицей психологического анализа в планомерном переходе от гипотезы к теории системного строения, где разрозненные, как дискретные частицы, элементы и связи, формируют образование нового единого целого. Следовательно, такая единица, анализа, обогащенная элементами различной психологической природы, становится уже системой, порождая уже следующие теории познания, необходимые в деятельности судебной экспертизы, такие, как дедукция, индукция правового пространства [13, с.58].

Данные базисные понятия, о том, что познание субъектом объекта неразрывно связано, как единство бытия, определяют идеи субъективизма и индивидуализма в социальном познании.

В целом, познание есть творческий процесс, который проводит субъект жизнедеятельности. Это приводит к понятию о том, что познание организуется лишь человеком, который и есть предпосылка всякой социальной активности, всякого философского познания. Уровень субъектно-объектных отношений формируется только человеком, который организует орудийный процесс отношений с социальной средой. Это приводит к образованию личностных отношений с образом мира – мерой ответственности жизненных интересов [5, с.118].

Деятельность судебной экспертизы полностью раскрывается через психологическую теорию деятельности, которая устанавливает все аспекты профессионального образа судебного эксперта, выявляющего составляющие деятельности судебной экспертизы, устанавливающего сложные закономерности информации через её обработку и перекодировку отношений исследуемых процессов.

Таким образом, прикладной характер деятельности судебной экспертизы, определяет основные виды судебно-экспертной деятельности – познавательную, конструктивную, коммуникативную, воспитательную и организаторскую.

Познавательная деятельность, как гносеологическая составляющая деятельности, направлена на получение достоверных знаний, адекватно отражающих познавательный объект, и основана на применении специальных знаний, используемых при отборе и выявлении информационных сигналов, фактов, содержащихся в объектах исследования [9, с.73].

Основываясь на приобретенном профессиональном опыте эксперт, выступая субъектом деятельности, становится автором ориентировочной основы действия, на которую в процессе деятельности накладываются знания, факты, входящие в круг уже определённой основы.

Для достижения цели и получения необходимых выводов в процессе доказывания, то есть, успеха деятельности, важно формирование степени обобщения набранных ориентиров, профессиональных знаний, методик классических расчетов.

В судебной экспертизе важная роль отводится процессуальным действиям, как правовой основы структуры всеобщей деятельности судебной экспертизы. Только при соблюдении процесса судопроизводства, представленного в статьях процессуальных кодексов, возможно принятие или не принятие сформированных доказательств, то есть, оценка судом или следствием достигнутых результатов судебного эксперта. Формулируя факторы и составляющие основных аспектов деятельности судебной экспертизы, важное место в экспертном исследовании отведено фактам, относящимся к делу, в том или ином судопроизводстве. Факт это особое предложение, несущее определенное эмпирическое знание, но в зависимости от выбранной позиции теоретических знаний может изменяться. Следовательно, факт в деятельности судебной экспертизы расценивается в качестве исходного, обуславливающего выбор дальнейших исследований. Следовательно, как метод визуализации в деятельности судебной экспертизы может быть принят, как перцептивное действие, как считывание информации объектов, моделей без их изменений, но являющихся основой дальнейших действий,

Процесс подбора методов исследования, для достижения конечного результата – это формирование выводов произведенного исследования. Исследуемое перцептивное действие, которое является единицей деятельности с определённой структурой, состоит из определенных частей - ориентировочной части, исполнительной, корректировочной и контрольной [13, с.49].

Следуя назначению предмета деятельности судебной экспертизы, непосредственно связанной с психологическими аспектами, существенное значение наряду с логическими операциями имеют интеллектуально - идентификационные свойства, такие как запоминание, восприятие, представление. Понятие о восприятии окружающих процессов относящееся к непосредственной деятельности судебной

экспертизы имеет психологическое содержание поскольку участвует в извлечении информации об исследуемом объекте, то есть включает в себя определенные действия, связанные с обследованием. Пользуясь содержанием выбранной ориентировки для конкретного исследования, субъект в непосредственной деятельности для выбора определенных методик, расчетов получает свойства, признаки, необходимые при формировании результатов соответствующей структуры всеобщей деятельности судебной экспертизы [11, с.87].

Общим результатом процесса развития структуры всеобщей деятельности судебной экспертизы являются умственные действия, направленные на формирование общей цели результатов профессиональной деятельности судебного эксперта. Возникающие процессы интериоризации и экстериоризации всеобщей деятельности профессионалов-экспертов отражают механизмы воспитания, развития и совершенствования профессионального мастерства специалистов судебной экспертизы. При этом возникает последовательность действий отражающих системную ориентировку в предмете установленной проблемы.

В процессе всеобщей деятельности судебной экспертизы, как умственного процесса, исходя из судебной практики происходит совмещение этих двух противоположных направлений движения исследовательского процесса в деятельности судебного эксперта.

В активной всеобщей деятельности судебного эксперта психологическая теория деятельности, общий системный анализ и теория планомерного формирования умственных действий принимают прикладной характер с применением социального опыта науки и различных методик теории научного познания и накопленного экспертного мастерства. При этом максимальный профессиональный эффект в организации судебной экспертизы возникает при сбалансированном соотношении процессов науки и практики с построением адекватных умственных действий экспертной судебной деятельности, прошедшей поэтапный путь развития.

В целом, формируется адекватная система деятельности, действий судебного эксперта на основе составления системного типа ориентировки в предмете и организации самой профессиональной деятельности, направленной на построение абсолютной схемы судебной экспертизы целостно-системного характера.

**Conclusion**

Исследовательский процесс построения структуры всеобщей деятельности судебной экспертизы включает возможности обобщения различных признаков и свойств объектов относительно их осмысления и придания им характеристик системности. Профессионализм формирования данной деятельности задаётся механизмами организации ориентировочной основы действия, на основе обобщения и систематизации свойств предметов и деятельностей, составляющих основу содержания успешности построения судебной экспертизы. При этом возникает мера самостоятельности относительно разделенности перехода экспертного действия из внешнего плана во внутренний и из разделенного в самостоятельное профессиональное действие судебного эксперта. Это обуславливает творческую основу судебных исследований и индивидуальную ответственность мера которой, установлена статьей УК РФ № 307, и статьями № 73-ФЗ от 31.05.2001 года (с изменениями на 2017 год) «О судебной экспертной деятельности» [7, с.48].

Формирование и исследование структуры обобщённой деятельности судебного эксперта связывается с построением всего профессионального цикла экспертной деятельности, содержание которого выражает единство выполнения всего круга законов процессуального характера, преломлённого через построение высшего уровня целостно-системной экспертной деятельности.

**References:**

1. Aver'yanova, T. V. (2017). *Kurs obshchej teorii sudeb-noj ekspertizy*. (p.407). Moscow: Norma.
2. Arsen'ev, V. D. (1964). *Voprosy obshchej teorii su-debnyh dokazatel'stv*. (p.179). Moscow: Yurid. Literatura.
3. Belkin, P. C. (1964). *Sobiranie, issledovanie i ocenka dokazatel'stv*. (p.295). Moscow: Yurid. Literatura.
4. Gal'perin, P. Y. (2000). *Vvedenie v psihologiyu*. (p.336). Moscow: Universitet.

5. Gegel' (1990). *Filosofiya prava*. (p.526). Moscow: JT.

6. Dulov, A. B. (1975). *Sudebnaya psihologiya*. (p.464). Minsk: Vyshejsh. SHkola.

7. (2003). *Kommentarij k Federal'nomu zakonu «O gosudarstvennoj sudebno-ekspertnoj deyatel'nosti v Rossijskoj Federacii» ot 31 maya 2001 g.* / Pod obshch. red. Kashepova V.P. (Eds.). (p.240). Moscow: Yusticin-form.

8. Leont'ev, A. N. (1975). D*eyatel'nost'. Soznanie. Lich-nost'*. (p.304). Moscow: Politizdat.

9. Majlis, N. P. (2006). *Moya professiya sudebnyj ekspert*. (p.168). Moscow: SHCHit-M.

10. Mishchik, S. A. (2014). *Mathematical modeling system integrity-curricular activities – the second problem pedagogometriki*. Materialy Mezhdunarodnoy nauchnoy konferenctsii "European Innovation" – 30.09.2014. ISJ Theoretical &Applied Science, 9(17), pp.126-128. http://dx.doi.org/10.15863/TAS.2014.09.17.21

11. Obozov, H. H. (1990). *Psihologiya mezhlichnostnyh otnoshenij*. (p.191). Kiev: Nauka.

12. Reshetova, Z. A. (2013). K voprosu o mekhanizmah usvoeniya i razvitiya. *Nacional'nyj psihologiche-skij zhurnal, № 1(9)*, pp.25–32.

13. Talyzina, N. F. (1984). *Upravlenie processom usvoeniya znanij*. (p.345). Moscow: MGU.

Clarivate
Analytics indexed

# Contents

p.

Clarivate
Analytics **indexed**

# International Scientific Journal
# Theoretical & Applied Science
## www.T-Science.org

**«ISJ Theoretical & Applied Science, USA»** - Международный научный журнал зарегистрированный во Франции, и выходящий в электронном и печатном формате. **Препринт** журнала публикуется на сайте по мере поступления статей.

Все поданные авторами статьи в течении 1-го дня размещаются на сайте **http://T-Science.org**.

Печатный экземпляр рассылается авторам в течение 2-4 дней после 30 числа каждого месяца.

## Импакт фактор журнала

| Impact Factor | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|
| **Impact Factor JIF** | | 1.500 | | | | | |
| **Impact Factor ISRA (India)** | | 1.344 | | | | 3.117 | |
| **Impact Factor ISI (Dubai, UAE)** based on International Citation Report (ICR) | 0.307 | 0.829 | | | | | |
| **Impact Factor GIF (Australia)** | 0.356 | 0.453 | 0.564 | | | | |
| **Impact Factor SIS (USA)** | 0.438 | 0.912 | | | | | |
| **Impact Factor РИНЦ (Russia)** | | 0.179 | 0.224 | 0.207 | 0.156 | | |
| **Impact Factor ESJI (KZ)** based on Eurasian Citation Report (ECR) | | 1.042 | 1.950 | 3.860 | 4.102 | 6.015 | 8.716 |
| **Impact Factor SJIF (Morocco)** | | 2.031 | | | | 5.667 | |
| **Impact Factor ICV (Poland)** | | 6.630 | | | | | |
| **Impact Factor PIF (India)** | | 1.619 | 1.940 | | | | |
| **Impact Factor IBI (India)** | | | 4.260 | | | | |
| **Impact Factor OAJI (USA)** | | | | | | 0.350 | |

Clarivate Analytics **indexed**

## INDEXING METADATA OF ARTICLES IN SCIENTOMETRIC BASES:

**International Scientific Indexing ISI (Dubai, UAE)**
http://isindexing.com/isi/journaldetails.php?id=327

**Cl.An. // THOMSON REUTERS, EndNote (USA)**
https://www.myendnoteweb.com/EndNoteWeb.html

Research Bible (Japan)
http://journalseeker.researchbib.com/?action=viewJournalDetails&issn=23084944&uid=rd1775

Scientific Object Identifier (SOI)
http://s-o-i.org/

РИНЦ (Russia)
http://elibrary.ru/contents.asp?issueid=1246197

Google Scholar (USA)
http://scholar.google.ru/scholar?q=Theoretical+t-science.org&btnG=&hl=ru&as_sdt=0%2C5

**Turk Egitim Indeksi (Turkey)**
http://www.turkegitimindeksi.com/Journals.aspx?ID=149

**Directory of abstract indexing for Journals**
http://www.daij.org/journal-detail.php?jid=94

DOI (USA)
http://www.doi.org

CrossRef (USA)
http://doi.crossref.org

**Open Academic Journals Index (Russia)**
http://oaji.net/journal-detail.html?number=679

**Collective IP (USA)**
https://www.collectiveip.com/

Japan Link Center (Japan) https://japanlinkcenter.org

PFTS Europe/Rebus:list (United Kingdom)
http://www.rebuslist.com

Kudos Innovations, Ltd. (USA)
https://www.growkudos.com

Korean Federation of Science and Technology Societies (Korea)
http://www.kofst.or.kr

AcademicKeys (Connecticut, USA)
http://sciences.academickeys.com/jour_main.php



Cl.An. // THOMSON REUTERS, ResearcherID (USA)
http://www.researcherid.com/rid/N-7988-2013



RedLink (Canada)
https://www.redlink.com/



TDNet
Library & Information Center Solutions (USA)
http://www.tdnet.io/



RefME (USA & UK)
https://www.refme.com



**Sherpa Romeo (United Kingdom)**
http://www.sherpa.ac.uk/romeo/search.php?source=journal&sourceid=28772





Cl.An. // THOMSON REUTERS, ORCID (USA)
http://orcid.org/0000-0002-7689-4157



Yewno (USA & UK)
http://yewno.com/



**Stratified Medical Ltd. (London, United Kingdom)**
http://www.stratifiedmedical.com/

**THE SCIENTIFIC JOURNAL IS INDEXED IN SCIENTOMETRIC BASES:**



**Advanced Sciences Index (Germany)**
http://journal-index.org/



**Global Impact Factor (Australia)**
http://globalimpactfactor.com/?type=issn&s=2308-4944&submit=Submit



**SCIENTIFIC INDEXING SERVICE (USA)**
http://sindexs.org/JournalList.aspx?ID=202



**International Society for Research Activity (India)**
http://www.israjif.org/single.php?did=2308-4944

**CiteFactor (USA) Directory Indexing of International Research Journals**

http://www.citefactor.org/journal/index/11362/theoretical-applied-science

**JIFACTOR**

http://www.jifactor.org/journal_view.php?journal_id=2073

**Eurasian Scientific Journal Index (Kazakhstan)**

http://esjindex.org/search.php?id=1

**SJIF Impact Factor (Morocco)**

http://sjifactor.inno-space.net/passport.php?id=18062

**InfoBase Index (India)**

http://infobaseindex.com
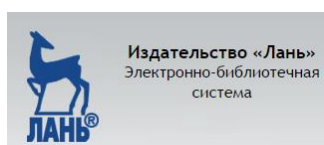
**Электронно-библиотечная система «Издательства «Лань» (Russia)**

http://e.lanbook.com/journal/

**International Institute of Organized Research (India)**

http://www.i2or.com/indexed-journals.html

**Journal Index**

http://journalindex.net/?qi=Theoretical+%26+Applied+Science

**Open Access Journals**

http://www.oajournals.info/

**Indian citation index (India)**

http://www.indiancitationindex.com/

**Index Copernicus International (Warsaw, Poland)**

http://journals.indexcopernicus.com/masterlist.php?q=2308-4944

Clarivate Analytics **indexed**

**Clarivate Analytics** indexed

Clarivate
Analytics **indexed**