

SOI: 1.1/TAS

DOI: 10.15863/TAS

Scopus ASJC: 1000

ISSN 2308-4944 (print)

ISSN 2409-0085 (online)

№ 06 (86) 2020

Teoretičeskaâ i prikladnaâ nauka

Theoretical & Applied Science



Philadelphia, USA

**Teoretičkaâ i prikladnaâ
nauka**

**Theoretical & Applied
Science**

06 (86)

2020

International Scientific Journal

Theoretical & Applied Science

Founder: **International Academy of Theoretical & Applied Sciences**

Published since 2013 year. Issued Monthly.

International scientific journal «Theoretical & Applied Science», registered in France, and indexed more than 45 international scientific bases.

Editorial office: <http://T-Science.org> Phone: +777727-606-81

E-mail: T-Science@mail.ru

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h Index RISC = 1 (78)

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ISSN 2308-4944



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International Scientific Journal

Theoretical & Applied Science

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International Scientific Journal
Theoretical & Applied Science



ISJ Theoretical & Applied Science, 06 (86), 790.
Philadelphia, USA



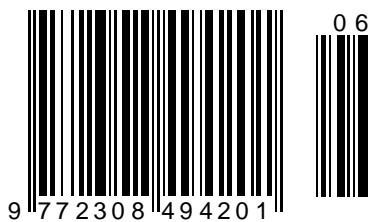
Impact Factor ICV = 6.630

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

The percentage of rejected articles:



ISSN 2308-4944



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GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
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PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 15.06.2020 <http://T-Science.org>

QR – Issue



QR – Article



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TO ISSUES OF DEVELOPMENT OF ENTREPRENEURSHIP IN THE REGIONS: THEORY AND PRACTICE OF UZBEKISTAN (ON THE MATERIALS OF ANDIZHAN REGION)

Abstract: The relevance of the study is determined by the growing demand for entrepreneurship, which is given the opportunity to solve problems of various nature and scale in the changing economy of Uzbekistan. Under these conditions, there is a need to develop the theoretical foundations of entrepreneurship, especially since in the theory of entrepreneurship there are numerous methodological problems that lead to misleading results.

The article considers various theories and approaches to the definition of entrepreneurship in economic theory. The directions of the development of theoretical and methodological aspects to determine the concept of "entrepreneurship" inherent in modern trends in the economy are identified.

The current state of development of the main business sectors in the country has been studied in detail. The state and economic indicators of entrepreneurship development in Andijan region are analyzed. Identified problems weaknesses in the development of small business in the region. Based on this, the author suggests some directions for further enhancing the development of entrepreneurship in the Andijan region of the Republic of Uzbekistan.

Key words: business, entrepreneurship, small business, entrepreneurship efficiency, regional economy, national economy of Uzbekistan.

Language: Russian

Citation: Kurpayanidi, K. I. (2020). To issues of development of entrepreneurship in the regions: theory and practice of Uzbekistan (on the materials of Andizhan region). *ISJ Theoretical & Applied Science*, 06 (86), 1-10.

Soi: <http://s-o-i.org/1.1/TAS-06-86-1> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.06.86.1>

Scopus ASCC: 2000.

К ВОПРОСАМ РАЗВИТИЯ ПРЕДПРИНИМАТЕЛЬСТВА В РЕГИОНАХ: ТЕОРИЯ И ПРАКТИКА УЗБЕКИСТАНА (НА МАТЕРИАЛАХ АНДИЖАНСКОЙ ОБЛАСТИ)

Аннотация: Актуальность исследования определяется растущим спросом на предпринимательство, которому предоставляются возможности решения проблем различного характера и масштаба в меняющейся экономике Узбекистана. В этих условиях возникает необходимость развивать теоретические основы предпринимательства, тем более что в теории предпринимательства существуют многочисленные методологические проблемы, которые приводят к вводящим в заблуждение результатам.

В статье рассмотрены различные теории и подходы к определению предпринимательства в экономической теории. Выявлены направления развития теоретико-методологических аспектов по определению понятия «предпринимательство», присущие современным тенденциям в экономике.

Подробно изучено современное состояние развития основных секторов предпринимательства в стране. Проанализировано состояние и экономические показатели развития предпринимательства в

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Андижанской области. Выявлены проблемы слабые стороны в развитии малого бизнеса в области. На основе этого автор предлагает некоторые направления дальнейшей активизации развития предпринимательства в Андижанской области Республики Узбекистан.

Ключевые слова: бизнес, предпринимательство, малый бизнес, эффективность предпринимательства, региональная экономика, национальная экономика Узбекистана.

Введение

Развитие экономики Республики Узбекистан требует активной модернизации предпринимательства, важное место в котором занимает малый и средний бизнес. Такая форма хозяйствования способствует укреплению экономического потенциала, обеспечивает решение социальных и научно-технических проблем, а также содействует росту благосостояния населения.

Предпринимательство как тип ведения хозяйства рассматривается в научных изданиях, посвящённых экономической теории и макроэкономического анализа уже в течение нескольких поколений экономистов. Формирование малых рыночных структур во всех без исключения отраслях и сферах экономики страны отвечает мирохозяйственным тенденциям экономических процессов, так как во всех странах мира в сфере малого бизнеса действует очень большое число небольших предприятий самого разнообразного профиля практически во всех отраслях [1].

Методология исследования

Методологическую основу исследования составляют исследовательский подход, аналоговый подход, диалектический подход, ситуационный подход, методы логического и сравнительного анализа, методы наблюдения и статические методы.

Анализ и результаты

В Республике Узбекистан в результате успешно осуществлённых реформ малый бизнес играет ключевую роль в модернизации национальной экономики страны. Современный малый и частный бизнес в Узбекистане рассматривается как целевая группа проводимых реформ и, что самое главное, как движущая сила трансформаций в социально-экономической и социально-политической сферах [2,3]. Сегодня предпринимательская деятельность осуществляется через институты рыночной инфраструктуры – совокупность взаимосвязанных проектно-технологических, информационных и производственно-организационных систем. Она позволяет проводить полный цикл предпринимательства - от начальной идеи до конечного практического воплощения в виде конкретного товара или услуги [4,5].

Предпринимательство – это поиск новых сфер рационализации и выгодного вложения ресурсов, осуществление новых комбинаций в производстве, движение на новые рынки,

создание новых продуктов. Оно нацелено на получение прибыли сверх среднего уровня путем наиболее полного удовлетворения потребностей на основе достижения успеха и лидерства в той или иной сфере экономической деятельности в создании новой продукции и технологии, в производстве или маркетинге. В законе Республики Узбекистан «О гарантиях свободы предпринимательской деятельности» дается следующее определение: «Предпринимательская деятельность (предпринимательство) инициативная деятельность, осуществляемая субъектами предпринимательской деятельности в соответствии с законодательством, направленная на получение дохода (прибыли) на свой риск и под свою имущественную ответственность» [6].

А теперь для точного анализа предпринимательство и его влияние на экономику правительства нужно сформулировать сущность предпринимательство. Для этого необходимо привести несколько точек зрения ученых-экономистов относительно экономической сущности предпринимательство.

В римском праве «предпринимательство» рассматривалось как занятие, дело, деятельность, особенно коммерческая. С точки зрения экономического аспекта, в мировой практике предпринимательство имеет разные толкования: «entrepreneur» (от французского слова «предприниматель»), «empresario» (с испанского - «бизнесмен»), «entrepreneur», «businessman», «business», «owner», «employer», «businessowner», «trader», «businessperson», «businesswoman» (с английского - «антрепренер», «бизнесмен», «бизнес», «владелец», «работодатель», «трейдер», «предпринимательница»), «impreditore» (с итальянского - «предприниматель»), «untemeher» (с немецкого - «бизнесмен»).

Английский экономист Ричард Кантильон предпринимателем считал человека с неопределёнными, нефиксированными доходами, который покупает чужие товары по известной цене, а продавать, будет свои по цене, ему пока неизвестной. Отсюда риск как главная отличительная черта предпринимателя [7].

Французский экономист конца XVIII - начала XIX вв. Жан Батист Сей характеризовал предпринимателя как лицо, которое берется за свой счёт и риск в свою пользу произвести какой-либо продукт. Он подчеркивал, что предприниматель занимается комбинированием факторов производства (капитал, труд, природные ресурсы). Сей довольно подробно описал

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специфические свойства предпринимателя и характер его доходов, часть которых является платой за его редкие предпринимательские способности [8].

Развитие теории предпринимательства в пределах физиократической школы отобразился в трудах французского экономиста и государственного деятеля А. Тюрго. Он впервые поставил под сомнение объективность отраслевого критерия в изучении классово-структуры общества, который разделял его на три класса: производительный (земледельцы), собственников (землевладельцы) и бесплодный (все остальные). А. Тюрго создал совершенную модель, в основу которой положил отношение к средствам производства. Бесплодный класс он разделил на предпринимателей-мануфактуристов и простых ремесленников, а производительный - на предпринимателей и простых рабочих. Часть прибыли, которая остается у предпринимателя, рассматривалась им как особый вид надбавки за предпринимательскую работу, риск и организаторское искусство. Таким образом, А. Тюрго пришел к выводу, что реализация предпринимательской функции требует не только рискованных капиталовложений, но и определенных управленческих способностей [9].

Шотландский экономист и основатель классической политэкономии А. Смит в своем труде «Исследование природы и причин богатства народов» дает характеристику предпринимателя. По определению А. Смита, предприниматель ради реализации определенной коммерческой идеи и получения прибыли идет на риск. Поэтому предпринимательская прибыль является компенсацией за риск. Предприниматель сам планирует, организует производство, реализует выгоды, связанные с разделением труда, распоряжается результатами производства [10, с. 340]. А. Смит характеризовал предпринимателя как собственника. Именно с такой точки зрения он рассматривал действия в экономической жизни, мотивацию, поведение, считал, что предприниматель в своей деятельности руководствуется только собственным интересом, имеет целью лишь собственную выгоду.

Английский экономист и представитель классической политэкономии Д. Рикардо характеризует предпринимателя как капиталиста, который ищет прибыльного применения для своих средств. Он считал предпринимателя только инвестором или обычным капиталистом, «который ищет прибыльного применения для своих средств, естественно, будет принимать во внимание все преимущества одного занятия перед другим. Поэтому он может уступить часть своего денежного дохода ради правильности размещения, опрятности, легкости или других действительных, или мнимых выгод, которыми

одно занятие отличается от другого» [11, с. 82]. Раскрыв причины и последствия перемещения капитала, Д. Рикардо не сделал предпринимательство предметом научного анализа в своих работах.

К началу XX века начинается осознание значения и роли института предпринимательства. Английский экономист А. Маршалл первым добавил к классическим факторам производства (земля, капитал, труд) четвертый фактор - организацию. А. Маршалл считал предпринимателей, с одной стороны, высококвалифицированными людьми, которые работают для удовлетворения потребностей общества, рискуют, а с другой, посредниками между рабочими физического труда и потребителями [12]. С этого времени понятие предпринимательство расширяется, как и выполнение им функций.

Немецкий экономист Вернер Зомбарт (конец XIX- начало XX вв.) отмечал, что предприниматель - это завоеватель, обладающий готовностью к риску, духовной свободой, богатством идей, волей и настойчивостью, это организатор, умеющий соединять многих людей для совместной работы [13].

Важное место в разработке подхода к предпринимательству занимает Й. Шумпетер. Согласно его определению быть предпринимателем «означает делать то, что не делают другие» и «делать так, как не делают другие» [14]. Й. Шумпетер считал главной целью предпринимательства сохранения капитала и обращал внимание на то, что предпринимательство основывается не только на праве собственности, но и на праве на самоуправление.

Во всех определениях предпринимательства и предпринимателя речь идет о таких свойствах и поведении, которые включают в себя комплекс понятий как новизна, организаторский талант, творческое начало, готовность рисковать нетрадиционное мышление, инициативность, ответственность и др.

Краткий экскурс в историю экономических учений подтверждает наличие фундаментальной основы в теории предпринимательства, ключевыми категориями которой являются функции, свойства, личностные качества и другие характеристики

Предпринимательство представляет собой неотъемлемый, объективно необходимый элемент любой развитой хозяйственной системы, без которого экономика и общество в целом не могут нормально существовать и развиваться. Он является вполне самостоятельной и наиболее типичной формой организации экономической жизни со своими особенностями, преимуществами и недостатками,

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закономерностями развития. Его двойственная роль подтверждена результатами анализа присущих малым предприятиям функций, классифицированных на целевые и инструментальные. К целевым функциям, благодаря которым развитие малого бизнеса является одной из макроэкономических задач государства, нами отнесены: его роль в сокращении безработицы, ускорении научно-технического прогресса, обеспечение социально-политической стабильности в обществе. А к инструментальным функциям – использование малого предпринимательства в целях ограничения тенденций монополизации экономики, содействие формированию среднего класса, заполнение малоэффективных для крупного бизнеса сегментов рынка [15].

Рассмотрим развитие предпринимательства в Республике Узбекистан. Развитие малого бизнеса и частного предпринимательства в регионах Узбекистана находится на пороге нового этапа. Малый бизнес является важнейшим элементом рыночной экономики, обеспечивающим гармоничное развитие регионов, во многом определяющим темпы экономического роста, структуру и качество валового внутреннего продукта. Одним из главных преимуществ малого бизнеса является то, что он неизбежно ведет к появлению конкуренции на отечественном рынке, что в свою очередь благоприятно влияет на экономическое состояние страны.

Для эффективного функционирования предпринимательства необходимы определенные экономические, социальные, правовые и инфраструктурные условия. В регионах Узбекистана сформированы необходимые условия для развития малого бизнеса и частного предпринимательства, о чем свидетельствует их

доля в ВВП (56,5%) и число занятых в экономике (от 77,6% до 83% в некоторых регионах) (Таб.1).

В целях совершенствования деятельности субъектов малого бизнеса и частного предпринимательства принят ряд нормативных и правовых актов. Указ Президента Республики Узбекистан №УП-4848 от 5 октября 2016 года «О дополнительных мерах по обеспечению ускоренного развития предпринимательской деятельности, всемерной защите частной собственности и качественному улучшению делового климата» направлен на дальнейшее усиление правовой защиты частной собственности, создание благоприятных условий и всемерную поддержку малого бизнеса и частного предпринимательства.

Создана институциональная база поддержки предпринимателей. В 2013 году при Национальном банке внешнеэкономической деятельности Узбекистана был создан «Фонд поддержки экспорта субъектов малого бизнеса и частного предпринимательства». Фонд имеет свои представительства в таких странах, как Южная Корея, Россия, Испания, Швейцария, Италия и Болгария. Представительство фонда оказывает содействие предпринимателям Узбекистана в экспорте продукции и поиске надежных партнеров, развитию контактов между деловыми кругами Узбекистана, организации участия предпринимателей Узбекистана в проводимых зарубежных выставках, ярмарках, тендерных торгах и бизнес-форумах. Кроме того, представительство содействует отечественным экспортерам в получении необходимых сертификатов, лицензий и других разрешительных документов для прохождения таможенных процедур в вышеперечисленных странах.

Таблица 1. Основные показатели малого предпринимательства¹

	ед.изм.	2018 г.	2019 г.	(+-)
Количество действующих малых предприятий и микрофирм	ед.	262930	334767	71837
Вновь созданные малые предприятия и микрофирмы	ед.	48922	92874	43952
Удельный вес малого предпринимательства в:				
ВВП	%	60,4	56,5	3,9
Промышленности	%	37,4	34,9	-2,5
Сельском, лесном и рыбном хозяйстве	%	98,3	98,3	-
Инвестициях	%	38,0	47,0	9,0
Строительстве	%	73,2	75,4	2,2
Торговле	%	86,3	84,3	-2,0

¹ Систематизировано авторами на основе данных Государственного комитета Республики Узбекистан по статистике.

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Услугах	%	56,0	52,1	-3,9
Перевозке грузов	%	55,5	54,6	-0,9
Грузообороте	%	79,6	77,4	-2,2
Перевозка пассажиров	%	89,6	90,7	1,1
Пассажираобороте	%	94,8	94,9	0,1
Экспорте	%	27,2	28,7	1,5
Импорте	%	56,2	54,2	-2,0

По данным Государственного комитета по статистике результате принимаемых мер по формированию деловой среды, всесторонней поддержке и дальнейшему стимулированию развития малого бизнеса и частного предпринимательства в январе-декабре 2019 года создано 92874 новых малых предприятий и микрофирм (без дехканских и фермерских хозяйств), что в 1,9 раз больше аналогичного периода 2018 года. Наибольшее количество малых предприятий и микрофирм создано в сфере торговли (39,1 %), промышленности (21,0 %), строительстве (9,4 %), сельском, лесном и рыбном

хозяйстве (8,0 %), услугах по проживанию и питанию (7,8 %), перевозке и хранении (3,2%).

В разрезе регионов наибольшая доля приходится на г. Ташкент и составляет в общем количестве вновь созданных малых предприятий и микрофирм 18252 ед., в Ташкентской области – 9671 ед., Самаркандской области – 7980 ед., Навоийской области – 7129 ед., Ферганской области – 6712 ед., Андижанской области – 6632 ед. На низком уровне данный показатель зафиксирован в Сырдарьинской области – 3153 ед. Рис.1.

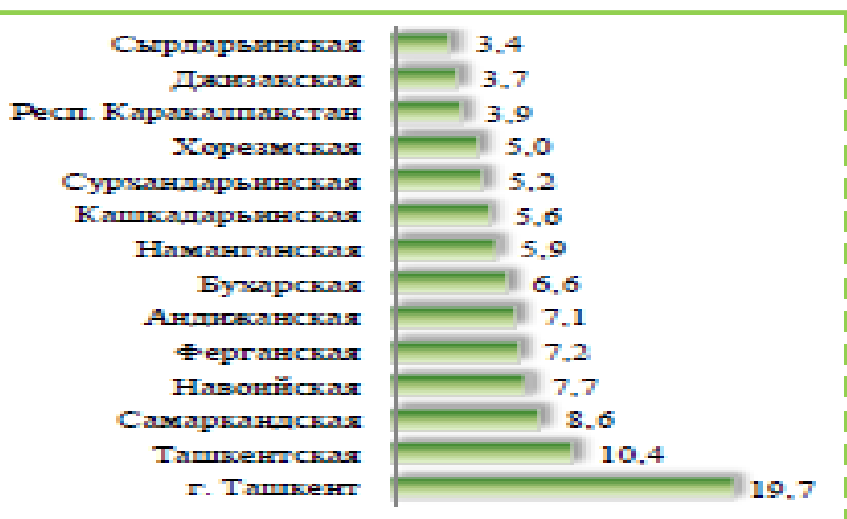


Рис.1. Удельный вес субъектов предпринимательства по регионам, на 1 января 2020 года.

В январе-декабре 2019 года в региональном разрезе наибольший показатель количества субъектов малого предпринимательства (на 1000 человек населения, ед.) составил в городе Ташкент - 28,8 ед., Навоийской области - 18,1 ед., Сырдарьинской области -17,9 ед. В Джизакской области этот показатель достиг 15,6 ед., Ташкентской и Бухарской областях - по 14,9 ед., Ферганской

области - 12,2 ед. На низком уровне данный показатель зафиксирован в Сурхандарьинской области - 8,3 ед. рис.2.

В январе-декабре 2019 года доля малого предпринимательства в ВВП составила 56,5 % (60,4 % за январь-декабрь 2018 года). Такое снижение объясняется увеличением в структуре ВВП удельного веса крупных предприятий.

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Рис.2. Количество субъектов малого предпринимательства (на 1000 человек населения, ед.) по регионам (за 2019 года)

Проанализируем основные итоги деятельности субъектов предпринимательства в прошлом году. Так, субъектами малого предпринимательства в 2019 г. :

- произведено промышленной продукции на 115406,4 млрд. сум (34,9 % всего промышленного производства);
- освоено инвестиций на 89352,0 млрд. сум (47,0 % от общего объема освоенных инвестиций в республике), или 166,1 % к уровню января-декабря 2018 года;
- выполнено строительных работ на 51949,8 млрд. сум (75,4 % от общего объема строительных работ), или 122,8 % к уровню января-декабря 2018 года;
- произведено (оказано) услуг на 99139,3 млрд. сум (52,1 % от общего объема услуг), или 104,8 % к уровню января-декабря 2018 года;
- сформировано 84,3 % от общего объема розничного товарооборота, составившего

138368,1 млрд. сум (темпы роста возросли на 105,4 %);

- экспортировано продукции (товаров и услуг) на 5135,7 млн. долл. США (28,7 % от общего объема экспорта), что на 1324,8 млн. долл. США, или на 34,8 %, больше января-декабря 2018 года; обеспечен рост грузооборота автомобильного транспорта на 7,4 % (77,4 % от общего объема грузооборота);
- обеспечен рост пассажирооборота на 2,7 % (94,9 % от общего объема пассажирооборота).

Если рассматривать развитие в предпринимательства в региональном разрезе, то из проведенного анализа видно, что наибольшая доля малого предпринимательства (бизнеса) в ВРП приходится на Джизакскую (84,1 %), Наманганскую (79,2 %), Сурхандарьинскую (78,2 %), Самаркандскую (77,5 %) и Бухарскую (75,7 %) области. В Навоийской области этот показатель остается низким и равен 31,3 %. Рис.3.

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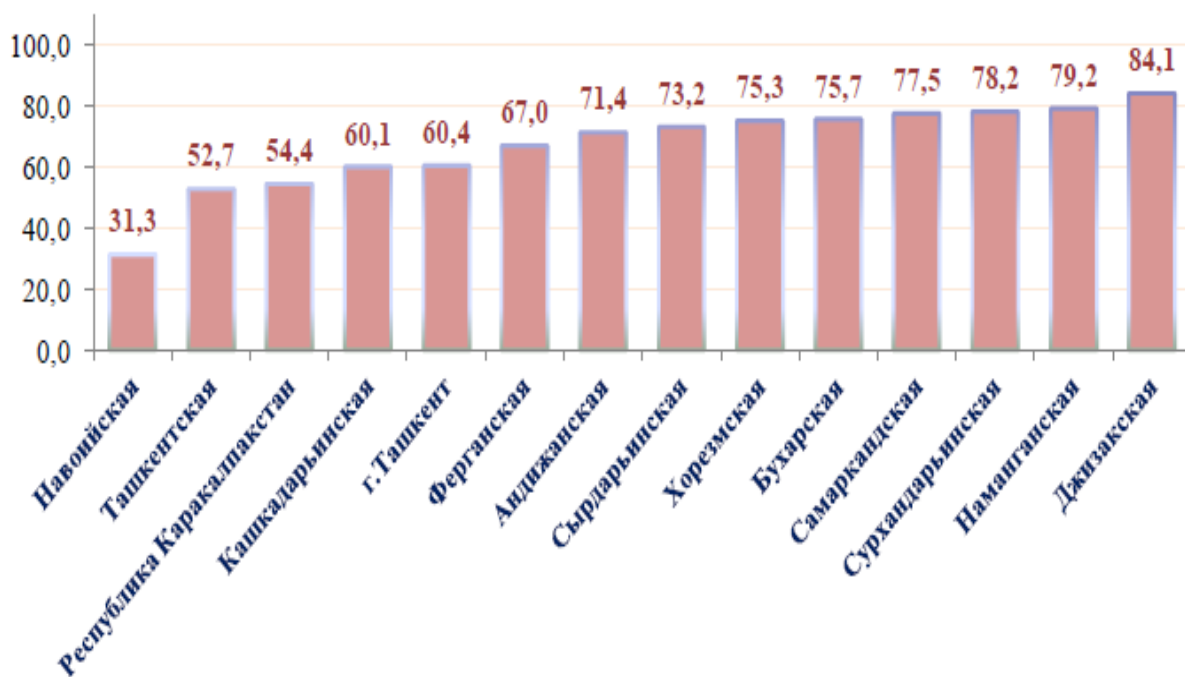


Рис.3. Доля малого предпринимательства в валовом региональном продукте (ВРП) за январь-декабрь 2019 г., %

В целях рассмотрения ситуации развития предпринимательства в регионах, узучим положение в Андижанской области.

Андижанская область является одним из регионов Республики Узбекистан с наиболее развитым предпринимательством. В области сформирована своеобразная площадка для развития малого бизнеса и частного предпринимательства. Ключевым фактором для создания благоприятных условий для развития малого бизнеса является предприимчивость местного населения.

Малый бизнес и частное предпринимательство играют важную роль в экономике Андижанской области. Так, в результате осуществляемых в Андижанской области мер по развитию и поддержке малого бизнеса доля малого предпринимательства в ВРП за 2019 года составила 71,4%. Количество субъектов малого предпринимательства (на 1000 человек населения, ед.) за 2019 года составила 11,4 ед. В 2019 года вновь было создано 6632 тыс. новых малых предприятий и микрофирм (без дехканских и фермерских хозяйств), что в 2,1 раза больше аналогичного периода 2018 года.

Наибольшее количество малых предприятий и микрофирм создано в сфере торговли (39,4 %), отраслях промышленности (27,6 %), строительстве (8,9 %), сельском, лесном и рыбном хозяйстве (4,1 %), услугах по проживанию и питанию (7,4 %), перевозке и хранении (12,6 %).

В январе - декабре 2019 года в региональном разрезе наибольший показатель количества субъектов малого предпринимательства (на 1000 человек населения, ед.) составил в городе Андижан – 21,9 ед., Улугнорском районе 18,6 ед., Ходжабадском районе - 14,0 ед., Бостанском районе 12,3 ед., городе Ханабад - 12,1 ед.,

На низком уровне данный показатель находится в Булакбашинском районе - 7,3 ед. Избасканском районе – 7,1 ед.

В региональном разрезе наибольшая доля малого предпринимательства в промышленности зафиксирована в Булакбашинском районе (100,0 %), Балыкчинском районе (99,4 %) и Бостанском районе (95,7 %). В строительстве – в г. Ханабад (100,0%), Андижанском (100,0 %), Балыкчинском (100,0%), Бостанском (100,0%), Булакбашинском (100,0%), Избасканском (100,0%), Асакинском (100,0%), Мархаматском (100,0%), Шахриханском (100,0%), Пахтабаадском (100,0%) и Хаджабадском (100,0%) районах.

В сфере услуг - в Мархаматском (97,3 %), Избасканском (95,4 %), Кургантепинском (95,4 %), Балыкчинском (95,3 %), Бостанском (95,3 %) районах и г. Андижан (94,7 %).

По инвестициям - в Кургантепинском (94,2%), Булакбашинском (88,3 %), Андижанской (84,1 %) и Шахриханском (82,7 %) районах.

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IBI (India) = 4.260
OAJI (USA) = 0.350

Так, субъектами малого предпринимательства в Андижанской области в 2019 г.²:

- произведено промышленной продукции на 7058,3 млрд. сум (21,4% всего промышленного производства);
- освоено инвестиций на 5504,0 млрд. сум (67,3% от общего объема освоенных инвестиций республики), или 202,5% к уровню января-декабря 2018 года;
- выполнено строительных работ на 3722,8 млрд. сум (97,0 % от общего объема строительных работ), или 107,3 % к уровню января-декабря 2018 года;

- произведено (оказано) услуг на 6682,2 млрд. сум или 103.6% к уровню 2018 года;
- сформировано 87,4 % от общего объема розничного товарооборота, составившего 10896,1 млрд. сум;
- экспортировано продукции (работ и услуг) на 288,6 млн.долл. США, или на 15,2 % больше 2018 года;
- обеспечен рост грузооборота автомобильного транспорта на 108,7 % (69,3 % от общего объема грузооборота);
- обеспечен рост пассажирооборота на 115,0 % (96,1%) от общего объема пассажирооборота) (рис.4).

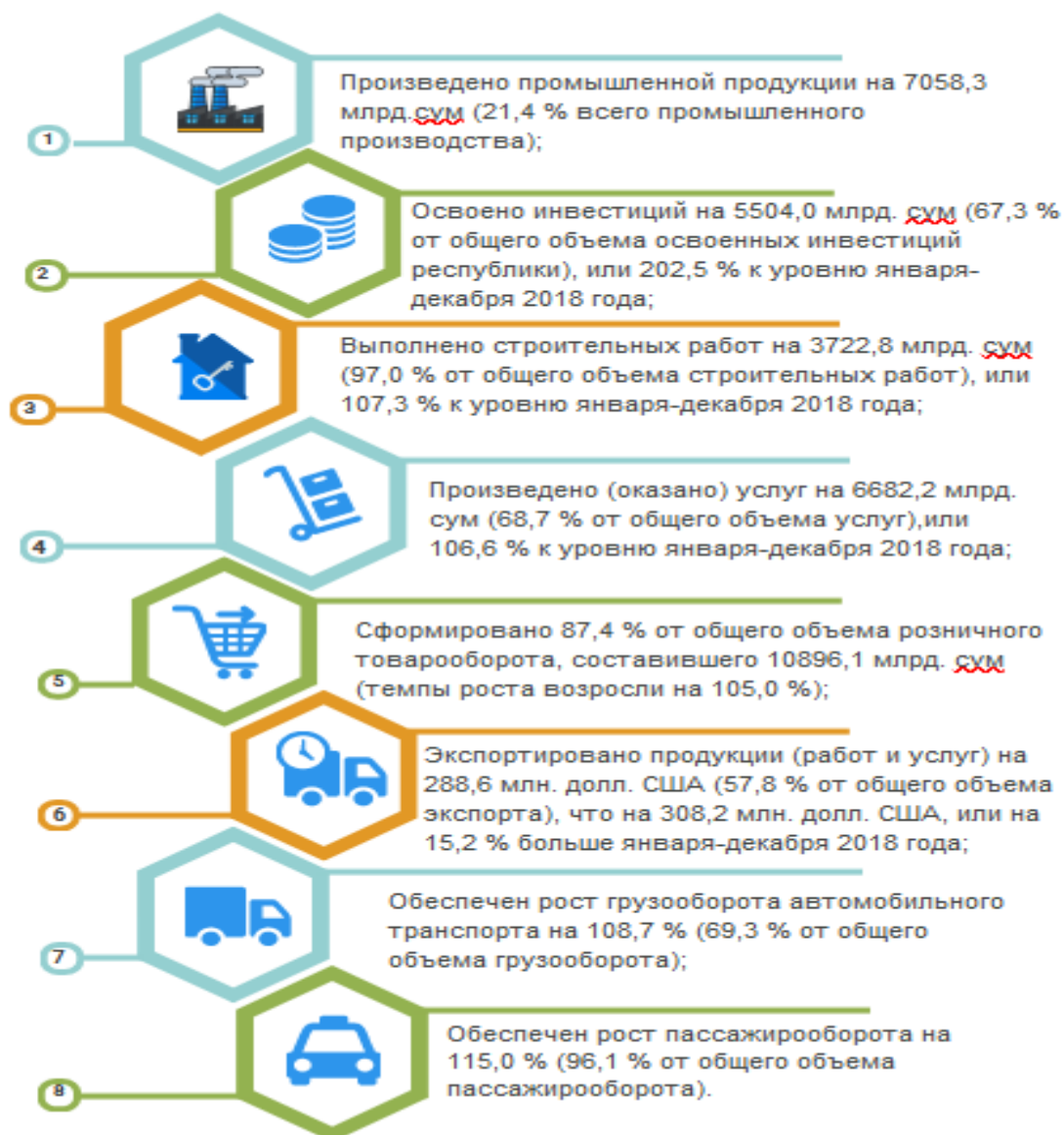


Рис.4. Итоги деятельности субъектов предпринимательства Андижанской области в 2019 году.

² Данные Областного управления Госкомстата Республики Узбекистан по Андижанской области

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Вышеуказанные результаты деятельности субъектов предпринимательства достигнуты в результате функционирования в Узбекистане механизма государственной поддержки предпринимательства, который, в частности, заключается в создании благоприятных условий для ведения бизнеса:

1. Время для регистрации малого бизнеса составляет 30 минут. Для регистрации субъекта, в качестве индивидуального предпринимателя требуется подготовить только один документ, а в качестве малого предприятия с юридическим лицом - два документа.

2. Финансовая поддержка субъектов малого предпринимательства осуществляется следующим образом:

- выдачей льготных банковских кредитов с субсидированной ставкой;
- поручительством Государственного фонда поддержки развития предпринимательской деятельности субъектам бизнеса в размере до 50% от суммы получаемого кредита;
- представлением Фондом компенсации процентных расходов по кредитам коммерческих банков.

3. Интересы бизнеса защищены институтом Уполномоченного по защите прав и законных интересов субъектов предпринимательства. В Узбекистане отменены внеплановые проверки деятельности малого бизнеса, субъекты предпринимательства освобождены от всех видов ответственности, совершившие впервые финансово-хозяйственные правонарушения;

4. Повсеместно в стране организованы учебные курсы для предпринимателей по ведению бизнеса, осуществляющих проекты на базе приватизированных объектов. Созданы кластеры молодежного предпринимательства, где молодым начинающим предпринимателям предоставлены в аренду площадки по нулевой ставке сроком на 5 лет.

Сравнение показателей Андижанской области и ряда других областей Узбекистана показывает, что доля торговли, производства товаров народного потребления, бытовых и платных услуг населению, а также транспортных услуг в структуре малого бизнеса в нем значительно выше. В то же время сфера услуг в Андижанской области отстает в своем развитии от уровня столицы. В сфере связи, здравоохранения, оказания коммунальных и социальных услуг доля оборота малого бизнеса также значительно ниже, чем в других городах республики.

Исследования показывают, что потенциал развития сектора малого бизнеса в области реализован далеко не полностью. По нашему мнению, на сегодняшний день основными барьерами, препятствующими развитию сектора

малого бизнеса в Андижанской области, являются:

- административные барьеры при осуществлении предпринимательской деятельности;
- ограниченный доступ малого бизнеса к рынкам сбыта, в том числе – иностранным и региональным, что объясняется меньшими возможностями и ограниченными финансовыми ресурсами большинства субъектов малого бизнеса в сравнении с крупными предприятиями;
- недостаток высококвалифицированного персонала и компетенции в секторе малого бизнеса, в том числе компетенции управления бизнесом;
- недостаточный уровень поддержки начинающих предпринимателей.

В отраслевой структуре малого бизнеса есть целый ряд сегментов, имеющих значительный потенциал для предпринимательской деятельности и высокую социальную значимость, но в настоящее время развитых не в полной мере. Например, в отрасли переработки плодоовощной продукции, трикотажной и швейной отрасли и в сфере услуг.

Исходя из анализа, в долгосрочной перспективе малый бизнес и частное предпринимательство Андижанской области целесообразно развивать в следующих направлениях:

- активная подготовка и переподготовка кадров для малого бизнеса;
- малый бизнес должен быть нацелен на удовлетворение первичной потребности населения, необходимой для существования и развития. Для этого в целях обеспечения продовольственной безопасности необходимо расширить номенклатуру производства основных видов пищевой промышленности с учетом формирования здорового образа жизни;
- с учетом ожидаемого роста населения в области целесообразно развитие трудоемких отраслей промышленности: мини-цехов по производству хлопчатобумажных, шелковых, шерстяных, трикотажных готовых изделий и народного ремесленничества;
- в связи с повышением покупательского спроса ожидается рост спроса на все виды действующих традиционных услуг, а также формируется спрос на новые и качественные виды услуг. Отсюда следует, что необходимо разработать специальную стратегию по развитию сферы услуг в секторе малого бизнеса до 2030 год;
- в связи с модернизацией, диверсификацией и цифровизацией экономики в долгосрочной перспективе появится большой спрос на инновационные товары. Поэтому целесообразно заранее планировать формирование инновационных бизнес-центров,

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целью которых будет обеспечение предпринимателей знаниями и навыками в данной сфере, в том числе в развитии информационных технологий.

Заключение

Исследование показало, что предпринимательство играет важную роль в экономике регионов страны. Малый бизнес и предпринимательство способствует повышению конкурентоспособности национальной

экономики, содействует ее инновационному развитию, стабилизирует политическую обстановку в стране, повышает уровень благосостояния населения и способствует выходу республики на мировую арену [16]. Именно поэтому, в Республике Узбекистан развитие малого предпринимательства является важнейшей приоритетной задачей и для реализации данной задачи предпринимаются все усилия со стороны государства.

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SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 15.06.2020 <http://T-Science.org>

QR – Issue



QR – Article



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REGIONAL AND INTERNATIONAL STUDY OF ABDULLAH AVLONI, REPRESENTATIVE OF THE UZBEK MOVEMENT JADID

Abstract: The research paper discusses and cites the works and scientific heritage of the great Abdullah Avloni. Studying the creative, pedagogical, educational and historical heritage of Abdullah Avloni through the professional activities of future teachers in the system of pedagogical higher education.

Key words: Abdullah Avloni, International Scientific and Pedagogical Jadid Movement, Activities Of The Youth Union Of Uzbekistan.

Language: English

Citation: Akhmedova, M. E., & Mirsaidova, M. K. (2020). Regional and international study of Abdullah Avloni, representative of the Uzbek movement jadid. *ISJ Theoretical & Applied Science*, 06 (86), 11-15.

Soi: <http://s-o-i.org/1.1/TAS-06-86-2> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.06.86.2>

Scopus ASCC: 3304.

Introduction

Consistent reforms in our country, 5 important initiatives of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to educate young people in the social and spiritual-educational spheres, the rapid development of science, engineering and technology, the opening of branches and faculties of foreign universities, the improvement of regulatory acts In addition to educating the enterprising and courageous young people who are able to take responsibility for the future of the country, aimed at improving the material and technical conditions, the content of education is constantly changing in order to develop the social activity of future teachers of higher educational institutions.

The Strategy for the Further Development of the Republic of Uzbekistan defines such areas as "physically healthy, mentally and intellectually developed, independent, strong, loyal to the Fatherland, deepening democratic reforms and increasing their social activity in the development of civil society". In turn, the need to consider this process

as a pedagogical system with a research and analytical focus is explained.

Decree of the President of the Republic of Uzbekistan №. 2909 of April 20, 2017 "On measures for the further development of the higher education system", Presidential Decree №. 4947 of February 7, 2017 "On the Strategy for the further development of the Republic of Uzbekistan", 2017 Decree of the President of the Republic of Uzbekistan of July 5, 2017 "On improving the efficiency of state youth policy and supporting the activities of the Youth Union of Uzbekistan" Presidential Decree №. 3138 of July 18, 2017 "On comprehensive measures to improve the activities of the Youth Union of Uzbekistan"; Decree of the President of the Republic of Uzbekistan "On improving the printing and distribution of books, the creation of a commission for the development and development of a culture of reading and reading ", as well as other regulations related to this activity. Of particular importance is the Decree of the President of the Republic of Uzbekistan Sh.M. Mirziyoyev, Decree №. 5953 on the

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implementation of the state program for 2020, "Year of Science, Education and the Digital Economy".

Materials And Methods

Improving the technology for studying the creative, pedagogical, educational and historical heritage of Abdullah Avloni through the professional activities of future teachers in the system of pedagogical higher education, to support the effective role of Abdullah Avloni in creating a national awakening and thinking of independence in Uzbek pedagogy, creating a targeted program; It is important to introduce effective pedagogical mechanisms based on professional, historical development. Particular attention is paid to the moral and spiritual-cultural foundations of professional and communicative training of future teachers, the attitude of Abdullah Avloni to ideas of development, the idea of a historical approach, that is, the importance of thinking. **During his visit to the Writers Alley in 2020, President Mirziyoyev will direct more than 20 statues of famous writers to be attached to higher education institutions. After this, TSPU will be entrusted with the study of the legacy of Abdullah Avloni, who fought for the ideas of the Enlightenment. Under the leadership of the rector of TSPU Alisher Yusubzhanovich Umarov, a program was developed consisting of 22 chapters and 54 sections on a comprehensive scientific study of the heritage of Abdullah Avloni, the implementation mechanism of which is planned for 5 years 2020–2025.** The implementation program is defined in the following tasks. Creation of scientific laboratories on the subject of Avloni's Education in pedagogical higher educational institutions, organization of annual international scientific and pedagogical seminars devoted to the work of Abdullah Avloni, establishment of scholarships named after Abdullah Avloni.

The establishment of the Abdullah Avloni State Prize, the publication of popular scientific publications covering the life and scientific activities of Abdullah Avloni, the preparation of scientific publications covering the life and scientific activities of Abdullah Avloni, 2500 dedicated to the life and work of Avloni. the creation of a bank of term papers, the organization of the republican competition "Experts in Avloni's work" in the framework of five important initiatives put forward by the President of the Republic of Uzbekistan, the organization of the competition of student theater and studio performances for Avloni's works in the framework of five important initiatives put forward by the President of the Republic of Uzbekistan in the framework of five important initiatives nominated by the President of the Republic of Uzbekistan, meetings of the Bekadzhon club on the topic "Raising the Avloni family", an essay competition on the topic "Raising the youth and Abdullah Avloni", the life of Abdullah Avloni and 3

doctors of science, 5 doctors of philosophy, 100 candidate dissertations, as well as visits of professors and students to the Abdullah Avloni House-Museum, a series of events dedicated to the life and work of Avloni on the Writers Alley. As part of the implementation of five important initiatives put forward by the President of the Republic of Uzbekistan, Avloni's works, his life and work will be included in national and international digital libraries, in the study of Abdullah Avloni's heritage and in the creation of a virtual museum. The task of organizing an exhibition of the works of Abdullah Avloni in resource centers is outlined.

Results And Discussion

Our main task is to support the work of A. Avloni to study the historical development of the younger generation, to protect its rights and interests, to the progressive ideas of the fight against ignorance by creating the necessary conditions for students to show their potential. identified a number of specific tasks and measures.

The system of training future teachers is becoming more and more democratic and national, since it is based on the idea of national independence and educational reform. In this regard, the Uzbek pedagogy of Jadidism is increasingly finding the democratic pedagogy of creativity, science, cooperation, creativity, social relations. A command-free management method is being introduced. A spiritual environment is created in education based on human qualities, such as attention to the quality of education, social protection, honesty, justice and justice. The study of historical development on the basis of the ideas of enlightenment, the study of the heritage of A. Avloni, its application in a wide range of life and practice plays a decisive role in achieving the student's educational activities in this regard. Studying the Avlonian national culture and pedagogical history allows a person to expand the scope of opportunities. Accordingly, the requirements follow from the need for research, and the research tasks are oriented towards historical and pedagogical needs.

Abdullah Avloni, a well-known representative of Uzbek national culture of the late 19th and early 20th centuries, an enlightened poet, jadid, ambassador, translator, playwright, journalist, scientist, student, statesman and public figure who fought for the development of the country. He was born on July 12, 1878 in a terrorist attack of a Tashkent morgancha in the family of a weaver Miravlon aka. His grandfather Mirne'matboy was from Kokand and was an archer. His father, Miravlon aka, was a little craftsman and weaver. He traded in gray and cheat. His mother, Fatima, spent her childhood on the winding streets of the Mirabad Mahalla, mainly among the children of Russian-

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speaking railway workers. He studied at the Abdumalikboy madrassah in Shaikhantahur, where he studied with Mullah Omar Ahund. Since 1891, he studied only in winter, and in other seasons worked as a carpenter, plasterer, bricklayer and baker. Engaged in independent reading. He studied Arabic, Persian and Russian. He followed newspapers and magazines published in Orenburg, Kazan and Tbilisi. In a short time he became known as an educator and became one of the most active representatives of the sociocultural movement in the country.

At the beginning of the twentieth century, the Enlightenment movement, the emergence of Jadidism and the historical environment were the main works of Abdullah Avloni. One of the most important changes in the cultural life of Turkestan is the creation of the necessary conditions for education in old-fashioned madrassas. During this period, Avloni joined the Jadid movement and became one of the active members of the Jadids in Tashkent. A progressive enlightener constantly struggled with ignorance and enlightenment in order to raise the honor and literacy of the nation with his ideas. In 1904, Avloni opened a new school in Mirabad, and then in Degrezli (1903-1913), where he taught and wrote textbooks for children of the people. In 1909, the Charity Society opened in the school, helping to raise orphans. He published the first part of a four-volume collection entitled Literature or National Poems. Together with such developers as Munavarkvori, Muhammadzhon Podshokhoyev, Tavallo, Rustambek Yusufbekov, Nizomiddin Khodzhaev, Shokirdzhon Rahimi, he founded "Nashriyot" (1914) and "Maktab" (1916). He published the newspapers Taraqiy, Shuhrat (1907), Osiyo (1908) and Turon (1917). In 1918, he became one of the founders and first editors of the «Ishtirokiyun» newspaper, the first newspaper of the Soviet government of Turkestan. Abdullah Avloni held various responsible posts in the former Soviet era.

Regardless of what position he occupies, he is engaged in the dissemination of knowledge and education and teaches in educational institutions and universities.

His pedagogical activities and ideas about education are important sources in determining the characteristics of education, which reached a new level in the early twentieth century. Avloni School was built on the basis of humanism and free education, the main task of which is to educate children in secular and advanced science, as well as providing opportunities for young people to participate in the public and political life of the country. The author compiled textbooks for these schools. His first teacher, "The First Teacher" (1911), was reprinted four times before the October Revolution, and his textbook alphabetically, "The Second Teacher" (1912), was reprinted three times. The textbook

"Turkish Gulistan or Morality" (1913) with a moral and didactic content played a special role in the development of socio-educational thought in the early twentieth century. First, the problems of education and ethics are analyzed in terms of the requirements and needs of the twentieth century. Distinguishing between good and evil, Avloni traditionally bases his views on the ideas of Hippocrates, Plato, Aristotle, Sa'di Sherazi and Bedil. The writer considered the love of the motherland one of the best human virtues, which must be fought for. Homeland is a city and a country where everyone is born and brought up. It must be appreciated, loved, rejuvenated. The poet understood this when Vatan said and fell in love with him. The love of language and culture is the love of every person for his people: "The mirror life of every nation, which shows its existence in the world, is language and literature.

The loss of a national language is a loss of the spirit of a nation. It should be noted that Avloni went through a very difficult life and career. He entered literature at a time when the ideological struggle was in full swing. He did not hesitate to accept the struggle for enlightenment and progress. When you get acquainted with the poetry of the poet, you will come across an interesting situation. In his work there are no romantic poems.

He believes that people's concerns are more important than social problems. He denies any love in the face of the misfortunes of the people and the homeland. He "loves his homeland" as a friend. He devotes all his love to this. At the beginning of the century, he was very responsible for the fate of Turkestan, and his life and death were decided. Abdullah Avloni quickly recognized this as a leading intellectual of the time, a great enlightener and an active supporter of the teachings of the Jadids. His first prose works were published in the books "Literature or National Poems" (parts I, II, III), "School of Gulistan" (1916), "Song of the Workers" (1917), "Sabzavor" (1914) and periodicals. They spread knowledge, ignorance and ignorance, condemned the socio-moral foundations of the old system and talked about free and happy time. In this regard, the works of Avloni of this period have an important educational value. Avloni made extensive use of folk weights in literature. He wrote poetry to folk tunes and enriched the possibilities of poetry. One of Avloni's most important contributions to literature was that he was one of the creators of a new literary phenomenon called labor poetry. He wrote poems describing the events of 1916, such as "The Words of the Worker's Father to His Son," "The Words of the Mother to Her Son," and "Sorry." Homeland lit up the farewell scenes of workers who were taken out of the country to the snowy and icy lands of the Far North, to black service behind the front, to injustice. The melody and style of these verses is very close to folk songs, which played an important role in the national

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awakening of our people. Avloni welcomed the February Revolution of 1917 with joy (verses "Coutuldic", "Yotma"). He wrote poems dedicated to the revolution, such as the "March of Freedom" (1919) and "The Ear of the Workers," glorifying the new socialist system.

However, he soon began to realize that the former Shura system was the worst form of the old tsarist regime, and that Shura's policies were based on ignorance. In particular, the refusal to grant the solemn promised freedom led to the appearance of sad melodies in the poet's work (Weekly Hour, 1919). Nevertheless, Avloni wrote poetry on various topics. The Journeys of the Afghanistan Journey, devoted to the 1919-1920 trip to Afghanistan, are important for studying the history of establishing friendly relations between our country and our neighbor. Avloni was the founder of the Uzbek theater. In 1913 he created the theater troupe "Turkiston". Turkestan also announced its strict charter. Its founder and ideological and artistic director was Avloni. The troupe staged the best examples of Uzbek drama of the early twentieth century, such as Poisonous Life (Khamza), The Unfortunate Groom (A. Kodiri), theatrical works of Azerbaijani playwrights (The Unfortunate Bride, Khor Khor, Ignorance, "The Elders"). ", "The Man Who Takes a Place", "I am Dead", "Leili and Majnun", "Asli and Karam" were translated into Uzbek and delivered. Avloni himself played the roles of Mallou ("Leili and Majnun"), Faiziboy ("Unhappy Groom"), Aliboy ("Wedding") and Boya ("Padarkush"). Avloni "Is it easy to defend interests?" His comedies (1914), Pinak (1915) and such tragic works as We and You, The Portuguese Revolution and Two Loves, written in 1914-17, contributed to the emergence of the Uzbek drama and the growth of the theater among people. Through lawyer Davronbek, he exposed lawlessness in Turkestan, ignorance in the world. "Is advocacy easy?" In his work, he portrayed many poppies and gambling, showing the decline of spiritual life. He wrote about the struggle against the monarchy, the Portuguese Revolution of 1910 under his banner and the Young Turks revolution of 1909 in Turkey ("Two Loves"), expanding the range of topics and ideas in our literature. In "We and You," he described the struggle of Turkestan in the early twentieth century for the old and the new, using concrete fates as an example. The most productive years of Avloni's main creative activity date back to the October Revolution of 1917. Avloni began to study the work in the late 1960s. Samples of his works in different genres are now published in separate books.

Well-known enlightener, a talented poet, a famous enlightener, Abdullah Avloni read the newspaper Tarjimon and learned about the time. "He graduated from the madrasah and went to school. Reforming teaching and learning methods, the young teacher who founded a new type of school will perform important educational work, such as

transferring modern knowledge to students, teaching Eastern and Western languages. Abdullah Avloni wrote textbooks for schools, such as "The First Teacher", "The Second Teacher" (1912), "History", "Turkish Gulistan and Morality" (1913). Poems, short stories, feuilletons and small dramatic works under the pseudonyms "Cain", "Glory", "Hijran", "Avloni", "Surayo", "Abulfize", "Indamas", which began their creative activity in 1895 (1900-1917) In his poems, the poet criticized the backwardness and ignorance of his time and called people to knowledge and enlightenment.

Until 1917, Abdullah Avloni was a major journalist who grew up among the local population and founded in Tashkent such newspapers as Shukhrat and Osiyo. In his dramatic works, such as "Is It Easy to Engage in Advocacy," "Two Loves," "Wedding," "Congress," "Leila and Majnun," "Dead," he describes the tragic consequences of ignorance, heresy, and ignorance. exposes gender and naughty customs. How the poet Abdullah Avloni wrote dozens and hundreds of poems. Whether it's an old tradition, love or schooling, they all sing about man and upbringing, moral beauty and spiritual wealth.

That is why in his verses folk didactics and modern pedagogy are combined. In particular, his book Literature (1915) stands out in this regard.

According to A. Avloni, the idea, if properly developed, will be as sharp as a dagger, a diamond. In 1913, Avloni founded the European theater troupe Turon, in which he staged a number of plays and translations from the languages of fraternal peoples. Abdullah Avloni played an important role in the education, culture and enlightenment of the Uzbek people, as well as in the socio-political life of the neighboring Afghan people in the 1920s. For some time he served as Minister of Education of Afghanistan, and then was the Ambassador of the Soviet Union to Afghanistan. A. Avloni took an active part in a number of articles in newspapers and magazines of the republic in 1920-1930. In addition to teaching at Central Asian State University, Avloni is the author of a number of textbooks on literature. He died in 1934 at the age of 56.

Conclusion

In conclusion, one of the advantages of our university and our people is the continuation of good deeds, the study of the creativity and scientific heritage of the great Avloni, the memory of the great Avloni. Our people will never forget such a disinterested Avloni. The beginning of the new millennium was the 21st century - the century of the Uzbek people who turned Uzbekistan into a great state and built a prosperous life where human rights are a priority. In this regard, our main task is to study the work of Avloni at a time when radical renewal and creative work in all areas of life are carried out on a large scale.

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JIF = 1.500

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ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 15.06.2020 <http://T-Science.org>

QR – Issue



QR – Article



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OPTIMIZATION OF MODELING WHILE INCREASING ENERGY EFFICIENCY OF BUILDING STRUCTURES OF PUBLIC BUILDINGS

Abstract: The research paper deliberates improving the energy efficiency of building structures in public buildings while optimizing modeling. An analysis of the temperature of the premises was also carried out against the background of the individual impact of the considered factors having an influence.

Key words: building structures, improving the energy efficiency, optimizing modeling, public buildings.

Language: English

Citation: Sayfiddinov, S., Akhmadiyrov, U. S., Razzokov, N. S., & Akhmedov, P. S. (2020). Optimization of modeling while increasing energy efficiency of building structures of public buildings. *ISJ Theoretical & Applied Science*, 06 (86), 16-19.

Soi: <http://s-o-i.org/1.1/TAS-06-86-3> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.06.86.3>

Scopus ASCC: 2215.

Introduction

The degree of energy efficiency of buildings depends on a number of factors, such as building envelopes, climatic conditions, etc.

When assessing and analyzing the energy efficiency of an object, it is necessary to take into account, in addition to energy indicators, a number of other parameters, for example, objects located in small cities or rural areas have their own specifics of functioning and are architecturally different from the typical projects of mass urban buildings.

Thermal modernization in the considered group of buildings of the social sphere, the average thermal resistance of external opaque fences was 0.8-1.5 m²K / W. The buildings used outdated boilers, some buildings are heated using stoves.

For example, the educational building of the housing college is considered as an example.

This is a 4-storey building with a technical floor, built 40 years ago. The total area of 8093m². The building has administrative premises - 10%, classrooms - 37%, computer classes - 4%, research laboratories - 18%, a buffet, utility rooms - 16% and training centers - 15%. The glazing area is 2031m² (about 45% of the external wall area). The building has the shape of an elongated rectangle oriented to the east by facades. Ventilation is natural.

Heat is supplied from district networks. The heating system is an independent one-pipe radiator with an upper wiring of 49 risers, connected to heating networks through a plate heat exchanger

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Commercial metering of thermal energy is carried out through a meter installed at the entrance to the building. In most of the heating period, heating networks do not comply with the temperature schedule for supplying coolant, which leads to lower temperatures in the building's rooms with respect to comfortable conditions.

Materials And Methods

The aim of the study is to use modeling optimization to analyze changes in the energy efficiency of building envelopes. In conditions of exclusively central regulation and an insufficient level of heating in the building's premises, in addition to a decrease in the level, there is a noticeable uneven temperature distribution, different glazing coefficient and condition of the windows, the influence of radiation and infiltration, which makes it possible to consider the building as an object of the influence of a set of different operational factors on space-time changes in room temperature.

In detailed analysis of the dynamic energy characteristics of a building, one should not consider the building as a whole, but its separate zone, these rooms of which are of the same type and, if necessary, a similar calculation can be repeated. The allocation of representative premises will allow for analysis for individual zones and to obtain an overall picture of the energy characteristics for the facility as a whole.

Representative premises were selected taking into account the purpose, orientation and number of storeys of the building. Corner rooms were considered separately, taking into account the geometric features of the length of the building, these rooms are not characteristic of the building as a whole.

The definition and analysis of energy efficiency based on experimental data carries a number of approximations and inaccuracies, so it is advisable to obtain the establishment of annual energy consumption for heating buildings on the basis of calculation approaches. The solution to these problems requires the use of calculation methods.

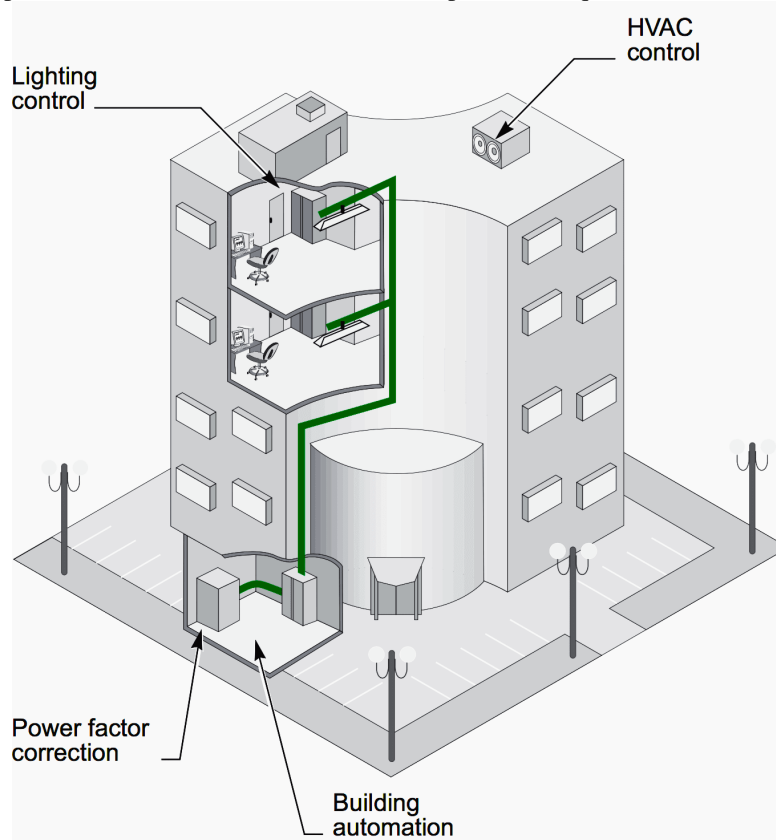


Figure 1. Optimization modeling while improving the energy efficiency of public buildings

In most buildings, specific characteristics are set for the value of heating and ventilation, depending on the purpose, year of construction and volume of the building. According to integrated heating characteristics of building standards. There are also international standards for public buildings on the need for heating, allowing you to set energy

requirements depending on the purpose and location of the facility.

In the calculations, it is accepted that only scattered solar radiation falls on the northern surface. In this calculation method, cloud cover is taken into account by decreasing direct solar radiation.

The heat flux entering the area of the room is determined by:

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$$Q_{sol} = q_i F_{trsl} k_{tra} k_{pre}$$

where, Q_{sol} is the heat flux from the sun to the room zone, W;

q_i is the specific heat flux entering the vertical surface of the corresponding orientation, W / m²;

F_{trsl} - the area of translucent structural elements, m²;

k_{tra} - transmittance of solar radiation;

k_{pre} - coefficient taking into account the presence of shading elements.

Typically, in calculations to determine the energy requirements of buildings, the ventilation component (air exchange) is specified through the value of the air exchange ratio. Air exchange is difficult to determine experimentally. Even with the same window designs, in terms of breathability, a different amount of air naturally enters the room. Indoor air exchange depends on a number of factors, both external and internal.

There was a temperature peak on the south side of the premises on a clear day. It should also be noted that during working hours this peak is longer in comparison with weekends. This is because on weekdays, in addition to solar heat, there are additional heats.

To assess the energy efficiency of buildings, calculation models and methods for their use for determining energy efficiency indicators have been developed by clarifying the separation of the thermal inertia characteristics of the building fencing, changing weather conditions, and reducing the differences in determining energy consumption.

On a cloudy day, the nature of the temperature change turned out to be approximately the same, if we did not take into account the effects of different levels of heat input during working hours.

In classrooms, as well as in administrative buildings, hours of solar activity have a similar peak length during working hours; at weekends, peak temperatures last only a few hours. At night, the classrooms located on the south side of the building also cool more significantly.

Metering of thermal energy in the building of the educational building was carried out at the entrance, the connection diagram is independent through a plate heat exchanger.

The heating system is single-pipe with a vertical top wiring. To analyze the experimentally obtained local characteristics of indoor air temperatures, there were local characteristics of the distribution of heat from the heating system.

The basis of an in-depth analysis of the thermal state and non-stationary energy balances of buildings is optimization modeling. One approach is to use models based on the thermophysical and geometric characteristics of the building. The main attention is paid to building models of energy consumption of buildings; the influence of various factors on the change and characteristics of the distribution of internal temperature in the premises is studied little. The second is to use the measured values of the thermal parameters of the building.

Results And Discussion

They allow you to analyze and predict various aspects of the behavior of the building as an energy system. The first approach requires the construction of a model for calculations (simulation, white models). The second large number of accumulated experimental data. Experimentally obtained data may contain a complex effect, which complicates their analysis and reduces the accuracy of the results. The combination of the two above approaches was developed in the use of gray models.

The combination of these approaches to determine the energy characteristics of the building will allow you to combine their advantages and predict the temperature conditions of the premises as closely as possible in real conditions. Gray models allow you to refine the characteristics of the calculation model based on actual data, to highlight the actual impact of individual source data using the calculation models.

Conclusion

Consequently, analysis of the temperature of premises against the background of the combined action of considered influential important factors. More accurate selection of their influence is provided by optimization in determining the energy characteristics of buildings for various calculation time intervals.

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International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 15.06.2020 <http://T-Science.org>

QR – Issue



QR – Article



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FORMATION OF INFORMATION SYSTEM IN CORPORATE GOVERNANCE

Abstract: *The research paper discusses the issues of creating and improving an information system, the effectiveness of using an information system in managing a corporation, ways to solve the problem of implementing an information system in managing a corporation, general rules for introducing a corporate information system in managing a corporation and managing changes in corporations based on information.*

Key words: *analysis, business, change management, corporation, demand, information system, information technology, information culture, management, information, manager, strategy.*

Language: English

Citation: Shadmanova, U. A., & Azimdzhanova, M. T. (2020). Formation of information system in corporate governance. *ISJ Theoretical & Applied Science*, 06 (86), 20-27.

Soi: <http://s-o-i.org/1.1/TAS-06-86-4> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.06.86.4>

Scopus ASCC: 1802.

Introduction

The reforms being carried out in our country require that all areas be brought into line with world standards and based on the most effective methods. The rapid development of new modern information and telecommunications technologies and systems is the basis for raising the quality of all processes in the country to a new level. The Address of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to the Oliy Majlis emphasizes these aspects: "It is necessary and necessary to acquire digital knowledge and modern information technologies in order to achieve development. This allows us to take the shortest path to the ascent. Today, information technology is penetrating deep into all spheres of life in the world." With this in mind, one of the most pressing issues today is the organization of management methods using modern information technologies and systems, as well as the use of new methods.

The amount of information that can be processed to develop effective management solutions is enormous. Problems in the management of large-scale

corporations require the widespread use of electronic computing techniques and the development of automated control systems, and as a result of these tasks set the task of creating new mathematical apparatus and economic mathematical methods.

There are a number of requirements for the organization of the organization of corporate information support. These include the analytics of information, the breadth of information, its unity, speed, rationality, and so on.

Information analytics is that regardless of the sources of information and where they come from, the economic information system must meet the requirements of the corporation leader, that is, the system to identify the impact of key factors to comprehensively study economic processes and increase production efficiency. should be a necessary tool for the leader. Therefore, all methods of information supply must be constantly evolving.

These systems are now widely used in accounting, planning and statistics in corporations. Managers in corporations are constantly reviewing the form of documents, their content and organization of

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circulation, as well as organizing new forms of data collection and storage. All these changes are made not only to the requirements of accounting and planning activities, but also to other circumstances. These changes represent the need for information support to develop management solutions.

Economic information must fully and accurately reflect the processes under study, otherwise the results of the analysis will not be consistent with the results of the tasks at hand, and the solutions proposed by corporate analysts may be detrimental to the corporation.

The next requirement for the organization of the flow of information is the unit of information coming from different sources. From this principle comes the need to compare different sources of information and eliminate their ambiguity. This means that an economic indicator needs to be formalized only once, and the results obtained are used in accounting, planning, monitoring and analysis.

The effectiveness of the analysis shows that there is a possibility to quickly influence the production process on the results. In this case, the information must be provided to the analyst immediately. At this point, the next demand for information, that is, the demand for speed, arises. Improving the speed of information is achieved through the introduction of a new tool for their processing, communication, etc.

Requirements for information quality are determined by the physical and research area, time period, methodology for calculating indicators, and a number of other types of indicators. The information system must be efficient and require minimal costs to collect, store and use the data.

Comprehensive information is required for a comprehensive analysis of the voluntary economic process. In the absence of information, the analysis is not considered complete. Too much information prolongs the process of searching, gathering, and making decisions. From this requirement arises the need to study the useful properties of information, and on this basis to improve the flow of information by eliminating unnecessary data and entering the necessary information.

The information system should be formed and improved on the basis of the above requirements and is a necessary condition for improving the practice and efficiency of corporate governance.

Receiving information is not the goal of the business. Its purpose is to operate and profit in a competitive environment. The information system of management is important to ensure that the goals of corporations are achieved on the basis of an organized, well-structured and timely delivery of information.

Information is an important strategic source of business. The lack of necessary information leads to uncertainties. In the case of uncertainty, the accuracy of the decisions made decreases.

The business is not subject to adequate management at a particular stage of development. In the event of a shortage of the necessary information, it becomes clear that there is a large amount of mutually compatible information received from different sources. In this case, there is a lack of a mechanism to quickly assess the effectiveness of this information in the management of individual businesses of corporations. Moreover, in many cases, strategic planning with effective control does not work.

For the effective development of the enterprise it is necessary to create a comprehensive management system that unites all aspects of management. At the same time, firstly, the problems of continuous management are important, and secondly, the problems of selection and implementation of information systems are relevant.

Materials And Methods

There are three ways to solve the problems of implementing information systems in the management of corporations.

The first method is to create an information system using the capabilities of the enterprise.

This method is used by many businesses. In many cases, manuals written using office software are used to automate calculations. However, when business conditions become more complex, such tools may not fully meet the requirements because such programs are not capable of managing monkeys with complex systems. Creating complete systems is costly and time consuming, and the development of a corporate business project necessitates the use of a centralized approach in the strategic management of a corporate project. Only large corporations can do such things.

The second method is to implement a universal system or a package of application systems.

The choice of this type of system is largely limited to accounting software. While the principles and structures of information are generally recognized in laws and reporting documents, commercial activity has different directions in different enterprises. The logic of the tasks performed in commercial practice also has a different appearance and it depends on different industries or forms of activity. There are not many types of universal packages available for complex automation of commercial activities. Like accounting software, they need to be customized. The basis of many such programs is accounting calculations.

The third method is to outsource the implementation of information systems and technologies.

This method is currently being used on a narrow scale. Based on the correct choice of such organizations, you can have the following opportunities:

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1. Saving money by implementing solutions. It is important that the core of such solutions is successfully implemented in other enterprises.

2. High level of mastery of actions.

3. Service support.

4. Possibility of system development in accordance with business complexity.

There are also some risks:

1. Loss of system development opportunities.

2. Risk of information loss as a result of not knowing the structure of the data.

3. Dependence on the executing enterprise.

The software product created on the basis of high mastery has more convenience than the software products created by the employees of the corporation. The main principle of such programs is their practical viability.

Involving the enterprise in the implementation of external information systems in the corporation creates a number of advantages. One of them is business formation.

There are a number of software tools available to meet customer requirements. Such supplies must have the following characteristics:

1. Retain investments. The implementation and use of the systems requires a number of costs. First, the costs required to adapt the system to the changing conditions of the business, and second, the costs associated with the development of new technologies.

2. Reliability of the system. In this case, first of all, the guaranteed storage and access to data in case of voluntary technical failure. Second, to effectively protect data when it is approached without question.

3. The possibility of expansion of the system that is, on a scale, its expansion and modulation.

4. The degree of automation of different types of activities, ie full automation of all types of activities.

5. The intuitiveness of the interface, i.e. the ability of the user to follow the interface without comment.

6. Ability to integrate with electronic document management, ie the ability to implement document management operations in the system or integrate document management with an external system.

7. Customer adaptation to the business. The degree to which system features are adapted to customer requirements when settlements with product suppliers are completed.

8. Convenience in price.

Nowadays, we can see many tools in the activities of managers that represent the concept of new information technologies. Information technology is a set of new tools and methods of data processing applied to the organizational management system. These technologies are technological systems that are expressed in the purposeful creation, transmission, storage and reflection of information products. The transition to new information technologies is finding a new application in the

immediate improvement of the performance of corporations in terms of quality, service and speed of production processes.

Corporations face the following challenges in the development process:

1. There will be many mistakes in the old methods of management.

2. Controlling corporate governance complicates it, attracts many employees, and leads to additional costs.

3. It takes a long time to find solutions. Data will not be available for a solution.

4. The amount of financial actions and decisions taken is greater than the reasons that lead to this or that result.

Technical, administrative and organizational issues need to be addressed in the selection and implementation of the system. Creating an information system in the activities of the corporation is a joint action of employees and enterprises providing information technology. To perform this task, you need to perform the following steps:

1. Research and design of the created system, ie clear definition of the current situation and application in the created service.

2. The organization developing the information system shall configure this system. At this point, it is necessary to test the information system for errors.

3. The implementation of information systems is divided into two parts: the training of administrators from the staff of the corporation and the launch of parts of information systems in the divisions of the enterprise.

It is necessary to apply non-contradictory and mutually agreed technologies in the selection of software and hardware and individual business applications. At the same time it is necessary to follow the new technology of operation and maintenance of information systems. In addition to the above requirements, there are the following general technical requirements for the information system:

1. Rapid operation, i.e., very short system response time when processing, retrieving and entering information.

2. Reliability of protection against unauthorized access to data and taking into account the actions of corporate employees.

3. Convenience of user-friendly interface of workplaces.

4. System scaling and development opportunities.

5. Integrate user modules in a data transmission system.

6. Ability to transfer data used during the previous period to the new system.

7. High reliability of system operation.

The method of creating corporate information systems for corporations includes the following general rules:

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1. The technology of creating a system on the models of the given cases without programming the existing algorithms. In this case, the practice of creating a system shows that as a result, automation of business processes without reengineering and improvement of the existing management system does not give the expected results and is considered inefficient. The use of software applications in the activities of the corporation is an effective factor in the transition to the organization of a new form of document management, document accounting and reporting.

2. Build the system from top to bottom. If the decision to automate the state of the corporation is made and approved by the top management of the corporation, the implementation of software modules is carried out by the parent companies. At the same time, the process of creating corporate systems is much faster than the initial implementation of the system in the lower parts. With this method and the active support of management, the whole set of tasks for the implementation of information systems can be properly assessed and carried out without unplanned costs.

3. Technology of step-by-step implementation of the system. Given that complex automation includes all divisions of the corporation, then the technology of implementation in stages is important. The primary areas of automation are the regulation of the process of accounting and formation of reporting documents for higher authorities and similar units.

4. Involvement of future users in the development of information systems. When the tasks of complex automation in the merger enterprise are completed, the actions of the customer's divisions on information technology will change and the capacity of these divisions will increase in the process of transition to new effective management methods of the corporation.

5. Such a system should establish such a cooperation between the modules and the automated workstations so that this cooperation meets the requirements and technical capabilities of the user. Important parameters of an information system are reliability, scalability and security, so the client-server architecture is used in the process of creating such systems. This architecture allows tasks to be compared between client and server parts of the system, and allows the system to be developed and improved according to the characteristics of the issues being addressed.

Improving production in corporations depends on the introduction of new techniques and advanced technologies, which are now one of the main directions in the management of business based on integrated information systems.

The complexity of implementing information systems for small businesses is the diversity of enterprises, the implementation of different forms of

production and the wide range of products. It is possible to design information systems based on the size and practical capabilities of small businesses, taking into account their characteristics. However, creating a separate information system for each enterprise is not effective enough.

Many institutional leaders now feel the need to make an immediate decision on the introduction of information technology. Implementing information systems in institutions can be costly, but maintaining the existing order can be even more expensive. The application of information systems and the technical means used to implement them in the activities of a corporation is not a sufficient condition for gaining a competitive advantage. The effectiveness of such systems can be highly effective in improving management and the organizational principle of the business. Therefore, the introduction of information technology and systems based on a systematic approach to corporate governance is a high factor in improving the effectiveness of management quality.

Information technology and systems are multifaceted, and it emerges in specific contexts.

Businesses also differ in terms of efficiency based on the implementation of computer information systems. In some cases, the competent implementation of information systems can provide a competitive advantage. For example, the efficiency of information systems increases due to the improvement of cooperation in the activities of remote business units or increasing the speed of order fulfillment. In other cases, computer technology facilitates the performance of complex tasks and helps to organize information.

No enterprise has the capacity to effectively process unlimited information that is constantly being retrieved from the external environment and work areas. In order for the information to be received to be suitable for other solutions, it must be selected, processed and reshaped as required. The quality of the solutions made by corporation executives and the products derived from them largely depend on the reliability of the messages they receive and the way they are processed.

Due to the large geographical size of corporations, the implementation of the above measures is complicated, but the solution of such issues is influenced by national and cultural characteristics, as well as financial, economic and social factors that require the attention of corporate management.

The main purpose of the corporation's head office is to collect, collect, process and analyze high-quality information about various markets, which creates a wide range of management opportunities throughout the corporation.

The collection of information by the head office of the corporation is carried out in two directions:

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1. Processing of marketing information collected by corporate divisions that have direct contact with customers and the market.

2. Independent collection of information about markets by corporation specialists.

Based on this information, the corporation develops and implements new plans to improve its operations.

Information-based change management in corporations.

Working with information (information culture) is one of the key activities in managing corporate change. There are currently three conditions that a corporate manager must meet in terms of information culture.

First, the information culture is not part of the overall organizational culture of the corporation. Many corporations feel the need for change to target their industries and markets. It is necessary to work with different forms of labor, market, technological and social information to influence future activities. Second, information technology enables the creation of a wide range of computer networks in corporations, and this creates a wide range of opportunities for communication between network managers. However, the creation of such a system does not guarantee the possibility of effective use of information.

Third, the information culture is different for different service departments, corporate divisions, and workgroups. This situation shows that the processes of interpreting, collecting, organizing, processing, disseminating, and using information vary. Therefore, many managers emphasize the importance of information culture for the development of corporate strategy and the implementation of changes.

Uncertain propositions regarding the metaphorical form and information culture of corporations.

The metaphorical expression of corporations often contains vague propositions as to what information culture is appropriate. Managers use metaphors to offer vague ideas to corporate employees about what information to apply or not to apply.

Currently, corporations use four forms of metaphor. In the first case, as a result of the use of the command method, all operations in the corporation are carried out on the basis of centralization and control. In the second case, actions aimed at eliminating problems within the corporation are taken into account. In this case, the next one appears, that is, rebuild. At the same time, based on the use of information flows and methods, the structure of the corporation is focused on simplification, reorganization or automation.

The next metaphor expresses the form of a living organism, responds to the environment and adapts to it. Such a metaphor clearly describes the state of groups that seek internal and external information and adapt to change. The above metaphor allows corporations to receive and use information in solving problems.

The fourth view of the corporations metaphorical form represents brain activity. The corporation is defined as a neural network that has the ability to use information and knowledge in a flexible, fast-paced way. Such an organization interprets the future situation and creates new ways to succeed.

There are currently four types of information culture in corporations (Figure 1).

Practical (functional) culture	Managers use information to manage or influence employees
Culture of interaction	Managers and employees trust each other and share information to increase personal efficiency
Research culture	Managers and employees seek information to change their activities and adapt to future relationships
Culture of openness	Managers and employees understand the nature of crisis and radical change and look for ways to compete

Figure 1. Identify types of information culture

Each of these has its own impact on the way information is used and reflects the position of corporate leaders in the use of information to achieve success or eliminate shortcomings.

1. Practical (functional) culture. In doing so, the information is used to influence different employees. Such a culture applies to hierarchical corporations, where information is used primarily for management and control. In this case, the interpretation of

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information implies control. Many workflows are used for control in all aspects of corporate activities.

2. In a culture of collaboration, managers and professionals have a high level of mutual trust and therefore share information that is detrimental to increase efficiency and improve processes.

Direct exchange of information about possible interruptions in the corporation's activities is necessary to solve problems and adapt to changes.

3. In a research culture, managers, employees, and staff strive to understand future differences and seek to find an effective way to eliminate potential risk. The decisive information state here is the preview mode. Many corporations now have enclaves that study culture in their service divisions, and they are engaged in customer service, market research, technology research, and information gathering services.

4. Culture of openness. In this case, managers and employees are prepared for the essence of the recession and radical change. Such corporations are consciously abandoning old-fashioned approaches to business and looking for new ideas to create new jobs

and services that can change the competitive environment.

The combination of the above-mentioned forms of information states is accompanied by various forms of information dysfunctions, which weaken the impact of corporations on changes in the market and the network, or increase resistance to changes in management. Many corporations implement general quality management programs. At the same time, they try to hide information about their shortcomings. General managers tend to be misinformed or encourage dysfunctional information in the process of change in corporate activities. The following figure shows four views of the dysfunctional information state (Figure 2).

Only in emerging corporations do managers use previous methods of control instead of looking for new information. The basis is the emergence of new manufacturers in the market. In almost all large corporations, the need for supervision increases over time, and this situation involves a large portion of managers' time and creates a sign of sluggishness among employees.

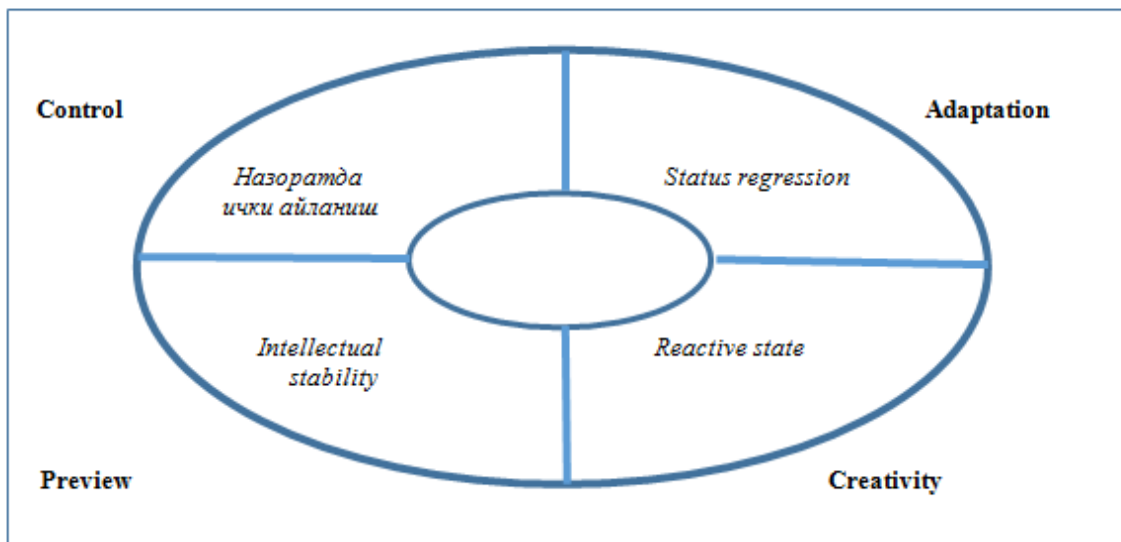


Figure 2. Four views of dysfunctional information status

When managers encounter new problems, they turn to secondary information and a situation regression occurs.

In a state of intellectual stability, a manager loses the ability to anticipate an approach or change in his or her business.

Reactive state. In doing so, the manager offers a plan of action in various forms in the event of a deep crisis in the network, but does not think about whether this action will help the plan.

In many corporations, the information culture is confirmed in a state of dissatisfaction with the strategy of change and expectations. The reason for this is the large changes in the market in these corporations and

the demands of consumers, but in this case the state of information will be intended only for control actions. Other corporations implement general quality management programs. However, this does not create an atmosphere of mutual trust in corporations. In such an environment that can be created, it will be possible to constructively eliminate errors and omissions. Some corporations have created an atmosphere of mutual trust, in which the process of continuous improvement takes place. However, in order for corporations to function in the problem-solving process, radical changes need to be made in order to improve the quality of the creative state. In developing corporations, the relevance of the corporate

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information state to the strategy of changing the information culture of their management is observed. This addresses the question of how to stimulate the

state of information in addressing various aspects of complexity and uncertainty in corporate markets and networks (Figure 3).

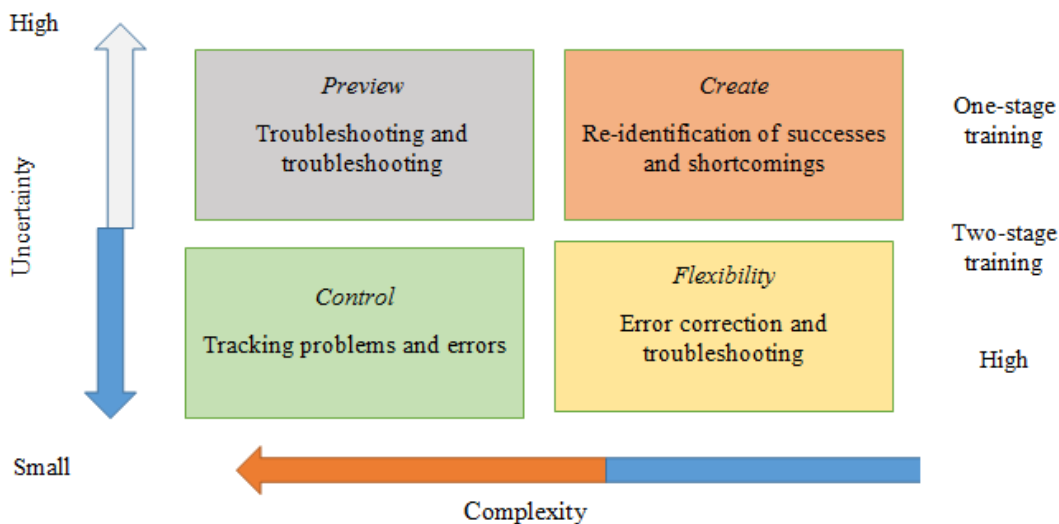


Figure 3. The effect of uncertainty and complexity on the state of information

Results And Discussion

In large and persistent markets where the level of uncertainty and the complexity of products and technologies are not high, the state of control is important to correct errors and eliminate problems. If the level of uncertainty of the markets is high and the product technology has a complex appearance, then it is possible to continuously correct errors and eliminate problems based on the principle of the general state of quality.

If the uncertainty of the market and the network is not high and the product and technology are relatively simple, there may be errors and problems in changing the composition of competitors or their emergence.

If the uncertainty of the markets is high and the products and technologies are high, the state of openness indicates on what principle corporations will succeed or on which principle the opposite will happen. If the rate and scale of change is too large, setting up controls, adapting, and previewing is an ineffective tool.

There are not many large centralized corporations today that belong to any single information culture. In many cases, the number of corporations with different information status is large. At this point, it is important to strike a balance between the different information cultures that are appropriate to the market conditions of corporations.

Conclusion

One of the key issues for managers today is the interrelationship between the status of management and production change strategies in corporations and the information culture. To do this, managers need to

look at knowledge and information flows as tangible assets. It is inappropriate for managers to view the existing problems in the corporation as a solution to the existing information culture and information system infrastructure. Electronic networks of computers and communications are only aids in the use of knowledge and information to enhance competitiveness.

Corporate employees involved in the collection, processing and use of information are more likely to be involved in this area than managers. Such employees immediately identify dysfunctional information status of managers who do not meet the goals of corporations. Corporations that are able to be among the first in the network to link their information culture and position to market and production strategies will have a competitive advantage.

Managers need to see information technology and systems as an important tool for the corporation. Managers must constantly seek solutions to the following tasks throughout their careers:

1. What sources of information and knowledge provide a constant competitive advantage for the corporation?
2. What organizational principles and management practices affect the information culture and status of a corporation?
3. How effective are the sets of information cultures and situations available to effectively manage current and future changes in corporations?
4. What needs to be mastered to distinguish between information culture and status and change strategy?

Managers are given full responsibility for solving existing problems in order to maintain

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competitiveness in corporations. The most important of these is the question of establishing a balance between the culture and status of information and the strategy of change.

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SOI: [1.1/TAS](https://doi.org/10.15863/TAS) DOI: [10.15863/TAS](https://doi.org/10.15863/TAS)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 16.06.2020 <http://T-Science.org>

QR – Issue



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THE ISSUE OF SPEECH ACT IN PRAGMATICS

Abstract: This article examines pragmatics and its components.

Key words: semiotics, pragmatic, illusion, locution, perlocution, proposition, presupposition, implicature, sema.

Language: English

Citation: Shokirova, K. N. (2020). The issue of speech act in pragmatics. *ISJ Theoretical & Applied Science*, 06 (86), 28-32.

Soi: <http://s-o-i.org/1.1/TAS-06-86-5> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.06.86.5>

Scopus ASCC: 1203.

Introduction

It is known that the activity of cognition begins with the direct perception, feeling, perception of reality. intuition creates an opportunity for the formation of a symbol of reality in thinking.

Language is the foundation of all fields. We create the product of our thinking through every thought and innovation through language. Man's attitude to everyday events occurs as a result of the combination of semantic, syntactic and pragmatic levels of language.

In the recent years, the study of pragmatic issues at the language level has intensified. At the heart of pragmatics is the relationship between the intended purpose of the linguistic movement and the means to achieve it. At the X11th International Congress of Linguists (Vienna, 1977), J. Lyons tried to define and define the subject of pragmalinguistics: "Pragmatics describes the use of appropriate linguistic units to encourage the listener to perceive the information being conveyed as the speaker wishes. This means that pragmatism is concerned with defining the role of linguistic means in interpersonal communication" (Proceedings 1978: 26).

M. Holliday's classification also mentions 3 functions of language:

1) the ideological function, that is, the language serves to express the thoughts and ideas of speakers about reality, their inner experiences; 2) the interpersonal function: language is used to communicate and establish interpersonal relationships; 3) the textual function: the language serves to form a connection between itself and the

elements of the situation in which it is used. The latter is an internal function of the language system and serves as a vehicle for the performance of the previous two functions (Halliday 1976: 14).

Communication between people is the basis of our lives. Therefore, linguistic activity - the communicative ability of human beings - is inextricably linked with speech. The expression of interpersonal relationships, the establishment of communication, is associated with the concept of pragmatic illusion.

The concept of "illusion" is the most common concept in the theory of speech act. At the heart of the structure of the speech act is also the illusion. There are even cases where the act of illusion is considered as an alternative to the act of speech as a whole, and the classification of speech acts is based on the goal of illusion (Searle 1969: 16; Satisfaction 1976: 75; Pocheptsov 1986: 27). The illocutionary act implies that the speaker's attitude to his opinion persuades the listener as well and urges him to respond as relevant (appropriate, appropriate). For example:

- 1) how much money is sugar in the market now?
- 2) man came to the funeral as dust.
- 3) we knew it would be so.

In the first sentence, the speaker's intention is to know what the market is like, to check if the listener has gone to the market, to complain about the price of sugar, to know whether he has received sugar or not, and to ignore whether it is necessary or not.

The second sentence is that the speaker is a funeral, that the funeral is described in a single word, that the respect and dignity of the deceased is evoked

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in the listener's eyes, that the deceased is old, that a large crowd has gathered, and so on. The sad mood of the speaker is absorbed into the listener, the imagination is formed.

In the third sentence, the speaker's reaction to the event is explained not only by the content of the sentence but also by the uniqueness of the tone of the speech. Although the speaker is speaking in the 3rd person, the logical power of the first person is to comprehend conclusions such as "I knew this beforehand," "he didn't correct me by talking so much," or "he didn't hear it," "I felt it beforehand," or so on. Together it means semantics such as regret, sorrow, remorse, bitterness, cutting, such as "we all knowingly didn't prevent it".

Because the speech process is a complex phenomenon, it requires a strong understanding from the speaker. The semantic structure of the expression is divided into four levels according to the semiological structure of the speaker in relation to the "I": "speech act (locution) proposition, the speaker's intention (illusion) and speech effect (perlocution)"¹. Dj. Ostin states that this semantic structure of the speech act consists only of the act of speech (locutive), the intention of the speaker (illocutive) and the act of speech influence (perlocutive)².

Doroshenko A.V. Pobuditelnie rechevie akti v kosvennix kontekstax. V kn.: Logicheskij analiz yazika. M., 1989. p.77.

The propositional act, on the other hand, is ignored.

Before talking about the act of speech "locutive", it is necessary to clarify the term "locution", which is common to all acts. Location, the term location, expresses the essence of the theory of pragmatism. (Khakimov.M 2011: 34). The pragmatic essence of the process of verbal communication is to bring to the forefront the actions of the speaker in the locomotive about himself, his dependence on me and the masculine "I" in time and space, the main goal:

I'm on my way, restless heart,

New joy, thirst for song (Zulfiya.2015: 55).

The process of normative pronunciation of phonetic, lexical and syntactic units by the speaker is considered as a locutive act. The essence of the locative act is illuminated by the pronunciation of the sentence using certain grammatical rules. The pronunciation of the above sentence is that as a locomotive act I have a special meaning and reference to the words road, heart, joy, thirst for song - the words "I am on the road with new joy, thirst for song, restless heart". When a speaker utters a text, he does not set himself the goal of conveying to the listener a certain information-pragmatic content, according to the essence of the act of speaking. The locutive aspect of a speech act is limited to the correct pronunciation of sounds, words, and devices based on certain lexical and grammatical rules. From this point of view, Dj. Austin divides the locutive act into 3 groups according

to the sign of internal differentiation: phonetic, fatal, retic acts. (Dj. Austin.M., 1986, p.83).

It is not uncommon for an inversion event to occur in poetic speech.

The pronunciation of poetic speech is the norm for a fatal act.

"Inversion is the replacement of the usual position of these components. The purpose of such changes is to bring the main idea to the forefront"³.

"I'll sing one day"

Your joke moved my dear. (Zulfiya).

In the line, too, the poet's humor is embodied in the very first word and attracts attention.

The manifestation of the grammatical rules peculiar to the speaker's speech in the fatic act opens the way to the possibilities of inner meaning.

This is the source, p.83-91.

Mamajonov A., Mahmudov U. Methodical aids. Fergana, 1996, p.38.

It is from this part of the speech act that the level of thinking characteristic of the speaker begins to be felt. The emergence of an idea creates an action (Khakimov M.2011: 37).

For example,

"I, my brothers, do not want to fall from the swing hanging on the almond with the girls next door."

In a rhetorical act, the speaker provides them with a certain content and reference in the process of using the words. The perception of the speaker's attitude at the beginning of a speech act pronunciation implies the concept of a retic act. With the onset of the reticent act, the boundaries of pragmatism begin to emerge. Rhetorical act is defined by the degree of clear (objective) and private interest in knowledge, expression and understanding in the process of communication between people. It is possible to express clarity in a retic act with the phrase "dear in the hand that brings water" that exists in our people.

The phrase "a strong hand lives" is a reticent act.

"He said, 'Go away,'" the fatik act, because the punctuation used correctly in the pronunciation of certain grammatical rules in the pronunciation of this sentence also shows that the grammatical rules were strictly followed in the pronunciation of the fatik act. "He shouted at me to leave. The sentence "is a retic act, because in the process of pronouncing this sentence, the speaker provided it with a clear content and reference.

In connection with this pragmatic factor is the difference in the appearance of the reference, which represents the knowledge base of the interlocutor.

In connection with this pragmatic factor is the difference in the appearance of the reference, which represents the knowledge base of the interlocutor.

The act of the speaker's perception of the listener is a perlocutive act, in which the discourse between the speaker and the listener directs the retic and fatic

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act in the right direction, or is a descriptive expression of emphatic stress in addition to the logical stress in speech. Another way to draw meaningful conclusions based on various logical-semantic actions is to make and understand what the speaker "means". This method is called conversational inference. This is probably why it is necessary to distinguish between the two types, which can be done on the basis of (Makarov 2003: 125-127).

The concept of perlocutive act is included in the list of pragmatic issues as a communicative act that affects the feelings of the listener.

The perlocutive act can be graded according to the power of the listener's feelings.

For example:

1. On the face of a heart-struck oon ... the effect of emotion is felt a little less in the bar. The student tries to evoke human imagination and feelings through a certain analogy.

2. You are thirsty, you are thirsty. You are the desert in my heart, my people! Now the level of emotion from these lines is a bit higher, and the power of vatasvir is more intense than before. The tone and pronunciation are also somewhat balanced. The perlocutive act has a greater effect on the listener's feelings.

3. Tulip, tulip, The whole universe is a tulip! ... In this poetic speech act, the repeated use of a word by the speaker helps to make it more widely imagined in the listener's mind and further enhances the power of the speech effect. The content of this implication is to direct and imagine the listener to the highest emotion with the beauty of nature, and the purpose of which is to raise the listener's pleasure to the highest level. Accordingly, the effect of perlocutive act can be conditionally defined as low, medium, high.

To put it another way, it is also possible to know that one of the words given in a speech act is higher in emotional power than other in the speech process.

Our neighbor is coming to the bride,

The trumpet that struck the court yard.

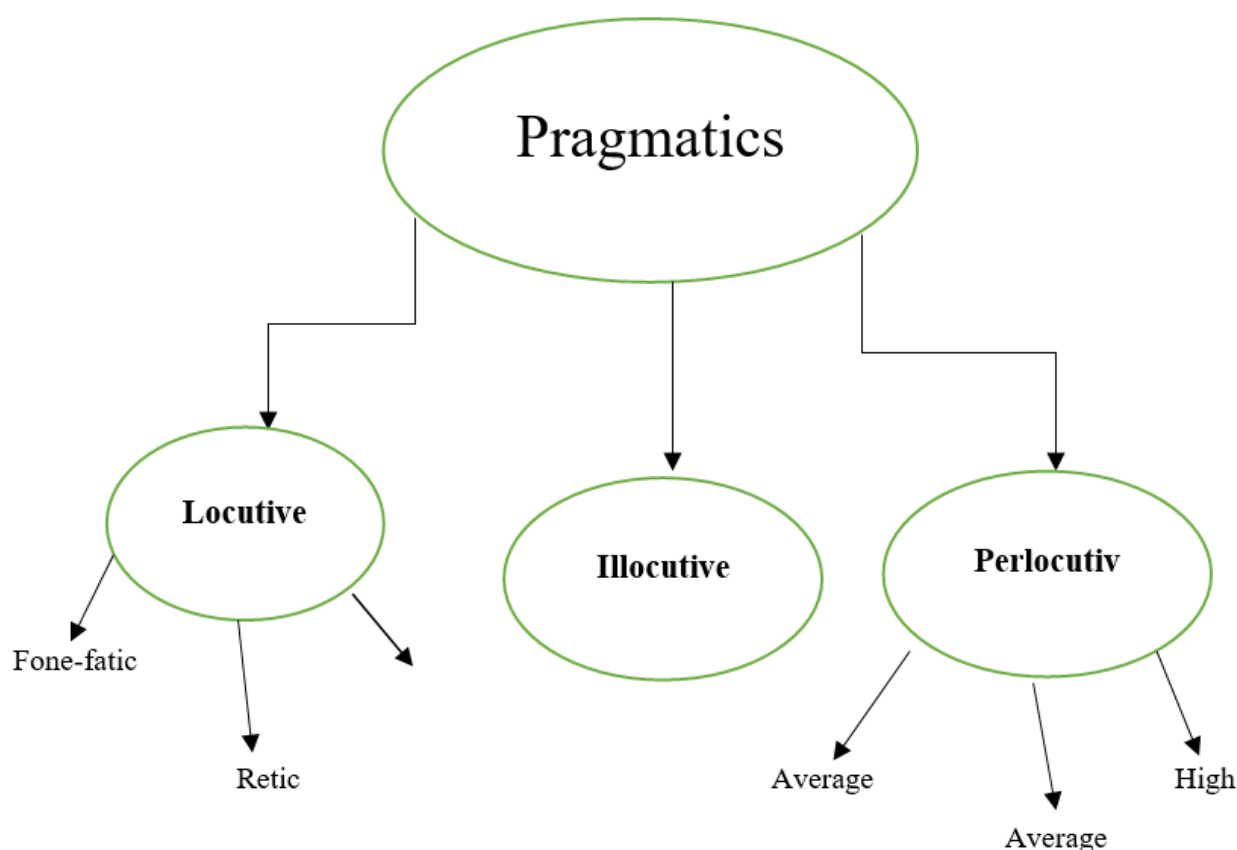
In the first of these poetic lines the bride, in the second the trumpet words have a higher meaning, range of influence, semantics than the others. The sentence is built around these two words. The implication of verbal influence is the result of the communicative purpose of interpersonal relationships in the speech process. This concept is the third, final stage of the structure of speech movement, which is a perlocutive act, which is radically different from the previous ones (locution and illusion), which is described as the result of the effect of speech activity. It is difficult to predict the outcome of a speech effect, and the listener who hears (or reads) the speaker's speech may have different behaviors and responses. As pragmalinguists themselves admit, "perlocutive act, unlike illocutive, is not a linguistic phenomenon, because any perlocutive result can be achieved without performing any verbal action" (Searle, Vanderveken 1985: 12). J. Leach also states that perlocution does not fall within the scope of linguistic analysis: "Perlocutive result analysis is not part of the task of pragmatics, because the power of pragmatic influence (speech action-Sh.S.) Depends on the purpose, not the result" (Leech 1983: 203).

In order not to leave the question open, linguists have come to the following conclusion: "... the exchange of information is not limited to a single message or request. The purpose of these actions is to satisfy the needs and interests of the speaker and the listener. This is the fulfillment of a pragmatic task. Hence, in the process of communication, pragmatic tasks occur within the communicative goal. Therefore, it is appropriate to include the perlocutive effect of speech in the scope of pragmalinguistic analysis" (Safarov Sh. 2008.96).

The graphical representation of the above also allows to illuminate the concepts of speech act of pragmatics:

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“All pragmalinguists agree that the content of a speech act consists of a generalization of linguistic and non-linguistic features. It has been said above that the concept of ‘speech act’ is one of the basic concepts of pragmatic analysis, but it should also be noted that this concept is interpreted differently by different authors. The diversity of opinions about the nature of the phenomenon of the speech act is also reflected in the proposed classification principles. To date, linguists have not come to a consensus on the number of groups of speech acts and even their naming.⁴ The

linguistic landscape of the world is created in a variety of colors, especially through figurative metaphorical words, similes, connotative words, stereotypes, symbols, etc. The realization of linguistic ability occurs in the process of communicating with specific language speakers. The presentation of the above idea shows that the study of the issues surrounding the pragmatic act, which is considered to be one of the events that determine the content of the text and speech structures in general, is still ongoing.

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International Scientific Journal
Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 30.06.2020 <http://T-Science.org>

QR – Issue



QR – Article



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AGROCHEMICAL PROPERTIES OF ERODED MOUNTAIN SOILS AND WAYS TO RESTORE THESE PROPERTIES

Abstract: The article shows that in brown and dark gray soils distributed in the vertical soil zone of mid-altitude mountains, due to the complex geological and geomorphological structure of the surface with significant slopes and a large depth of local bases of erosion, poor anti-erosion resistance of soils and parent rocks, uneven distribution of precipitation, rainfall their nature in the spring, the absence of anti-erosion measures, erosion processes are intensively developed.

Erosion processes have significantly changed the chemical and agrochemical properties of brown mountain soils that are common in the southern spurs of the Hissar Range within the confines of Surkhandarya. With an increase in the degree of erosion, the content and reserves of humus and nutrients decreased; accordingly, some agrochemical properties worsened.

The article also presents the results of studies on the change in the agrochemical properties of dark gray soils of the widespread western spurs of the Chatkal ridge under the influence of erosion. Also, it is substantiated that the eroded soil under the fruit plantations has fully recovered, acquired a clearly expressed humus horizon, and an accumulation of humus and other nutrients has occurred. It is proved that terracing of slopes and planting of trees positively affect the restoration of soil fertility and contribute to the protection of soils from erosion.

Key words: Soil erosion, agrochemical properties, humus, slope exposure, slope terracing, brown carbonate soils, typical brown soils, dark gray soil.

Language: Russian

Citation: Mirkhaydarova, G. S., & Sodikova, G. S. (2020). Agrochemical properties of eroded mountain soils and ways to restore these properties. *ISJ Theoretical & Applied Science*, 06 (86), 33-38.

Soi: <http://s-o-i.org/1.1/TAS-06-86-6> **Doi:** <https://dx.doi.org/10.15863/TAS.2020.06.86.6>

Scopus ASCC: 1100.

АГРОХИМИЧЕСКИЕ СВОЙСТВА ЭРОДИРОВАННЫХ ГОРНЫХ ПОЧВ И ПУТИ ВОССТАНОВЛЕНИЯ ЭТИХ СВОЙСТВ

Аннотация: В статье приведено, что коричневые и тёмно серозёмные почвы распространённые в вертикальном почвенном поясе средневысотных гор, из-за сложного геолого-геоморфологического строения поверхности со значительными уклонами и большой глубиной местных базисов эрозии, слабой противоэрозионной устойчивостью почв и почвообразующих пород, неравномерным распределением атмосферных осадков, ливневым характером их в весенний период, отсутствием противоэрозионных мероприятий, интенсивно развиты эрозионные процессы.

Эрозионные процессы в значительной степени изменили химические и агрохимические свойства горных коричневых почв, распространённые в южных отрогах Гиссарского хребта в пределах Сурхандарьи. С

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увеличением степени эродированности уменьшилось содержание и запасы гумуса и питательных элементов, соответственно этим показателям ухудшились некоторые агрохимические свойства.

Также в статье приведены результаты исследований по изменению агрохимических свойств тёмных серозёмов распространённых западных отрогов Чаткальского хребта под влиянием эрозии. Также, обоснованы что эродированная почва под плодовыми насаждениями полностью восстановилась, приобрела четко выраженный гумусированный горизонт, произошло накопление гумуса и других питательных элементов. Доказано, что террасирование склонов и посадка деревьев положительно влияют на восстановление плодородия почв и способствуют охране почв от эрозии.

Ключевые слова: Эрозия почв, агрохимические свойства, гумус, экспозиция склонов, террасирование склонов, коричневые карбонатные почвы, коричневые типичные почвы, тёмный серозём.

Введение

УДК: 631.4:551.3

В Узбекистане коричневые и тёмно серозёмные почвы распространены в вертикальном почвенном поясе средневысотных гор. Рельеф горных территорий в той или иной степени не позволяет использовать их для богарного земледелия, а в большинстве случаев используется для богарного садоводства и виноградоводства. Но при этом в большинстве случаев при проведении горно-мелиоративных работ в горной зоне не учитывался рельеф и другие условия почвообразования, которые способствуют проявлению процессов эрозии. В исследованиях Д.А.Кадировой показывает что, максимальное количество питательных веществ наблюдается в намытых, а минимальное количество питательных веществ находится на разных эродированных склонах [3].

Последствием эрозии является общее снижение плодородия почв, ухудшение их водно-физических свойств и водного режима, падение урожая сельскохозяйственных культур, низкая производительная способность эродированных почв в результате стока и смыва. В исследованиях наших ученых доказаны что в почвах, которые не подверглись эрозии и накоплению в результате эрозии (намытые), в гумусе преобладают гумусовые кислоты. Также, доказаны повышение питательных веществ [1, 4, 6, 7].

Исходя из выше изложенного, становится актуальным всестороннее изучение горных почв, на основе которых возможно решить сложных теоретических и практических проблем, стоящих перед современной почвенно-экологической наукой. В научных исследованиях А.Х.Кораяева [4] разработаны научно практические решение на определение свойств, оценка качества, а также сохранению и повышению плодородных богарных почв, развитых на горных и предгорных территориях Гиссарского хребта.

Материалы и методы

В качестве объекта исследования выбраны почвы распространённые в южных отрогах Гиссарского хребта в пределах Сурхандарьи и прилегающие к ней территории Байсунского

района, где более 68% земель подвержены в различной степени водной эрозии, которые требуют разработки мероприятия по восстановлению плодородия эродированных предгорных и горных почв, борьбы с эрозией и охраны биогеноценозов. А также, объектом исследования служили эродированные тёмные серозёмы западных отрогов Чаткальского хребта, в Паркентском районе Ташкентской области, в предгорьях западного Чаткала - на территории Чаткальской горно-лесомелиоративной опытной станции (ЧГМОС).

Природные и хозяйственные условия западных отрогов Чаткальского хребта способствуют интенсивному развитию эрозионных процессов. Резкая расчлененность территории, большая крутизна склонов, частые ливневые осадки, выпадающие в основном в весенне-осенне-зимний периоды, когда почва полей обработана и поверхность покрыта растениями незначительно, являются причиной поверхностного смыва на богарных землях.

На маршрутах закладывались по геоморфологическим профилям примерно 2-3 разрезов глубиной 1,5-2 м в зависимости от рельефа и степени смытости почв.

Гумус определялся по методу Тюрина, валовой азот, фосфор и калий определен по Гриценко, Мальцевой, Смиту, CO₂ карбонаты – ацидетрическим методом.

Результаты исследования и их обсуждение

В процессе смыва верхних, наиболее плодородных горизонтов, происходят значительные изменения ее химических и агрохимических свойств. Эродированные почвы по сравнению с несмытыми почвами водоразделов и склонов характеризуются меньшей мощностью гумусового слоя и более низким содержанием гумуса.

Снижение содержания гумуса эродированных почв (гуминовой кислоты) один из факторов, ослабляющих противозерозионную устойчивость смытых почв [5, 6].

Процесс эрозии резко ухудшает химические и агрохимические свойства почв. При этом снижается содержание гумуса и форм азота, фосфора и калия. Как показывают данные на

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рисунке 1, в слабосмытых горных коричневых карбонатных почвах пахотном горизонте гумуса содержится - 2,96%, в среднесмытых 2,52%. Особенно обеднены гумусом почвы, расположенные на южных и восточных экспозициях, где количество его в горных карбонатных коричневых почвах в пахотном

горизонте составляет - 2,46%, при этом их убывание вниз довольно резкое, а в слабосмытых почвах его содержание уменьшается вглубь более или менее равномерно.

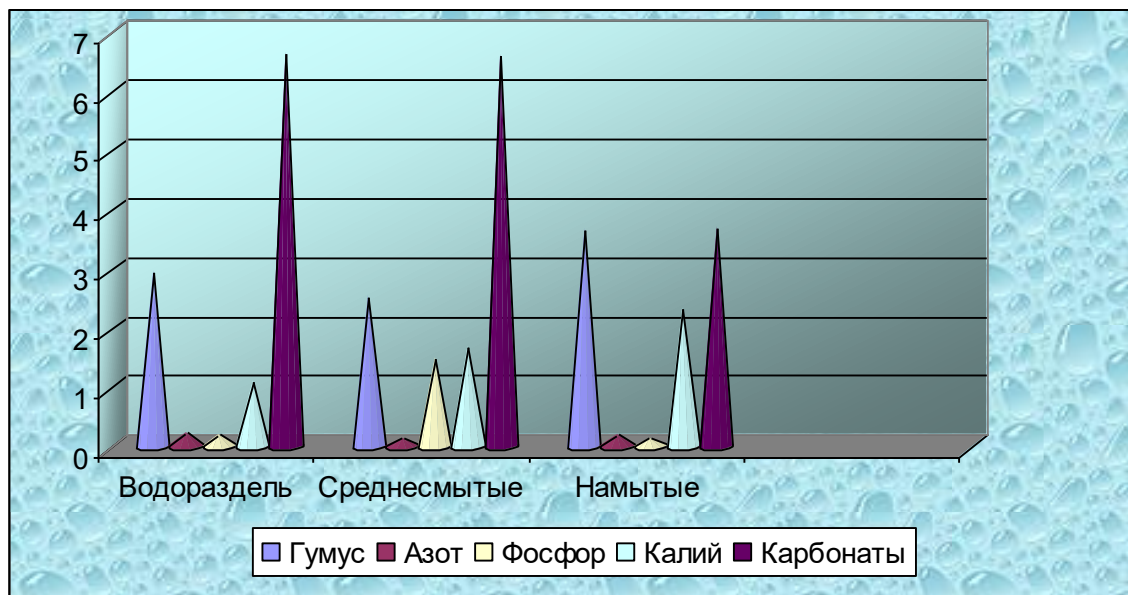


Рис.1. Агрохимические свойства в различной степени эродированных горно-коричневых карбонатных почв.

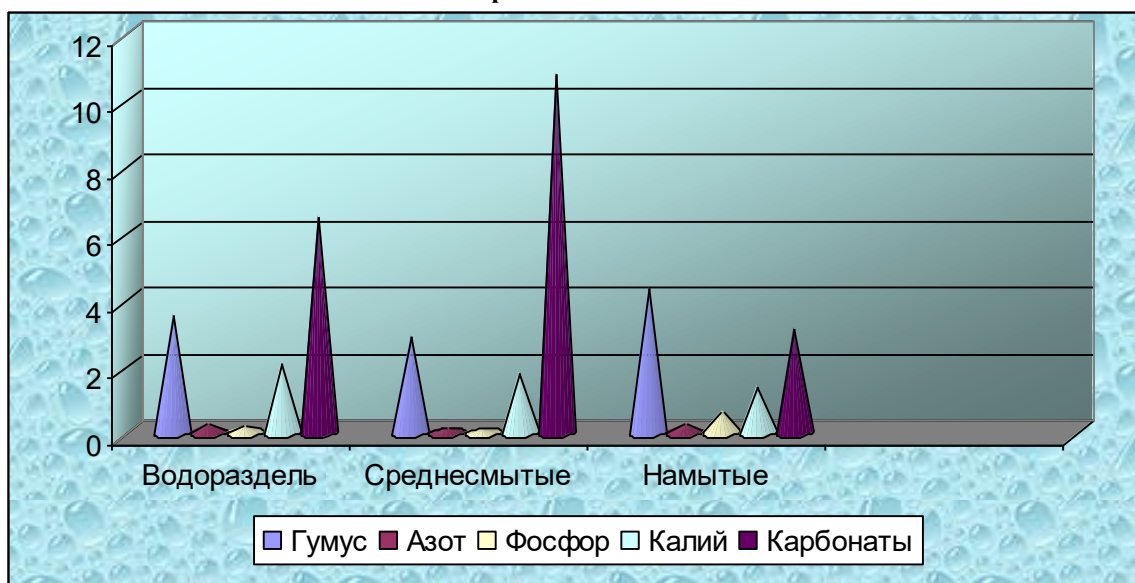


Рис.2. Агрохимические свойства в различной степени эродированных горно-коричневых типичных почв.

Самое высокое содержание гумуса наблюдается в несмытых коричневых типичных почвах расположенных в северных экспозициях, где его количество в пахотном горизонте составляет 4,37%, а в нижних слоях 2,19-1,97%. В среднесмытых почвах расположенных на южных

склонах в верхнем горизонте содержание гумуса колеблется в пределах 2,90 - 1,26%. (рис.2).

Такое низкое содержание гумуса на южных склонах во всех исследуемых почвах связано с процессом эрозии, со скудностью растительного покрова и сухостью верхнего слоя почв.

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Следует отметить, что высокая подверженность эрозии горных коричневых карбонатных почв южных отрогов Гиссарского хребта является результатом большой крутизны склонов, слабого травянистого покрова и отсутствия на большей части территории лесной растительности, хотя противоэрозионная устойчивость этих почв оценивается как более высокая, чем у сероземного пояса.

Так, если в верхнем горизонте слабосмытых горных коричневых карбонатных и горных коричневых типичных почвах содержание CO₂ карбонатов составляет 5–2%, то среднесмытых 6,54–7,6 %. Как видно из рисунка 1, повышение содержания карбонатов в верхних горизонтах смытых горных коричневых карбонатных почв проявляется резче, чем на слабосмытых горных коричневых типичных почвах, так как на горных коричневых типичных почвах карбонаты промыты глубже. Такая же закономерность наблюдается в исследовательских работах О.Х.Эргашева, проведённых в северных отрогах Туркестанского хребта [7].

Из приведенных данных таблицы 1 видно, что в тёмных серозёмах, западных отрогов Чаткальского хребта, в верхних горизонтах сильноэродированных почв содержание гумуса составляет 1.39–1.20% и оно уменьшается вглубь довольно резко. В обследованных почвах содержание валового азота, фосфора и калия изменяется в тесной связи с содержанием гумуса. Наибольшее их количество отмечается в верхних гумусированных горизонтах.

Как видно из таблицы 1, повышение содержания карбонатов в верхних горизонтах смытых тёмных сероземов проявляется резче. Это объясняется приближением к дневной поверхности нижних горизонтов почвы, содержащих большое количество карбонатов. Таким образом, под влиянием ливневой эрозии, в эродированных тёмных сероземах кроме изменения механического состава, снижается содержание гумуса, азота, фосфора, калия, а также значительно приподнимаются нижние, более карбонатные горизонты.

Таблица 1. Химические и агрохимические свойства темных сероземов Чаткальской горно-лесомелиоративной опытной станции.

№ раз.	Название почв и место положения разрезов	Глубина, см	Гумус, %	Азот, %	C:N	Валовой %		CO ₂ карбонат, %
						фосфор	калий	
1	Тоже, верхняя часть склона, 1942 году террасированная, крутизна 13°	0-5	3.73	0.17	15.1	0.26	2.15	1.03
		5-18	2.45	0.14	6.0	0.19	2.20	1.60
		18-42	1.51	0.10	8.7	0.16	2.15	1.17
		42-60	1.15	0.08	8.2	0.15	2.00	1.25
		60-88	0.96	0.04	13.7	0.12	1.95	2.64
		88-121	0.81	-	-	-	-	2.06
		121-137	0.77	-	-	-	-	11.06
		137-155	0.50	-	-	-	-	12.63
6	Тоже, средняя часть склона террасированная 1952 г. крутизна 15°	155-200	0.54	0.03	10.3	0.10	2.00	15.63
		0-26	2.32	0.18	7.4	0.16	2.15	2.64
		26-63	1.54	0.14	6.3	0.15	2.25	4.15
		63-105	0.88	0.08	6.4	0.15	2.10	7.82
		105-136	0.62	0.05	7.2	0.12	1.80	14.68
8	Тоже, подножье склона, террасированная 1960 г. крутизна, 5°	136-180	0.54	0.03	10.3	0.11	1.6П	14.84
		0-6	2.21	0.13	9.8	0.16	1.15	6.05
		6-23	1.84	0.14	7.6	0.16	2.35	7.34
		23-42	1.34	0.11	7.0	0.16	1.75	7.34
		42-72	1.27	0.11	6.6	0.18	1.80	7.19
		72-103	1.09	0.09	7.0	0.17	2.05	3.89

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		103-130	0.86	-	-	-	-	2.79
		130-154	0.87	-	-	-	-	2.06
		154-200	0.53	-	-	-	-	5.54
10	Тоже, сильно эродированная почва (склон незащищенный от эрозии), крутизна 15°	0-4	1.39	0.07	11.4	0.05	1.40	11.26
		4-14	1.20	0.07	9.8	0.05	1.40	14.29
		14-27	0.97	0.07	8.0	0.05	1.20	14.36
		27-53	0.52	0.06	5.0	0.04	1.20	16.05
		53-77	0.42	0.04	6.0	0.04	1.10	15.98
		77-102	0.31	0.04	4.5	0.04	1.10	16.12
		102-120	0.31	0.05	3.6	0.03	1.10	16.83
		120-150	0.31	0.04	4.5	0.03	1.10	16.97

Террасирование склонов и посадка деревьев положительно влияют на восстановление плодородия почв и способствуют охране почв от эрозии.

Как известно, почвенный покров Чаткальской горно-лесомелиоративной опытной станции (ЧГМОС) обследован и описан в 1939 году. З. Н. Антошиной и М. А. Панковыми было установлено, что в этой зоне все почвы склонов подвержены различной степени эрозии [1].

В почвенных разрезах 1939 г. содержание гумуса в верхних горизонтах составило 0.86-1.64%, после террасирования склонов и посадки деревьев в настоящее время, содержание гумуса в верхних горизонтах почвы увеличилось до 2.46-3.73%. Значительные изменения произошли в накоплении CO₂ карбонатов в верхних горизонтах. В начальный период количество их составило 9.88-12.58%, а в данный период снизилось до 1-6%.

Как видно, идет процесс их вымывания вглубь, т.е. наблюдается восстановление почвы. Большое значение в этом имеют древесные насаждения, они задерживают таяние снега, препятствуют смыву почвы, способствуют более равномерному впитыванию воды в почву. Здесь основную противоэрозионную роль выполняет лесная подстилка, препятствующая смыву и размыву верхних почвенных горизонтов. В результате поверхностный сток проходит во внутрь почвы, и это способствует вымыванию карбонатов в более глубокие горизонты. Полученные данные согласуются с данными других исследователей.

Изучение поверхностных и подземных растительных остатков (биомассы) проводилось в последние весенние дни с целью наблюдения результатов запланированного, рационального воздействия человека на природу в изменении содержания гумуса в почвах. Почвенные монолиты размером 50×50×50 см отбирали слоями (0-50 см) для изучения подземной корневой массы растений. Поверхностная биомасса растения была сначала извлечена из

участка площадью 1 м², предназначенного для извлечения почвенных монолитов, затем почвенные монолиты были извлечены и помещены в трехслойный марлевый мешок с собственными этикетками. Пробы отбирались в последовательности глубин 0–10, 10–20, 20–30, 30–50 см. Описание стационарных точек и расчет биомассы приведены ниже:

1. С.т.- северо-западная экспозиция, темно серозёмная почва, верхняя часть террасированного склона в 1942 году для предотвращения эрозии и восстановления плодородия почвы, сад с различными фруктовыми деревьями, 1 м² подземного и надземного растительного фонда составляют 1160 г/м².

2. С.т. - юго-восточная экспозиция, темно серозёмная почва, незащищенный открытый склон, биомасса на 1 м² земли составила 601,2 г/м².

Расчет поверхностной и подземной биомассы растений имеет большое значение, поскольку является основным источником гумуса почвы. Если мы обратимся к приведенным выше данным, то на первый взгляд увидим, что количество биомассы на 1 м² на склоне, на котором созданы сады, в два раза больше, чем на участке, где эродированы почвы на открытом склоне. Например, изменение количества гумуса было непосредственно увеличено на склоне, где был создан сад. Это прямо отражается на запасах гумуса: в результате мер, принятых 60-80 лет назад для предотвращения эрозии и восстановления плодородия почв, сегодня запасы гумуса в почвах региона на уровне 0-50 см составляют 130,0 т/га. Это, конечно, непосредственно результат избытка биомассы и, с другой стороны, процессов минерализации и гумификации, которые происходят в условиях достаточной влажности. На других склонах, где почвы являются незащищенными и сильно эродированными, запасы гумуса составляли почти половину вышеуказанного показателя, т.е. 70,6 т/га.

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Выводы

Таким образом, почвы распространенные в вертикальном почвенном поясе средневысотных гор и предгорьях из-за сложного геолого-геоморфологического строения поверхности со значительными уклонами и большой глубиной местных базисов эрозии, слабой противоэрозионной устойчивостью почв и почвообразующих пород, неравномерным распределением атмосферных осадков, ливневым характером их в весенний период, отсутствием противоэрозионных мероприятий, интенсивно развиты эрозионные процессы.

Эрозионные процессы в значительной степени изменили химические и агрохимические свойства горных коричневых почв, распространенные в южных отрогах Гиссарского хребта в пределах Сурхандарьи. С увеличением степени эродированности уменьшилось

содержание и запасы гумуса и питательных элементов, соответственно этим показателям ухудшились некоторые агрохимические свойства.

В темных сероземах, западных отрогов Чаткальского хребта из-за сильного воздействия эрозии на химические свойства почвы в верхних горизонтах содержание гумуса составляет 1.39-1.20%. Под влиянием эрозии на поверхность выходят нижние слои, содержащие больше карбонатов, их количество уже в верхних слоях составляет 1.3-14.3%.

Изменения произошли в химических свойствах: по ситуациям М. А. Панкова (1941) если в 1939 году в верхних слоях почвы содержание гумуса составило 1.44-0.86%, то при воздействии противоэрозионных мероприятий, в настоящее время этот показатель заметно увеличился (3.73-2.45%).

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SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 17.06.2020 <http://T-Science.org>

QR – Issue



QR – Article



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GENDER-POLITE EUPHEMISMS OF THE LINGUISTIC AND CULTURAL CONCEPT «WOMAN» IN COMPARISON OF RUSSIAN AND UZBEK LANGUAGES

Abstract: The article analyzes the comparison of gender-polite euphemisms of the linguoculturological concept "woman" in comparison of the Russian and Uzbek languages.

Examples of euphemisms in relation to the concept of "pregnant woman" are analyzed in the comparative plan of two completely different languages that occur in the process of modern communication. We consider the strategies of politeness and its accompanying national-cultural principles that dictate the creation and use of gender-polite euphemisms when addressing women, and describe the ethnic and socio-cultural features of the compared languages.

Key words: euphemism, comparison, concept, linguo-cultural studies, gender linguistics, stereotypes, mentality.

Language: Russian

Citation: Sattorova, E. A. (2020). Gender-polite euphemisms of the linguistic and cultural concept «woman» in comparison of Russian and Uzbek languages. *ISJ Theoretical & Applied Science*, 06 (86), 39-42.

Soi: <http://s-o-i.org/1.1/TAS-06-86-7> **Doi:** <https://dx.doi.org/10.15863/TAS.2020.06.86.7>

Scopus ASCC: 1203.

ГЕНДЕРНО-ВЕЖЛИВЫЕ ЭВФЕМИЗМЫ ЛИНГВОКУЛЬТУРОЛОГИЧЕСКОГО КОНЦЕПТА «ЖЕНЩИНА» В СОПОСТАВЛЕНИИ РУССКОГО И УЗБЕКСКОГО ЯЗЫКОВ

Аннотация: Статья посвящена анализу сопоставления гендерно-вежливых эвфемизмов лингвокультурологического концепта «женщина» в сопоставлении русского и узбекского языков.

Анализируются примеры эвфемизмов по отношению к понятию «беременная женщина» в сопоставительном плане двух совершенно разнотипных языков, которые встречаются в процессе современной коммуникации. Рассматриваются стратегии вежливости и сопутствующие ей национально-культурные принципы, диктующие создание и употребление гендерно-вежливых эвфемизмов при обращении к лицам женского пола, и описываются этнические и социокультурные особенности сопоставляемых языков.

Ключевые слова: эвфемизм, сопоставление, концепт, лингвокультурология, гендерная лингвистика, стереотипы, менталитет.

Введение

Эвфемизмы по своей природе представляют собой сложное и многоплановое явление.

Ученые-лингвисты, занимающиеся изучением эвфемизмов, объясняют некоторые его особенности и свойства неоднозначно, уделяя, как правило, особое внимание какой-либо одной стороне вопроса.

Подходы к изучению явления эвфемистических замен разнообразны и

многочисленны и зависят напрямую от того аспекта, который подвергается исследованию и анализу [1, с. 15].

С точки зрения гендерной лингвистики подходит к проблеме использования в языке эвфемизмов Г.А. Вильданова. Она выделяет в языке гендерно-вежливые эвфемизмы, отражающие гендерные стереотипы. Исследователь отмечает перенос эвфемизации, связанной с языком женщин, из личной сферы в

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социальную [2, с. 7]. Рассмотрев эвфемизмы в речи мужчин и женщин, В.Ю. Харитонова наблюдает «свойственное женщинам предпочтение утончённых, завуалированных и уклончивых номинаций» [3, с. 142].

Согласно узбекскому лингвисту А.Ж. Омонтурдиеву, «Эвфемизмы принадлежат языковым универсалиям, при помощи которых хотят завуалировать, закамouflировать некий смысл, который говорящий почему – либо считает неудобным обозначать прямо» [4, с.116].

Межъязыковые сопоставления эвфемизмов только ещё начинаются. В данной статье, мы особое место отводим исследованию менталитетам двух различных народов, и их национальным обычаям и традициям, что очень тесно связано с речевой культурой общества в целом. Так как, в настоящее время общепринятым является мнение о том, что как в культуре, так и в языке каждого народа присутствует универсальное (общечеловеческое) и национально-специфическое единство. В то же время в любой культуре имеются присущие только ей культурные значения и особенности, закреплённые в языке, моральных нормах, убеждениях, поведении и т.п. Менталитет и концептосфера тесно связаны и взаимодействуют в процессах мышления.

Гендерный фактор играет значительную роль в употреблении эвфемизмов. Его влияние обусловлено, в первую очередь, желанием избежать дискриминации человека по его половой принадлежности, уважительным отношением к личности.

В соответствии с направленностью данной научной статьи на сопоставительные лингвокультурологические особенности эвфемизмов базой исследования выступают два разносистемных языка, анализируемых в аспекте отражения, накопления, хранения и передачи культурной информации, культурных кодов народа – носителя языка, что обеспечивает преемственность и развитие национальной культуры. Таким образом, базовыми представляются понятия – национальная языковая картина мира и национальная языковая личность.

Мы считаем, что культурный компонент отражается через внутреннюю форму слова, т.е. через гендерно-вежливые эвфемизмы. И в качестве иллюстрации к сказанному, можно привести в пример лингвокультурологический концепт «женщина», который мы анализируем по следующей схеме: 1) отражение сути концепта в каждой из анализируемых культур; 2) с позиции запретов (кому-либо, что-либо нельзя + какое-либо действие, если); 3) употребляемые эвфемизмы вместо табу, запретов; 4) лингвокультурологические поверья. При этом «в качестве главной предпосылки применения

вторичной номинации служит ассоциативное сходство денотатов объединяемых реалий; даже если оно незначительно возможно осуществить вторичное название, которое происходит за счет установления общих (интегрирующих) признаков, позволяющих объединить определенные реалии в один класс» [5, с.6].

Следует отметить, что лингвокультурологические эвфемизмы в анализируемых культурах имеют характерные, национально-специфичные, региональные особенности.

«Женщина» – универсальный лингвокультурологический концепт, понятие, характерное для обеих анализируемых культур. Традиционно «женщина» в русской и узбекской культурах имела жесткие ограничения в социальных, религиозных и общественных моральных прав. С давних времен, женщина, как среди узбеков, так и у русских, традиционно находилась в тени мужчины. Она являлась хранительницей домашнего очага, женой, матерью, воспитывала детей.

В контексте общекультурных универсальных ценностей «женщина» понимается неоднозначно. С одной стороны, женщина представляет собой нечто отрицательное, т.е. она являлась носителем отрицательных качеств, представляя негативный полюс ценностей в иерархии определенного мира, сочетая в себе источник бедствий для мужчины и прибежище дьявольских, темных сил. С другой стороны, женщина, находясь в зависимости от мужчины, являясь его помощницей, выполняла функции жены и матери детей. Следует отметить, что дискриминация женщин в правах и свободах наблюдается и сейчас, на современном этапе, хотя не столько ярко выражена. Женщина не воспринимается как лидер из-за традиционных устоявшихся стереотипов и философских верований. Например, в коммуникативной ситуации-прием на работу при предъявлении одинаковых резюме (диплом, сертификаты, характеристики, умения, знания и т.д.) мужчиной и женщиной предпочтение отдается мужчине, шансов устроиться на работу больше у мужской нежели у женской половины общества.

В рассматриваемых культурах запрещалось называть в прямой номинации – беременную женщину, употреблялись следующие гендерно-вежливые эвфемизмы, например, рус.: **беременная** – эвф. будущая мать, в (своём) марьяжном интересе, в положении, в интересном состоянии, ждет пополнения, в деликатном положении, ожидающая, на снастях, в тягости и т.д.; узб.: **bo'goz (беременная)** – эвф. boshqoronqu bo'lmoq (находящаяся под контролем), bo'yida bo'lmoq (не имеет перевода, т.е. не имеет эквивалента в русском языке), vujud (тело), gavhar (жемчуг), gumon (не имеет перевода), gumoni bor

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(не имеет перевода), donni cho'qimoq (перемальвает зерно), doq paydo bo'lmoq (время иметь пятна на лице), dujon (не имеет перевода), duqat duqat (не имеет перевода), ikkiqat (двое), ko'ngli sust ketmoq (обескураженная), natija hosil bo'lmoq (ждет результаты плода), nishona paydo bo'lmoq (идущая к цели), oy-kuni yaqin (близок день и месяц), oyog olishi galati (странно ходящая), oyogi ogir (тяжелая нога), ota salobidan ona botiniga boglanmoq (быть привязанным к утробе матери, приветствие от отца к утробе матери), ogirbo'yu (тяжелая), uchinchi kishi (третий человек), uchinchi odam (третий человек), zida dogi bor (у нее есть пятно), yukli (загружена), yukli bo'lmoq (быть загруженной), qornida bir nimani sezmoq (что-то чувствуется в утробе), surgunida bor (в изгнании, перевод путем кальки) и др.

С древних времен, и по сегодняшний день традиционно, узбекским менталитетом является то, что дочерям и женщинам запрещалось и запрещается называть имена своих родителей, имя мужа, а также имена родственников мужа, поэтому лингвокультурологический концепт «женщина» в анализируемых культурах имеет свои национально-специфические особенности.

В узбекской культуре женщина характеризуется следующими особенностями и чертами:

- хранительница очага (o'choq); ассоциируется с уютом в семье; все управление и ведение домашнего хозяйства было на плечах женщины;

- продолжательница рода, жизни; мать детей;
- строго следуя древним традициям девочку в семье всесторонне обучали и прививали навыки, различные умения: от этикета и почитания традиций до ведения и управления домашним хозяйством. Это делалось для того, чтобы в будущем достойно и выгодно выдать дочь замуж;

- в узбекской семье девочке, будущей невесте с самого рождения готовилось приданное. Эта традиция сохранилась и в наши дни. В приданое невесты входит все необходимое для будущей семьи, причем это делается с запасом, чтобы в течение 5-6 лет молодая семья ни в чем не нуждалась.

Итак, в узбекской культуре дочерей почитают как высшую драгоценность семьи, а мудрая женщина управляет незаметно.

В русской культуре отношение к «женщине» отразилось в славянской мифологии, древних языческих верованиях. С одной стороны, с Мокошью – единственным женским божеством в языческом пантеоне – было связано не только благополучие девичьих судеб, но и плодородность земли и хороший урожай. «Мать – сыра земля» – постоянный эпитет высшего женского начала. С другой стороны, женские образы связаны с

темным, плохим, то есть они соотносены с проявлением негативных качеств.

Суть отношения к женщине в русской культуре отражена в народных поговорках: «Кто кого любит, тот того лупит», «Коли муж не бьет, значит, не любит»; «Не верь коню в поле, а жене на воле», то есть неволя считалась принадлежностью женского существа. Традиционно русские женщины верили и считали, что они, в самом деле, рождены для того, чтобы их били мужа и сами побои были признаком любви.

Женщина в русской культуре характеризуется следующими особенностями и чертами:

- традиционно дочерей воспитывали и держали в строгости;

- обучали девочек различным умениям по ведению домашнего хозяйства;

- сохранение невинности девушки было основным требованием, критерием при выдаче замуж;

- девушка не знала до замужества своего жениха;

- мать не имела влияния на своих детей, так как знатной женщине считалось неприличным кормить грудью детей, их отдавали кормилицам. Няни и дядки воспитывали детей под руководством и властью отца семейства;

- женщина без позволения мужа не смела никуда выйти из дома; за стол садились только после отца семейства;

- в домашнем быту женщина не обладала какой-либо властью, даже в ведении хозяйства.

Следует отметить, что только в начале XVIII в. в жизни русской женщины начали происходить изменения, т.е. в обществе был выдвинут принцип гуманизма, интерес к человеку, как к личности.

Сейчас, на современном этапе женщины имеют одинаковые права с мужчинами, но определенная дискриминация женщин присутствует и сейчас, отражающаяся в выражениях: хозяин-барин, муж-глава, отец семейства.

Таким образом, анализ лингвокультурологического концепта «женщина» в рассмотренных русской, узбекской культурах позволяет сделать следующие обобщающие выводы.

1. Понятие «женщина» универсальный лингвокультурологический концепт характерный для обеих культур вне зависимости от вероисповедания.

2. Для анализируемых культур характерно то, что традиционно женщина была ограничена социальных, религиозных, политических, юридических, общественных, моральных правах.

3. Функциональные обязанности женщины ограничивались рамками семьи.

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4. Основное предназначение женщины заключалось в том, что она обустроивала весь быт и вела хозяйство семьи; была женой, матерью, воспитывала детей.

5. Лингвокультурологический концепт «женщина» в анализируемых культурах в своей принципиальной сущности понимается однозначно (одинаково), но различается трактовками по отношению к данному понятию.

Кацев А.М. в своих работах по исследованию эвфемии указывает на лингвистические критерии идентификации эвфемизма. К ним он относит, во-первых, вторичную номинацию. Под вторичной номинацией понимается использование уже имеющихся в языке номинативных средств в новой для них функции – функции наречения [6, с. 15]. При этом «в качестве главной предпосылки применения вторичной номинации служит ассоциативное сходство денотатов объединяемых

реалий; даже если оно незначительно – возможно осуществить вторичное название, которое происходит за счет установления общих (интегрирующих) признаков, позволяющих объединить определенные реалии в один класс» [7, с. 6].

В тени данных мотивов скрывается оценка как результат переосмысления окружающего мира с позиции разных ценностей [8, с. 262]. Стоит отметить, что, несмотря на разность подходов, круг эвфемизируемых явлений в языке достаточно однообразен в своем проявлении, как в русском языке, так и в узбекском. Это, на наш взгляд, обусловлено глубокими философскими учениями, религиозными верованиями, национально-специфическими культурными традициями, иерархической структурой власти, политической системой общества и т.д.

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SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 17.06.2020 <http://T-Science.org>

QR – Issue



QR – Article



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STUDY OF STATISTICAL DESCRIPTION OF SENSORS FOR THE CONVERSION OF MULTIPHASE CURRENTS OF REACTIVE POWER SOURCES IN ELECTRICITY SUPPLY SYSTEMS

Abstract: In this study, the reactive power of the power supply system is controlled and controlled using secondary voltage conversion sensors, taking into account the interaction of magnetic currents generated by multi-phase primary currents. For control and management of reactive power, the results of the descriptions of multi-phase current conversion sensors are given.

Key words: Reactive power, multi-phase currents, sensor, control, control, voltage, source, signal, air gap, sensitive element, description.

Language: English

Citation: Abubakirov, A., Baymurov, I., Ismandiyarov, A., Otemisov, A., & Uteniyazov, K. (2020). Study of statistical description of sensors for the conversion of multiphase currents of reactive power sources in electricity supply systems. *ISJ Theoretical & Applied Science*, 06 (86), 43-47.

Soi: <http://s-o-i.org/1.1/TAS-06-86-8> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.06.86.8>

Scopus ASCC: 2102.

Introduction

The study of the static characteristics of the reactive power (RP) multi-phase current-to-voltage conversion sensor of power supply systems (PSS) is carried out in the form of studies of signal conversion processes based on distributed parametric models of magnetic circuits. In the study of static characteristics of sensors that convert the value of the primary current of the RP source to the output voltage, I_3 input phase

currents U_{3u} output voltages, magnetic currents generated by the input currents to the S_{C3} cross section of the sensing element, the number of w_{C3} windings of $l_{x.o}$ the sensing element, dipazones and the various parameters of the magnetic core are required to be determined [1-5].

The magnetic currents generated by the currents $I_{AY}, I_{BY}, I_{CY}, I_{AD}, I_{BD}, I_{CD}$ generated by PSS s RP sources are in the magnetic cores (rods) F_{μ} - magnetic driving

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forces (m.d.f.), they generate Φ_{μ} - sensing based on the magnetic currents passing through the elements, the process of converting primary currents to $U_{\text{Эчик}}$ -

secondary voltages and a model of the sensor structure is constructed (Figure 1).

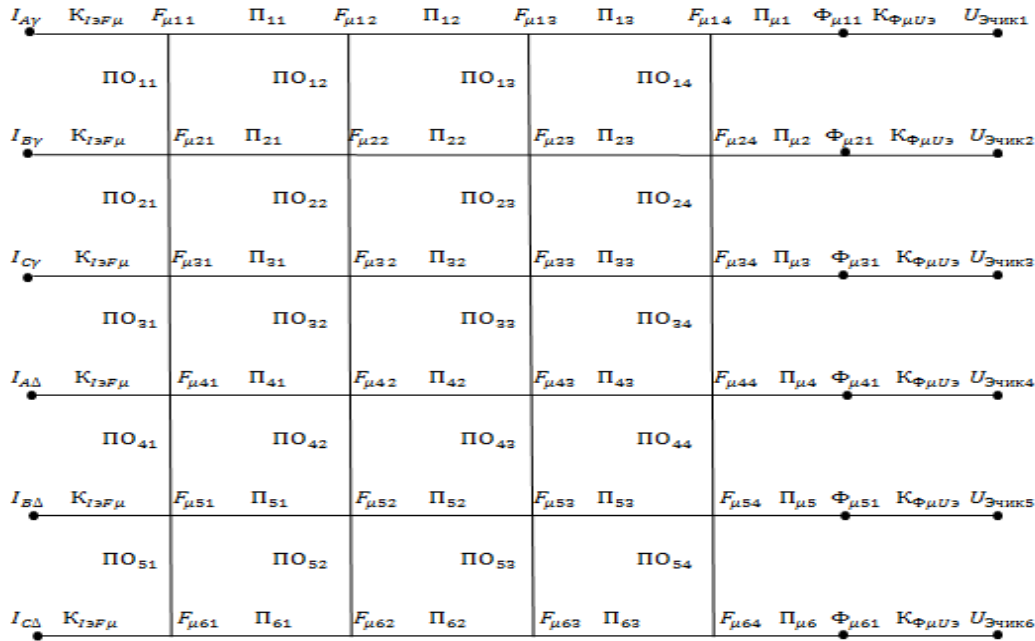


Figure 1. The process of converting multi-phase current to secondary voltage and the model of the sensor switch section.

The static characteristics of the multi-phase current-to-voltage conversion sensor used in the RP control of the PSS are investigated on the basis of a

distributed parametric graph model (Figure 1) using an analytical expression as follows [6-10]:

$$\begin{aligned}
 U_{A\gamma} &= K_{\Phi\mu U_{\text{Э}}}\Pi_{\mu 1}(W(F_{\mu 11}, F_{\mu 14})K_{I_{\Delta F}\mu}I_{A\gamma} + W(F_{\mu 21}, F_{\mu 14})K_{I_{\Delta F}\mu}I_{B\gamma} \\
 &\quad + W(F_{\mu 31}, F_{\mu 14})K_{I_{\Delta F}\mu}I_{C\gamma} + W(F_{\mu 41}, F_{\mu 14})K_{I_{\Delta F}\mu}I_{A\Delta} + \\
 &\quad + W(F_{\mu 51}, F_{\mu 14})K_{I_{\Delta F}\mu}I_{B\Delta} + W(F_{\mu 61}, F_{\mu 14})K_{I_{\Delta F}\mu}I_{C\Delta}), \\
 U_{B\gamma} &= K_{\Phi\mu U_{\text{Э}}}\Pi_{\mu 2}(W(F_{\mu 21}, F_{\mu 24})K_{I_{\Delta F}\mu}I_{B\gamma} + W(F_{\mu 11}, F_{\mu 24})K_{I_{\Delta F}\mu}I_{A\gamma} \\
 &\quad + W(F_{\mu 31}, F_{\mu 24})K_{I_{\Delta F}\mu}I_{C\gamma} + W(F_{\mu 41}, F_{\mu 24})K_{I_{\Delta F}\mu}I_{A\Delta} \\
 &\quad + W(F_{\mu 51}, F_{\mu 24})K_{I_{\Delta F}\mu}I_{B\Delta} + W(F_{\mu 61}, F_{\mu 24})K_{I_{\Delta F}\mu}I_{C\Delta}), \\
 U_{C\gamma} &= K_{\Phi\mu U_{\text{Э}}}\Pi_{\mu 2}(W(F_{\mu 31}, F_{\mu 34})K_{I_{\Delta F}\mu}I_{C\gamma} + W(F_{\mu 11}, F_{\mu 34})K_{I_{\Delta F}\mu}I_{A\gamma} \\
 &\quad + W(F_{\mu 21}, F_{\mu 34})K_{I_{\Delta F}\mu}I_{B\gamma} + W(F_{\mu 41}, F_{\mu 34})K_{I_{\Delta F}\mu}I_{A\Delta} \\
 &\quad + W(F_{\mu 51}, F_{\mu 34})K_{I_{\Delta F}\mu}I_{B\Delta} + W(F_{\mu 61}, F_{\mu 34})K_{I_{\Delta F}\mu}I_{C\Delta}), \\
 U_{A\Delta} &= K_{\Phi\mu U_{\text{Э}}}\Pi_{\mu 2}(W(F_{\mu 41}, F_{\mu 44})K_{I_{\Delta F}\mu}I_{A\Delta} + W(F_{\mu 11}, F_{\mu 44})K_{I_{\Delta F}\mu}I_{A\gamma} \\
 &\quad + W(F_{\mu 21}, F_{\mu 44})K_{I_{\Delta F}\mu}I_{B\gamma} + W(F_{\mu 31}, F_{\mu 44})K_{I_{\Delta F}\mu}I_{C\gamma} \\
 &\quad + W(F_{\mu 51}, F_{\mu 44})K_{I_{\Delta F}\mu}I_{B\Delta} + W(F_{\mu 61}, F_{\mu 44})K_{I_{\Delta F}\mu}I_{C\Delta}), \\
 U_{B\Delta} &= K_{\Phi\mu U_{\text{Э}}}\Pi_{\mu 5}(W(F_{\mu 51}, F_{\mu 54})K_{I_{\Delta F}\mu}I_{B\Delta} + W(F_{\mu 11}, F_{\mu 54})K_{I_{\Delta F}\mu}I_{A\gamma} \\
 &\quad + W(F_{\mu 21}, F_{\mu 54})K_{I_{\Delta F}\mu}I_{B\gamma} + W(F_{\mu 31}, F_{\mu 54})K_{I_{\Delta F}\mu}I_{C\gamma} \\
 &\quad + W(F_{\mu 41}, F_{\mu 54})K_{I_{\Delta F}\mu}I_{A\Delta} + W(F_{\mu 61}, F_{\mu 54})K_{I_{\Delta F}\mu}I_{C\Delta}), \\
 U_{C\Delta} &= K_{\Phi\mu U_{\text{Э}}}\Pi_{\mu 5}(W(F_{\mu 61}, F_{\mu 64})K_{I_{\Delta F}\mu}I_{C\Delta} + W(F_{\mu 11}, F_{\mu 64})K_{I_{\Delta F}\mu}I_{A\gamma} \\
 &\quad + W(F_{\mu 21}, F_{\mu 64})K_{I_{\Delta F}\mu}I_{B\gamma} + W(F_{\mu 31}, F_{\mu 64})K_{I_{\Delta F}\mu}I_{C\gamma} \\
 &\quad + W(F_{\mu 41}, F_{\mu 64})K_{I_{\Delta F}\mu}I_{A\Delta} + W(F_{\mu 51}, F_{\mu 64})K_{I_{\Delta F}\mu}I_{B\Delta})
 \end{aligned} \tag{1}$$

where: $K_{\Phi\mu U_{\text{Э}}} = \omega_{2\text{ч}} - \Phi_{\mu}$ is the coefficient of interconnection between magnetic currents and $U_{\text{Эчик}}$ output voltages, (assumes values up to

$\omega_{2\text{ч}} = 1 \div 20$ windings based on the requirement that the output voltage be rated (20 V) at rated primary currents) [10,11]

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$\Pi_{\mu j} = \frac{\mu_0 F_j}{\delta_{\mu j}}$ ($j=1,6$) – is the magnetic parameter of the variable part of the sensor generated $U_{\Delta\gamma}$ output voltages (μ_0 – magnetic absorption of air gaps with sensing element, $\mu_0 = 1,25 * 10^{-6} \Gamma/M$);

F – log cross-sectional area of air gaps with sensing elements, $axb=0.01 \times 0.01 \text{ m}^2$;

δ_{μ} – Heights of air gaps with sensing elements (m);

$W(F_{\mu ij}, F_{\mu in})$ – is the transfer function of the magnetic switching part.

$K_{I\Delta F \mu} = \omega_{jk} - I_{\Delta}$ – PSS F_{μ} – m.d.f. The coefficient of interdependence between chains is usually $\omega_{jk} = 1$.

Multi-phase primary currents (A) supplied by reactive power sources connected to the $I_{A\gamma}, I_{B\gamma}, I_{C\gamma}, I_{A\Delta}, I_{B\Delta}, I_{C\Delta}$ – QTEM PSS networks according to schemes γ or Δ .

In particular, the magnitude of the output voltages $U_{a\gamma}, U_{b\gamma}, U_{c\gamma}, U_{a\Delta}, U_{b\Delta}, U_{c\Delta}$ depends mainly on the currents $I_{A\gamma}, I_{B\gamma}, I_{C\gamma}, I_{A\Delta}, I_{B\Delta}, I_{C\Delta}$, which they receive from their respective mains phases:

$$U_{a\gamma} = K_{\Phi\mu U_{\Delta}} \Pi_{\mu 1} (W(F_{\mu 11}, F_{\mu 14})) K_{I\Delta F \mu} I_{A\gamma}$$

$$U_{b\gamma} = K_{\Phi\mu U_{\Delta}} \Pi_{\mu 2} (W(F_{\mu 21}, F_{\mu 24})) K_{I\Delta F \mu} I_{B\gamma}$$

$$U_{c\gamma} = K_{\Phi\mu U_{\Delta}} \Pi_{\mu 3} (W(F_{\mu 31}, F_{\mu 34})) K_{I\Delta F \mu} I_{C\gamma}$$

$$U_{a\Delta} = K_{\Phi\mu U_{\Delta}} \Pi_{\mu 4} (W(F_{\mu 41}, F_{\mu 44})) K_{I\Delta F \mu} I_{A\Delta}$$

$$U_{b\Delta} = K_{\Phi\mu U_{\Delta}} \Pi_{\mu 5} (W(F_{\mu 51}, F_{\mu 54})) K_{I\Delta F \mu} I_{B\Delta}$$

$$U_{c\Delta} = K_{\Phi\mu U_{\Delta}} \Pi_{\mu 6} (W(F_{\mu 61}, F_{\mu 64})) K_{I\Delta F \mu} I_{C\Delta} \quad (2)$$

Based on formulas (1 and 2) above, the relationship between the single-phase current of the RP source of PSS networks and the output voltage of the sensor is given in the form of a static description below (Figure 1).

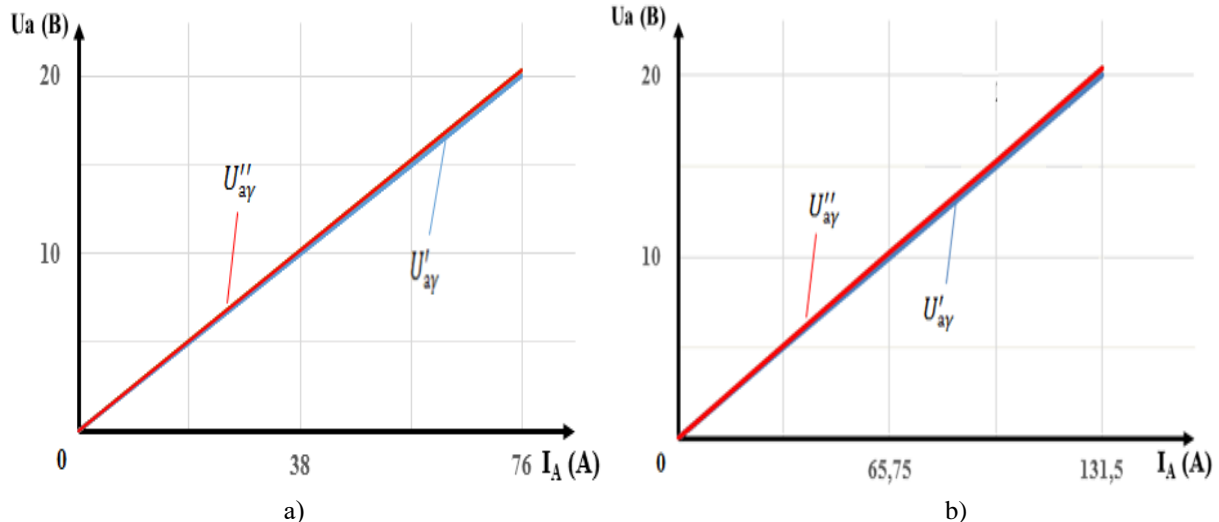


Figure 2 Static characteristics of the relationship between the single-phase primary currents of the ETT network reactive powers and the sensor output voltage
 a) The reactive power supply is connected in a star shape;
 b) The reactive power supply is connected in a triangular shape.

Where: $U'_{a\gamma}$ – description of the change in output voltage obtained on the basis of the collected parametric model,

$U''_{a\gamma}$ – a description of the change in output voltage obtained on the basis of the distributed parametric model.

A static description of the effect of the geometric dimensions of the air gap of the sensor on the output voltage is given in Figure 2.

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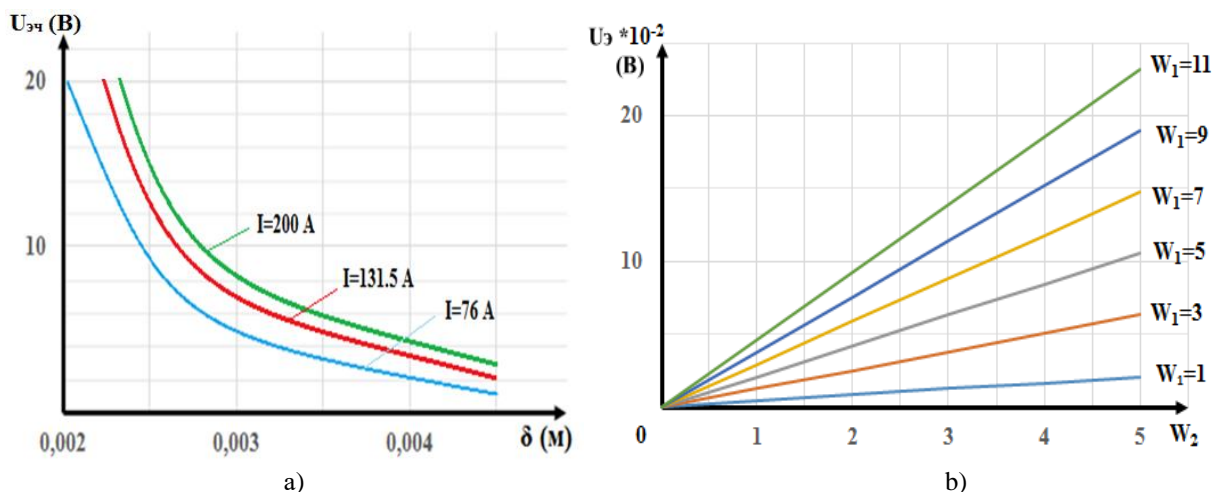


Figure 3. The effect of sensor sizes on output power.
a) The effect of airflow b) the effect of the number of packages

2- Based on the static characteristics shown in Figures (a) and (b), the metrological characteristics of the PSS RP multi-phase primary current conversion sensor to secondary voltage are studied: change accuracy, linearity of the output characteristic, uniformity of the sensor sensitivity throughout the change range.

Based on Figure 2a, the values of the magnitudes I_{Ay} , U'_{ay} , U''_{ay} - are indicators of the change errors corresponding to the points of static descriptions:

$$I_{Ay} = 38 \text{ A}; U'_{ay} = 10 \text{ B}; U''_{ay} = 10,18 \text{ B}$$

$$\Delta = \frac{(U''_{ay} - U'_{ay})}{U'_{ay}} * 100\% = \frac{(10,18 - 10)}{10} * 100\%$$

$$= 1,8\%$$

$$I_{Ay} = 76 \text{ A}; U'_{ay} = 20 \text{ B}; U''_{ay} = 20,37 \text{ B}$$

$$\Delta = \frac{(U''_{ay} - U'_{ay})}{U'_{ay}} * 100\% = \frac{(20,37 - 20)}{20} * 100\%$$

$$= 1,81\%$$

For the case of triangular connection of reactive power supply capacitors in the form of a triangle, $I_{A\Delta}$, U_{ay} , $U_{ay'}$ are the indicators of conversion errors corresponding to the points of static characteristics based on the quantities and are shown in Figure 2b:

$$I_{A\Delta} = 65,75 \text{ A}; U'_{a\Delta} = 10 \text{ B}; U''_{a\Delta} = 10,184 \text{ B}$$

$$\Delta = \frac{(U''_{a\Delta} - U'_{a\Delta})}{U'_{a\Delta}} * 100\% = \frac{(10,184 - 10)}{10} * 100\%$$

$$= 1,8\%$$

$$I_{A\Delta} = 131,5 \text{ A}; U'_{a\Delta} = 20 \text{ B}; U''_{a\Delta} = 20,369 \text{ B}$$

$$\Delta = \frac{(U''_{a\Delta} - U'_{a\Delta})}{U'_{a\Delta}} * 100\% = \frac{(20,369 - 20)}{20} * 100\%$$

$$= 1,8\%$$

Based on the calculated data, it can be concluded that the distributed parametric graph model of the multi-phase current sensor represented by PSS reactive power sources and the analytical expression based on it are adequate 1,8% to the real linear output characteristics of the sensor.

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SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 17.06.2020 <http://T-Science.org>

QR – Issue



QR – Article



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REVIEW OF DYNAMIC CHARACTERISTICS OF SECONDARY CURRENT SENSORS OF REACTIVE POWER SOURCES

Abstract: In this work, the structure of the sensor for the conversion of reactive power to multiple voltages of reactive power networks, the structure of the sensor that provides a signal to the control and management devices of reactive power and the algorithm for modeling the processes occurring in it, based on the created algorithm, model, the results of the dynamic descriptions studied on the basis of the analytical expression of the graph model.

Key words: power supply system, reactive power and power, primary currents, sensor, control, management, voltage, signal, graph model, analytical expression, dynamic description, stagnation time.

Language: English

Citation: Abubakirov, A., Baymuratov, I., Ismandiyarov, A., Uteniyazov, K., & Yuldoshov, T. (2020). Review of dynamic characteristics of secondary current sensors of reactive power sources. *ISJ Theoretical & Applied Science*, 06 (86), 48-53.

Soi: <http://s-o-i.org/1.1/TAS-06-86-9> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.06.86.9>

Scopus ASCC: 2102.

Introduction

Research on the dynamic characteristics of the sensor of conversion of primary currents to secondary voltage of reactive energy and power flowing from power supply systems (PSS) networks, modeling of processes occurring in the sensor, research clarity and analytical expression of highly formalized graph model and graph model [1-2].

Providing consumers with uninterrupted quality energy through PSSs requires not only the correct

selection of active and reactive power sources and power grids, but also their reliable control and management systems, devices and sensors, as well as real-time continuous monitoring [2-5].

The general structure of PSS networks and the directions of I_A , I_B , I_C , $I_{A\Delta}$, $I_{B\Delta}$, $I_{C\Delta}$ - primary currents of reactive power sources and the principle of installation of the sensor in PSS are shown in Figure 1. The general structure of PSS networks and reactive power sources. The directions of the primary currents

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$I_{A\gamma}, I_{B\gamma}, I_{C\gamma}, I_{A\Delta}, I_{B\Delta}, I_{C\Delta}$ - and the principle of installation of the sensor in the PSS are shown in Figure 1.

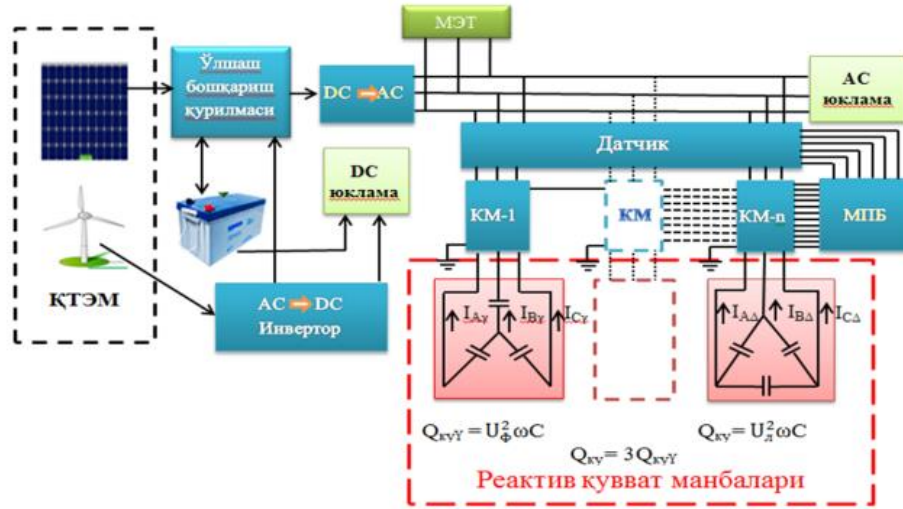


Figure 1. The general structure of PSS networks, $I_{A\gamma}, I_{B\gamma}, I_{C\gamma}, I_{A\Delta}, I_{B\Delta}, I_{C\Delta}$ - the direction of the primary currents of reactive power sources and the principle of installation of the sensor.

where RES is a renewable energy source, CPS is a centralized power supply system, DC → AC is a device that converts AC to AC; DC load - alternating current load; AC → DC AC converter;

CPS - centralized power supply; KM-1, KM-n- contactors; MPC-microprocessor control; AC load - alternating current load.

Alarm conversion process

Investigation of the dynamic characteristics of sensors that convert primary currents of PSS reactive power sources to secondary voltages, I_{γ} - generating U_{γ} -output voltages of the sensor with primary

currents, Φ_{μ} - of magnetic sensing elements, $S_{C\gamma}$ - cross-sectional area, sensor sensing element, $w_{C\gamma}$ - number of packages, the part where the sensing elements are located in the magnetic replacement part $l_{x,o}$ it is necessary to determine whether the geometric dimensions depend on the acceptable variation ranges and the variable geometric dimensions of the magnetic core [1-5].

The structure of the magnetic part of the sensor for the conversion of primary currents of PSS reactive power sources $I_{A\gamma}, I_{B\gamma}, I_{C\gamma}, I_{A\Delta}, I_{B\Delta}, I_{C\Delta}$ - to secondary voltage is shown in Figure 2.

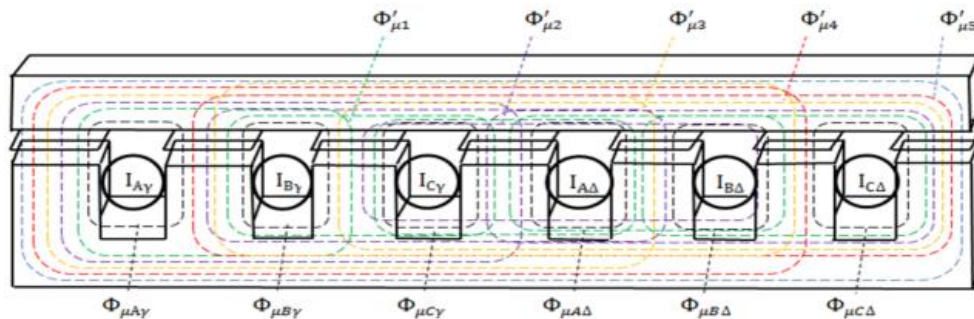


Figure 2. $I_{A\gamma}, I_{B\gamma}, I_{C\gamma}, I_{A\Delta}, I_{B\Delta}, I_{C\Delta}$ - is the magnetic part of the sensor that converts primary currents to secondary voltage.

When the primary currents of PSS reactive power sources flow through the sensor's first $I_{A\gamma}$, second $I_{B\gamma}$, third $I_{C\gamma}$, fourth $I_{A\Delta}$, fifth $I_{B\Delta}$, or sixth $I_{C\Delta}$ excitation coils, in the common magnetic core and parallel cores $\Phi_{\mu A\gamma}, \Phi_{\mu B\gamma}, \Phi_{\mu C\gamma}, \Phi_{\mu A\Delta}, \Phi_{\mu B\Delta}, \Phi_{\mu C\Delta}$

magnetic currents are generated, which also flow through the air gap between the cores.

The magnetic currents source, $\Phi_{\mu A\gamma}, \Phi_{\mu B\gamma}, \Phi_{\mu C\gamma}, \Phi_{\mu A\Delta}, \Phi_{\mu B\Delta}$ and $\Phi_{\mu C\Delta}$ of the change sensor, which provide a signal in the form of a secondary voltage for

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the control and management of the primary currents of PSS reactive power sources, reactive power sources star-connected single-phase I_{Ay} , two-phase I_{Ay}, I_{By} or I_{By}, I_{Cy} and three-phase I_{Ay}, I_{By}, I_{Cy} and triangular connected single phase $I_{A\Delta}$, two-phase $I_{A\Delta}, I_{B\Delta}$ or $I_{B\Delta}, I_{C\Delta}$ and three-phase $I_{A\Delta}, I_{B\Delta}, I_{C\Delta}$ currents, at the outputs of the sensing element (simple or flat measuring tape, gerkoe, etc.) signals in the form of $U_{ay}, U_{by}, U_{cy}, U_{a\Delta}, U_{b\Delta},$ and $U_{c\Delta}$ - output voltages in amounts corresponding to the currents of reactive power sources.

In the control and management of primary currents generated by ETT power supplies and flowing from the transmission line using modern electronic and microprocessor means at the rated current of the electrical device or at the outputs of the sensing elements at a nominal cross-section of the conductor for a long time, $U_{ay}, U_{by}, U_{cy}, U_{a\Delta}, U_{b\Delta},$ and $U_{c\Delta}$ are required to form. F_{μ} - magnetic driving forces

(m.d.f) generated by PSS sources and generating currents $I_{Ay}, I_{By}, I_{Cy}, I_{A\Delta}, I_{B\Delta}, I_{C\Delta}$ flowing from power transmission lines) generating Φ_{μ} - magnetic currents cross the surfaces of sensing elements located on the corresponding base in the magnetic transformation section and on the basis of interacting magnetic currents $I_{Ay}, I_{By}, I_{Cy}, I_{A\Delta}, I_{B\Delta}, I_{C\Delta}$ The process of converting primary currents to $U_{ay}, U_{by}, U_{cy}, U_{a\Delta}, U_{b\Delta}$ and $U_{c\Delta}$ -secondary voltages, output signals.

Research model

Figure 3 shows a graphical model that corresponds to the structure of the magnetic part of the change sensor, which provides a signal in the form of a secondary voltage for the control and management of primary currents of PSS reactive power sources and reflects the processes taking place in the magnetic switching part [6].



Figure 3. A graphical model that corresponds to the structure of the magnetic part of the sensor for the conversion of primary currents to secondary voltage and reflects the processes taking place in the magnetic switching part.

In the graph model, which corresponds to the structure of the magnetic part of the sensor and reflects the processes taking place in the magnetic change part, $K_{\Phi_{\mu}U_{\Delta}} = w_{2\Delta} \cdot \Phi_{\mu}$ is the coefficient of interconnection between magnetic currents and U_{Δ} - output voltages. Can take values up to $w_{2\Delta} = 1 \div 20$ windings [7, 9-11]

In the graph model, which corresponds to the structure of the magnetic part of the sensor and reflects the processes taking place in the magnetic change part, $K_{\Phi_{\mu}U_{\Delta}} = w_{2\Delta} \cdot \Phi_{\mu}$ is the coefficient of interconnection between magnetic currents and U_{Δ} - output voltage, it can take values up to $w_{2\Delta} = 1 \div 20$ windings based on the requirement that the output voltage be rated at the

specified values of the primary currents (20V) [7, 9-11].

Analytical expressions of dynamic descriptions

$I_{Ay}, I_{By}, I_{Cy}, I_{A\Delta}, I_{B\Delta}$ ба $I_{C\Delta}$ Flowing from PSS reactive power sources and networks - $U_{ay}, U_{by}, U_{cy}, U_{a\Delta}, U_{b\Delta},$ ба $U_{c\Delta}$ - for control and management of primary currents. the dynamic characteristics of the sensor providing a signal in the form of a secondary voltage are studied using the following analytical expression formed on the basis of the graph model shown in Figure 3 [6,7-12]:

$$U_{Ay} = K_{\Phi_{\mu}U_{\Delta}} \Pi_{\mu 1} W(F_{\mu 11}, F_{\mu 14}) K_{I_{\Delta}F_{\mu}} I_{Ay} \sin \omega t + I_{A\mu} e^{-\frac{t}{T}}$$

$$U_{By} = K_{\Phi_{\mu}U_{\Delta}} \Pi_{\mu 2} W(F_{\mu 21}, F_{\mu 24}) K_{I_{\Delta}F_{\mu}} I_{By} (\sin \omega t + 120^{\circ}) + I_{B\mu} e^{-\frac{t}{T}}$$

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$$U_{C\gamma} = K_{\Phi\mu U_3} \Pi_{\mu 3} W(F_{\mu 31}, F_{\mu 34}) K_{I_3 F \mu} I_{C\gamma} (\sin \omega t - 120^\circ) + I_{C\mu} e^{-\frac{t}{T}}$$

$$U_{A\Delta} = K_{\Phi\mu U_3} \Pi_{\mu 4} W(F_{\mu 41}, F_{\mu 44}) K_{I_3 F \mu} I_{A\Delta} \sin(\omega t) + I_{A\mu} e^{-\frac{t}{T}}$$

$$U_{B\Delta} = K_{\Phi\mu U_3} \Pi_{\mu 5} W(F_{\mu 51}, F_{\mu 54}) K_{I_3 F \mu} I_{B\Delta} (\sin \omega t + 120^\circ) + I_{B\mu} e^{-\frac{t}{T}}$$

$$U_{C\Delta} = K_{\Phi\mu U_3} \Pi_{\mu 6} W(F_{\mu 61}, F_{\mu 64}) K_{I_3 F \mu} I_{C\Delta} (\sin \omega t - 120^\circ) + I_{C\mu} e^{-\frac{t}{T}}$$

where: $\Pi_{\mu j} = \frac{\mu_0 F_j}{\delta_{\mu j}}$ ($j=1,6$) – magnetic parameter of the change part of the sensor generated $U_{3\gamma}$. No output voltages (μ_0 – magnetic absorption of air gaps with sensing element $\mu_0 = 1,25 * 10^{-6} \text{ГН/М}$);

s – is the cross-sectional area of the magnetic core piece on which the sensing elements are mounted, for example $s_b=0.01 \times 0.01 \text{ М}^2$;

δ_{μ} – heights of air gaps with sensing elements (m);

$W(F_{\mu ij}, F_{\mu in})$ – is the transfer function of the magnetic switching part.

$K_{I_3 F \mu} - \omega_{jk} - I_3$ – Primary currents flowing from PSS networks and F_{μ} – m.d.f formed in a magnetic converter. The inter-chain coefficient between is usually $\omega_{jk} = 1$.

$I_{A\gamma}, I_{B\gamma}, I_{C\gamma}, I_{A\Delta}, I_{B\Delta}, I_{C\Delta}$ – PSS Primary currents supplied by power sources connected to γ - star and Δ - triangle circuits (A).

The primary input currents of the dynamic changes occurring in the sensor, depending on the magnitudes and parameters of the magnetic currents and output voltages they generate, are given in the graphs of change (Fig. 4) and (Fig. 5).

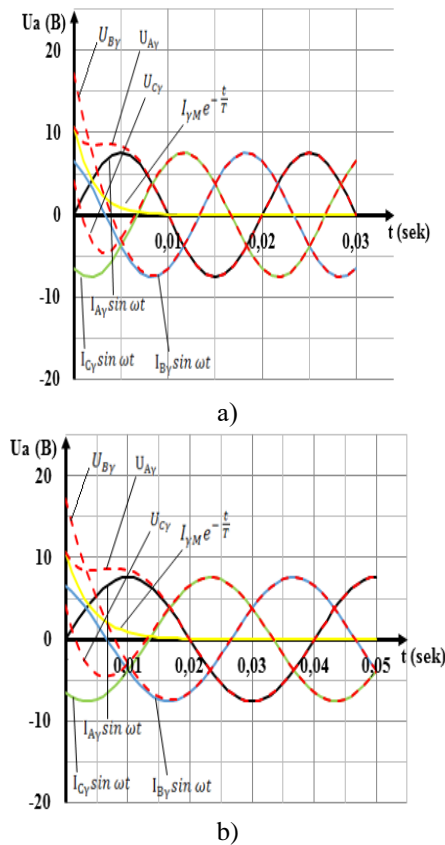


Figure 4. Dynamic characteristics of the relationship between the primary currents of the sensor and the output voltage (PSS reactive power sources are star-connected: a) when $T = 0.02$ b) when $T = 0.04$).

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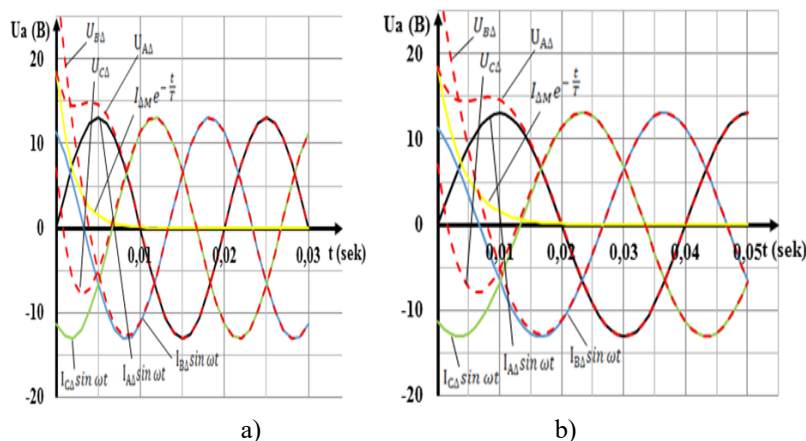


Figure 5. Dynamic characteristics of the relationship between the primary currents and secondary voltages of the sensor (PSS reactive power sources are connected in a triangle: a) when $T = 0.02$ b) when $T = 0.04$).

Results

1. The magnetic currents generated by the PSS power supplies and generated by the currents $I_{A\gamma}, I_{B\gamma}, I_{C\gamma}, I_{A\Delta}, I_{B\Delta}$ and $I_{C\Delta}$ flowing through the electric networks in the magnetic cores F_{μ} - m.d.f., A graph model has been developed for the study of the processes of conversion of primary currents to U_{γ} -secondary output voltages on the basis of Φ_{μ} - magnetic fluxes.

2. Based on the dynamic changes that occur in the sensor of currents flowing through the mains, developed by reactive power sources, it can be concluded that when the inertia period of the transmission line is $T=0,02$, the currents flowing from the primary winding of the sensor are 0,008 - 0,012 sec from the connection to the PSS networks, after passing, while the inertia period is $T = 0.04$, the currents are 0.015 to 0.025 sec when connected to the mains, after reaching its constant value.

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SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 17.06.2020 <http://T-Science.org>

QR – Issue



QR – Article



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MODERN METHODS OF TEACHING RUSSIAN

Abstract: this article is devoted to the use of modern innovative methods of forming speech skills of schoolchildren in terms of their effectiveness.

Key words: methodology, teaching, Russian language, innovation, speech, linguistics, teaching.

Language: English

Citation: Shatov, I. A. (2020). Modern methods of teaching Russian. *ISJ Theoretical & Applied Science*, 06 (86), 54-59.

Soi: <http://s-o-i.org/1.1/TAS-06-86-10> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.06.86.10>

Scopus ASCC: 1203.

Introduction

In a constantly changing social world and the world of science the school cannot remain unchanged. In accordance with the requirements in modern society, the main task of the school is to train a person of high humanitarian culture. The global reform of the education system in the Republic of Uzbekistan, the key idea of which was the idea of development, determines the change in the concept of education. The problem of transition from "knowledge-dogma" to "knowledge-thinking" is brought to the fore. The problem of forming a student's communicative competence is acute. Analysis of the state of teaching Russian language and literature shows that the school does not develop enough skills of oral communication and writing, too. There is no theoretical information about the Russian language and literature they are used to the full extent for the formation of practical speech activity. This means that the problem of the ratio of knowledge about the language and how it works cannot be solved. The practical level of language proficiency has not yet been determined.

Formation of communicative competence in the learning process Russian language and literature is one of the ways to solve this problem. Improving the quality of education, in particular the quality of school education, is one of the most pressing problems of pedagogy and methodology due to the fact that, unfortunately, the shortcomings in the educational level of schoolchildren, including their level of proficiency in Russian, are becoming more and more obvious. [1, 187-188]

The changes taking place both in the country and in education pose new challenges for the school in determining the content, developing author programs, forms and methods of working with students. In the last decade, active searches for rational teaching of the Russian language have been conducted.

The formation of key competencies is becoming the main task today the purpose of training, as it gives the student the opportunity to improve their educational skills it solves the issues of reducing the lack of communication in society. Since the components of any competence are: knowledge, content of competence, manifestation of competence in various fields situations related to the content of the competence and the object of its application, then the communicative competence can be considered from the position of three components: subject-information, activity-communicative, personal-orientation, where all components make up a complete system of personal properties of students. Therefore communicative competence should be considered as readiness the student's ability to independently solve problems based on knowledge, skills, personality traits.

The formation of communicative competence is based on the following principles: activity approach, since it provides independent creative activity of each student. This approach is based on the position that in the independent creative activity of each student it is necessary to move from external practical material actions to internal, theoretical, ideal actions. In other words, training it involves joint educational and

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cognitive activity at the first stage, activity under the guidance of a teacher, and then-independent. We are talking about the "zone of nearest development", which should be taken into account when developing the project. formation of communicative competence. [2,c.130-131]

This approach is not opposed to the traditional one, but it is not identical with it, since it fixes and establishes subordination knowledge, skills, focusing on the practical side of the issue, expanding the content is actually personal components. Communicative competence is defined as the creative ability of a student to use an inventory of language tools, which consists of knowledge and readiness for their adequate use. The authors of the modern theory of communicative competence (Ladyzhenskaya T. A., Mickle, N. A. Kogtev N. N., Murashov A. A.) offer the technology of problem-based learning that allows you to change the lesson explanation of the new material the lesson open knowledge: students themselves formulate lesson objectives, define the problem and together with the teacher seek ways to solve problems. A special approach to the development of coherent oral and written speech in this program is that the authors proceed from the fact that you can not "develop speech at all", but should focus in each class on certain types of oral and written speech. [3]

The main objectives of the formation of communicative competence are: formation of functional literacy of students, formation of productive skills and abilities in various types of oral and writing, the formation of students ' General linguistic competence", which is necessary for successful mastering of others objects. The main principle of formation of communicative competence is personal targeting of education. Therefore, the theme of "speech Development" is implemented primarily in the ability to introduce students to the content of this topic in various ways, depending on the personal, psychological and physiological characteristics of sixth graders. Ways of realization of communicative competence of students is that the forms, methods and working methods aimed to the content of educational material was the source for a standalone solution.[4] The research approach to the themes of literary works helps to consider the life of a literary hero as a study. A discussion on the results of essays gives you the opportunity to Express your point of view, listen to others, and argue. Scientists believe that when a child is 10-11 years old, the child's interest in the world around us. And if the child's interest is not satisfied, then he will fade away. Traditional reading materials also help to maintain these interest conferences where students introduce their classmates to the most interesting read books, reviews of which are recorded in the readers ' diaries. In the classroom, students really like role-playing games, where they learn the culture of communication. The formation of

communicative competence involves a process-based approach, since the effectiveness of the work can only be judged by the result. Any result implies an assessment.

Concept of the content of teaching Russian at school it provides for the formation of not only linguistic (language), but also communicative (speech) competence of schoolchildren related to mastering all types of speech activity, as well as the culture of oral and written speech, the rules and methods of using the language in different areas of communication. Modernization of education in the Republic of Uzbekistan involves the education of a person who strives for the maximum realization of their capabilities, is open to the perception of new experiences, and is able to make informed and responsible choices in various situations in life. It is necessary, first of all, to teach the student to solve certain communicative tasks using language means in different spheres and situations of communication, that is, to form their communicative competence. Today, we are searching for a learning paradigm that meets the new conditions in a changing world. This is about innovation. The reform of school education is gradually abandoning traditional forms of education, and there is a problem-to arouse interest in the study of educational material.

Today, practice teachers feel that the state of teaching Russian at school is unsatisfactory. The reasons for this are seen in the predominant attention to language at the expense of speech, the weak connection of training sessions with the real speech situation, the speech experience of schoolchildren, the predominance of tasks for identifying language facts and their analysis over the tasks of generating texts and language observations. Modern training programs (Ladyzhenskaya T. A., Mikhailichenko N. A., Kokhtev N. N., Murashov A. A.) strive to overcome these shortcomings, to mitigate their ruinous effect on the language consciousness of students. The newly created programs are based on the following General principles:

- the principle of priority of speech, communicative orientation means inclusion in the work of all types of speech activity: listening, speaking, reading, writing, and not just analyzing extracted from speech or artificial examples; in this case, attention is paid to the everyday speech of students and their environment, and not just the artistic works of word masters that in the construction of the program is shown in the presence of four end-to-end speech-language topics for all five years of study - "Oral colloquial speech", "Spheres of speech", "Genres of speech", "rules of speech", consistently correlated with all lexical and grammatical material to study; priority speech leads to the rejection of orthographocentrism, leads to understanding spelling as a discipline, which is necessary when creating a written text; without compromising the literacy of

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students problems of mastering spelling are solved while working on tasks generating texts and experimenting with them;

- the principle of integral approach to linguistic facts (as opposed the principle level studying language units, the position of the basis all school courses); linguistic facts are integrated on the basis of semantic unity, solution of homogeneous semantic task; wherein program the first two years built "from" (name), and the three subsequent

- "category" (objectivity in the 7th, the qualitative in the 8th and eventfulness in 9th grade), the integral approach determines the composition of the program, the material is grouped into four categories: "Semantics", "Grammar", "Speech", "Orthology";

- the principle of search and experiment as organizing the beginning of the student's work in contrast to the principle of assimilation of ready-made knowledge (rules and schemes parsing), while the student is offered the role of the language user and its the researcher is gradually involved in the work and his language skills are trained and speech reflection;

- the principle of unity of teaching literature, which assumes the maximum convergence of the conceptual apparatus in the field of language and literature (genre, characteristics material world, plot as a chain of events, chronotope). [5] What is understood in the existing methodology as the main content speech development lessons: vocabulary accumulation, ability to structure speech (build your statement according to the plan, etc.) - modern methods are not denied or excluded, but are included in most types of work. You should not teach children to make a text plan until they themselves understand why it is necessary and what advantages it gives in real communication situations. The accumulation of vocabulary can be carried out by the same means (maintaining dictionaries) that are usually used, but you can start using them only when children themselves want to know as many words as possible and themselves strive to write them down - at this point, the teacher should teach children to keep dictionaries; but a situation where students keep dictionaries only because it is the teacher advised them to do it, it is not allowed. Thus, the undoubted advantage of such programs in the communicative orientation, in the intensity and consistency of language use modern semantics of such notions as subject, object and other participants of the event, authorization, evaluation and the like that are accessible to students and helps them in working on analysis and creation of texts.[5]

The possibilities are promising: with the planning of thematic material through a set of innovative techniques and design of model lessons with the involvement of the semantic space of interest to students, using exemplary texts of classical authors, through their comprehensive analysis, the system

works-miniatures, oral statements, statement with the creative task, i.e. the generation and analysis of speech to the formation of stable skill of speech creative work on a variety of topics - linguistic, moral to the philosophical and universal. In modern articles on the methodology of speech development, it is said that for successful speech development of children is not enough just to perform exercises in the selection of synonyms, in the preparation of sentences, in telling and retelling - such a system of training does not equip students with an understanding of existing speech patterns, knowledge of a set of actions and ways to perform them when thinking about statements, knowledge of evaluation criteria for created texts. In other words, such a system does not allow students to teach a conscious attitude to speech. To change the situation, it is necessary to equip students with certain knowledge about speech, for example, that when talking about something, you can narrate, reason, describe and evaluate something, that there must always be a "core" (theme and main idea) in the utterance, on which, as in a child's pyramid, sentences are "strung" in a certain system, and so on. This knowledge, of course, is not an end in itself. They are needed only to help each child learn to consciously relate to speech, to direct their efforts to improve it. The question of what knowledge should become mandatory, what is the technology of their presentation to students, how to link theoretical work organically with speech practice, how to make it more natural in the classroom - all these are problems that have not yet been fully resolved. Ramzaeva T. G. Russian Russian language education system development is based on the fact that the main goal, which determines the direction of the entire process of teaching Russian language, is the development of oral and written speech of students in unity with the development of their thinking, and the acquisition of grammatical tasks and the formation of spelling skills as their final results are the development of students' ability to grammatically correctly, stylistically accurately, meaningfully, intonationally Express their thoughts in oral and written form. correctly pass them on the email. The most important advantage of modern stage of teaching Russian language is increasing attention to speech the preparation of the students. [6] Despite the fact that modern Russian language textbooks include materials about how the language is organized, what are its basic laws, it also provides for the practical assimilation of the main orthoepic, lexical and grammatical norms of the modern Russian language; however, given the current language situation, we would like to see this aspect language learning has been expanded. Therefore, it appears completely - introduction to the content of sample programs developed to improve the structure and content of General education, concepts of language norms and speech culture, elements of language history, revealing the dynamics, changes in

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the norm. Thus, the development of students' speech is the practical side of language learning, the formation of those skills that contribute to the enrichment of an active vocabulary, the free use of all grammatical means - word-formation models, forms of parts of speech, phrases, sentences of various types, as well as the formation of figurative and emotional side of speech to Express their thoughts, knowledge, feelings, intentions. Naturally, the modern method of teaching the Russian language it is aimed at middle school students. Russian language training should be more in-depth and more intensive. And in modern schools, certain steps are being taken in this direction:

-non-traditional tasks are used that require logical solutions and problem analysis;

- integrated academic disciplines (Russian language and literature).

-new technical training tools are being introduced and new ones are being created learning technologies (for example, distance education technologies);

- theoretical and pragmatic sections are integrated Russian Russian language (Russian language, speech culture, style.[7]

Modular training and its elements are actively used in the practice of teaching Russian. Modular training is based on activity-based approach to learning: only the educational content it is realized and firmly assimilated by the student, which becomes the subject of his active action. Modular training is based on the theory of developmental learning, the foundations of which were laid by L. S. Vygotsky. The implementation of this theory of learning requires that the student is constantly in the zone of his closest development. In modular training, this is achieved by differentiating the content and dose of assistance to the student, organizing educational activities in different forms: individual, pair, group, in pairs of shifts.[8]

lot of modular training uses programming training. This is, first, planning the actions of each student in a certain logic, secondly, the reliance on activity and independence third, taking into account the individualized pace of learning and, in-fourth, constant reinforcement, which is carried out by comparison (reconciliation) of the progress and results of activities, self-monitoring and mutual control. As a basis, the training module is allocated, which includes a complete block of information, a target program actions and tips from the teacher for its successful implementation. The training material is divided into thematic blocks, each thematic block fits into a strict time frame of a two-hour lesson. For better assimilation of the content of the thematic block, the teacher follows the stages of a rigid structure of the module class: repetition, perception of new things, understanding, consolidation of the studied, control. Each stage begins with the target installation and specifying the action system; each stage of the lesson

ends with a control that allows you to set success of training. Using modules, the teacher manages the learning process. At the very training session, the teacher's role is to form a positive motivation of the student, to organize, coordinate, consult, control.

2. project Technology, or project method, by virtue of its didactic essence allows to solve the problems of formation and development of intellectual skills of critical and creative thinking. Work on a training project is usually carried out throughout the entire year. academic year and includes several stages: pre-selection a graduate of the subject, taking into account the recommendations of the teacher; drawing up a plan, the student's study of literature on this topic and collection of material, creating your own text containing literature analysis and own conclusions on the topic, a defense that involves oral speech of the graduate containing a brief description of the work, answers to questions about the topic of the work. To some extent this brings us closer a training project with a traditional form-an abstract. However, it is becoming more and more generally accepted that the educational process the project is an independent research activity of a student, which has not only educational, but also scientific and practical significance, which is well understood by both the teacher-project Manager and its performer. This is a solution to a problem that requires integrated knowledge, research search for its solution. Therefore, the presentation the results of the project can be different: a scientific report with a statement problems and scientific conclusions on the trends observed in the development of the problem; the creation of a dictionary of current vocabulary, the project "Museum of Russian words" development of computer programs on the Russian language under the title "Linguistic puzzles" etc. The project method is currently being actively approved in the school, in including when teaching Russian. This method assumes organization of joint or individual work of students on a particular problem with the mandatory presentation of the results of their work activities. What intellectual skills can be developed in educational activities organized according to the project method? First, analytical thinking in the process of information analysis, selection necessary facts, comparisons, comparisons of facts, phenomena. Second, associative thinking in the process of establishing associations with previously studied, familiar facts, phenomena, establishing associations with new qualities of the subject, phenomenon, etc. Third, logical thinking, when the ability to build the logic of proof of the decision being made, the internal logic of the problem being solved, the logic of the sequence of actions taken to solve the problem is formed. In addition, the student develops the ability to consider the problem in the integrity of relationships and characteristics, as well as establish cause - and-effect relationships, search for new solutions, transfer

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knowledge from different areas to solve the problem. This technology actualizes the most important speech skills, including students in all types of speech activities (speaking, listening, reading, writing), improves the ability to work with texts of different styles and types of speech at the level of information and semantic processing in the first place.

3. "Language portfolio of student achievements" is one of the new, recently developed technologies for teaching Russian. In the "Language portfolio" form-a new type of workbook-folder, fixing the self-assessment of speech and communication skills of students on the throughout the school language course. The purpose of the language portfolio is in the description done by the student work on improving speech skills over the years of schooling (give as a teacher, so ucenik);

in a quality fixing the teacher-student level of mastery the main types of speech activity (listening, speaking, reading and writing) depending on the stage of training (primary, secondary and senior);

in the presentation (at the student's choice) of the most successful written works of various genres (essays of different genres, answers to questions, dictation, statements, etc.);

in determining the personal position of the student in relation to the subject on at a certain stage of training;

in predicting a student's professional aptitude at the stage of pre-professional and specialized training. [10]

4. Technology of modular training

Thus, the creation of speech works of certain genres is one of the sides of the formation of students' speech competence. It is realized at lessons of Russian language with the use of technology of modular training, but the lessons of the literature using information and communication technologies. Block learning technology allows you to create conditions for the implementation of system thinking, activation of attention.

Conclusion

Modernization and renewal of education in the Republic of Uzbekistan they create the need to

educate a person who strives to realize their capabilities, able to make informed and responsible choices. In addition to lessons in speech development, work on the creation of speech works students should be conducted systematically. Innovative methods combine the types of work that form communicative competence (the requirement of analysis, comparison of phenomena, justification, argumentation, generalization). The technologies used in the course of the lesson to achieve knowledge and competence results are designed to activate the learning process the activities of the student. Speech is the most complex human activity, and creative activity, including the ability to observe, think, fantasize, and listen and hear; first of all, the one who has something to say learns to speak, so it is necessary to teach children not technical design of statements, but speech thinking, speech creativity, and adequate perception of other people's speech. Innovative techniques make the lessons of the Russian language more interesting, brighter. Independent search for solutions and active thinking contribute to improving the effectiveness of the educational process. Proper organization of lessons using innovative technologies requires that each child is engaged in solving a task that is feasible for him, since this condition can support his interest in learning. Therefore, the teacher has a task: to see in the lesson not only the educational problem, but also to determine ways to solve this problem in relation to each child. A differentiated approach is necessary at all stages of learning knowledge and skills. Using new technologies in the Russian language lesson, the lesson of speech development allows you to activate the cognitive interests of students, monitor the activities of each, significantly increase the pace of work, solve several tasks at once: to study new material, to consolidate, performing practical work, including different types of exercises, to deepen knowledge, to conduct control. It is very important that students work with passion at any stage of the lesson, and this maintains interest in the subject as a whole.

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SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 17.06.2020 <http://T-Science.org>

QR – Issue



QR – Article



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MOTIF OF DIVINE MIRACULOUS BIRTH IN KARAKALPAK FOLK EPOS AND THEIR HISTORICAL ROOTS

Abstract: This article scientifically analyzed one of the leading motives in epos - the miraculous birth of heroes. The historical roots of this motive are studied in connection with the ancient archaic concepts, pre-Islamic religious concepts, as well as with Islamic religion. It has been proved that ideological sources of motive about the miraculous birth of heroes in epos, fairy tales, legends are similar to sources of Central Asian, Greek, Babylonian, Assyrian, Iranian myths about the origin of people in ancient times. Greek myths about "Birth of Perey," Devkalion and Pirra, "Iranian myths about the birth of Kayumars (Gaimartan of" Avesto ") are analyzed and the poem "Odyssey" is relatively analyzed. These mythical motives, as a result of diffusion, have undergone structural-semantic changes and have been introduced into the structure of epos, and their display in a diverse artistic form is considered in connection with the conditions created by the era, concepts and faith in the spiritual consciousness of the people. For example, the birth of a hero without a father (ray of sun, appearance from stone, water, fruit, spells, eating enchanted fruit, etc.) is analyzed the birth of a hero without a father from the ray of sun, miraculous events from the marriage of animals and birds, etc.

It is considered that this motif at different stages of development of thinking and human civilization has different forms. Numerous examples prove that this motif is often found in geneological and ethnogeneological epos, fairy tales and legends. The poetic significance of the motive of the miraculous birth of the hero in the creation of the image of the hero, in the image of events, in the artistic disclosure of the ideological content of the work is revealed. For example, world-famous historical personalities as Prophet Mohammed, Grandfather Korkut, King Iskander, Genghizhan, Amir Temur, Edige, etc. reveal artistic significance in creating the image of ideal.

The national identities of the motive, about the miraculous birth of the hero used in the Karakalpak folk epos are relatively analyzed with the works of other peoples.

Key words: motif, genesis, diffusion, totemism, epic, legend, fairy tale, myth, plot, folklore, image.

Language: Russian

Citation: Esebaev, M. (2020). Motif of divine miraculous birth in Karakalpak folk epos and their historical roots. *ISJ Theoretical & Applied Science*, 06 (86), 60-65.

Soi: <http://s-o-i.org/1.1/TAS-06-86-11> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.06.86.11>

Scopus ASCC: 1208.

МОТИВ БОЖЕСТВЕННОГО ЧУДОТВОРНОГО РОЖДЕНИЯ В КАРАКАЛПАКСКИХ НАРОДНЫХ ЭПОСАХ И ИХ ИСТОРИЧЕСКИЕ КОРНИ

Аннотация: В этой статье научно проанализирован один из ведущих мотивов в эпосах – чудотворное рождение героев. Исторические корни этого мотива изучаются в связи с возникшими на основе древних архаических понятий, доисламских религиозных понятий, а также с исламской религией. Доказано, что идейные источники мотива о чудотворном рождении героев в эпосах, сказках, легендах сходны с источниками среднеазиатских, греческих, вавилонских, ассирийских, иранских мифов о происхождении людей в древнейшие времена. Анализируются греческие мифы о «Рождении Перей», «Девкалион и Пирра», иранские мифы о рождении Каюмарса (Гаймартан из «Авесто») и сравнительно анализируется поэма «Одиссея». Эти мифические мотивы в результате диффузии претерпели структурно-семантические изменения и внедрены в структуру эпосов, рассматриваются их отображение в разнообразной

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художественной форме в связи с условиями, возникшими в результате эпохи, понятиями и верой в духовном сознании народа. Например, рождение героя без отца (луч солнца, появление с камня, воды, плода, заклинания, кушать заколдованный плод и т.д.) анализируются рождение героя без отца от луча солнца, чудотворные события от брака зверей и птиц и т.д.

Рассматривается, что данный мотив на различных этапах развития мышления и человеческой цивилизации имеет разные формы. На многочисленных примерах доказываем, что данный мотив часто встречается в генеологических и этногенеологических эпохах, в сказках и легендах. Раскрывается поэтическое значение мотива чудотворного рождения героя в создании образа героя, в изображении событий, в художественном раскрытии идейного содержания произведения. Например, всемирно известные исторические личности как Пророк Мухаммед, Дед Коркут, царь Искандер, Чингизхан, Амир Темура, Едиге и т.д., раскрывается художественное значение в создании образа идеала. Национальные своеобразия мотива, о чудотворном рождении героя использованного в каракалпакских народных эпохах сравнительно анализируются с произведениями других народов.

Ключевые слова: мотив, генезис, диффузия, тотемизм, эпос, легенда, сказка, миф, сюжет, фольклор, образ.

Введение

Изучая народные эпосы, анализируя каждый сюжет, каждый художественный образ и мотив понимаем его значение и роль в устном народном творчестве.

Всем известно, что в народных эпосах много мотивов показывающих их специфические особенности. Поэтому эти мотивы играют важную роль в развитии сюжета эпоса с точки зрения художественности.

Известный ученый Жаббар Эшонкул в труде «Миф и мышление» приводит следующее: например, в эпосе «Алпамыс» рождение героя-богатыря имеет божественный характер. Божественное рождение, являясь одним из главных мотивов в фольклоре, имеет несколько этапов. Во-первых, бездетность родителей героя. Это явление имеет символическое значение. С одной стороны, данный мотив связан с мечтами и чаяниями матери о потомстве, с другой стороны – рождением нового героя, который объединит свой разрозненный народ, укрепит власть. Во-вторых, рождение героя, его божественная сила. В-третьих, сразу же после рождения герой должен выполнить определенные задачи, все его испытания предопределены [16, с. 309]. Судьбу героя предопределяют духовные наставники, и при рождении эти духовные наставники дают ему имя. Например, в эпосе «Маспатша» воспеваются:

« Не суетись, что дал сына.
Займет место сорока детей,
Если назовешь Маспатша,
Когда исполнится шестнадцать,
Будет знаменит везде.
Будет очень сильным,
Сын оседлает коня Мажнун,
Враги будут бояться,
Будет очень великим,
Руки будут достигать всего,
Ты будешь счастливым,
Слава разойдется по всему миру,
Твои слезы были увидены,
Твои дела будут развиваться» [10, с. 22-23].

Это предсказания духовных наставников ребенку, который должен вскоре родиться. Ребенок в будущем будет очень сильным, умным, будет защищать свою родину от врагов, богатырь будет очень красивым, его руки будут доходить до всего, у него будет конь Мажнун, слава о нем будет известна всему миру. Такие чудеса в народных эпосах обожествляют образы будущих богатырей, и это уже известно с начала беременности матери. Например, в эпосе «Маспатша»: «Карашаш забеременела, настали радостные дни, во время беременности ей хочется кушать сердце льва, как будто больше никакой еды нет на белом свете» [10, с. 26. Данный мотив встречается и в эпосе «Коблан». В народном сознании рождение будущего богатыря тоже должно происходить иначе. Жена Кыдырбая Бозкемпир забеременела и хочет кушать сердце льва. Это знак того, что ребенок в будущем будет богатырем, отличаться от других.

В древности люди не понимая научные основы биологической наследственности рождения человека, верили, что причинами рождения ребенка могут быть луч солнца, свет луны, ветер, волны моря, различные фруктовые плоды.

В.Я.Пропп рассматривает божественное рождение героя. Данный мотив он ищет в сказках, ставит перед собой цель – найти исторические основы этого древнего мотива. В результате исследования доказывает, что происхождение данного мотива не однородно, происходит в нескольких этапах, выделяет три источника происхождения данного мотива. 1. Взгляды, связанные с тотемизмом; 2. Олицетворение природы, вера, связанная созидательной силой, иногда включает элементы тотемизма; 3. Мотивы, появившиеся в связи с мифами о происхождении первых людей [15, с. 237].

Известный ученый В.М.Жирмунский мотив божественного рождения связывает с партогенезисом, с загадочной, божественной

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беременностью женщины, то есть, с древним происхождением людей [3, с. 224-233].

Основой вышеуказанного мнения ученого является рождение героя при помощи духовного наставника или причиной его рождения является какой-то фрукт или же животное, а в момент рождения отцы отсутствуют.

Во всех народах мира встречаются мифы о происхождении первых людей на земле, в них происхождение людей описывается по-разному.

В работе Н.Маллаева «Алишер Навои и народное творчество» о создании мира и о происхождении первого человека приводит такое мнение: например, Каюмарс, Хушанг, Тахмурас и Жамшид первые люди и появляются мифы об их потомстве. Как отмечается в мифологии Гайа Мартан (Каюмарс) первый человек, появившийся на земле, он был создан Ахура Маздой (Хурмуз) и сложен из двух частей: быка и человека. У человека был очень коварный враг Ахираман, он убивает Каюмарса. Из бычий части тела Каюмарса появляются 55 видов зерновых, 12 видов растений, корова и 272 различных полезных животных, а от человеческой части появляются мужчина и женщина.

Образ Каюмарса создан и в изобразительном искусстве. В сополе, найденном в 1932 году в Тали Барзун (вблизи города Самарканда), изображается в верхней части человеческое тело, а в нижней части тело быка. Как говорится в «Бундахишан» из семени Каюмарса выросли люди – близнецы, это была первая человеческая пара Машойо и Машойона (или Матра и Матройана) и от них стал распространяться человеческий род [13, с. 98-99]. Она сходна с легендой об Адаме и Еве в «Товрате».

По утверждению В.Я.Проппа на самом начальном этапе цивилизации люди все виды божественного чудесного рождения принимали за правду. В их понятии первых людей на земле создали боги и полубоги. Затем эта вера была изменена, причиной рождения человека считались разные природные явления: ветер, дождь, вода, фрукт, растения и т.д. Далее вождь племени обрел качества полубога, стал покровителем тотемом и их воспринимали как создателей человека. Этот взгляд расширился, люди стали понимать, что человек создавал человека, создателем человека стали обыкновенные супруги. Так же он отмечает, что, прежде всего на такое чудесное рождение имели право боги и полубоги, далее так рождались императоры, цари, покровители герои, родоначальник племени [15, с. 237].

О происхождении человечества много говорится в эпосах народов мира, легендах и мифах. Мифические изображения нашли свое отражение в поэме «Одиссея», в «Поэме о Гельгамеше» [15, с. 209], созданном на основе

мифических сюжетов о всемирном потопе вавилонского и ассирийского «Атрахасиса».

У греков существует легенда «Девкалион и Пирра». Люди периода меди стали высокомерными, они перестали подчиняться богам Олимпа. Это разозлило могучего бога Зевса. Он при помощи Нота дождем затопил Грецию. Таким образом, были уничтожены люди этого периода, в живых остались только двое: сын Прометея Девкалион и его жена Пирра. Они смастерили большой сундук, наполнили его едой, сами забрались в этот сундук и закрылись, через девять дней волны привели их к вершине Парнаса. Девкалион и Пирра вышли из сундука. Они стали молиться Зевсу, через гонца Гермеса благодарили его и обещали выполнять все его пожелания. Девкалион попросил его, чтобы он оживил всех людей, погибших во время потопа. Тогда Зевс сказал им, чтобы они собрали камни и кидали их назад, Они выполнили задание, потом посмотрели назад и увидели, что из тех камней, которые были брошены супругами, появились люди мужского и женского пола. Вот так люди опять стали обитать на земле. Это были потомки людей каменного века [11, 83-85].

Мотивы о происхождении человечества из дерева, камня известны еще с древнейших периодов человеческой цивилизации. Потому что, в древнейших мифических понятиях камень и дерево считались местом хранения человеческого духа. А мотив о происхождении человека из глины появляется чуть позже. Об этом В.Я.Пропп утверждает, что мотив о происхождении человека из глины появились у племен, занимающихся гончарным делом [15, 235].

О происхождении человека из почвы напоминаются в древних мифах народов Средней Азии, первый человек в мире Каюмарс, в «Авесто» Гаймартан. Он появился с пота, капнувшего с божьего лба на землю [5, с. 13]. Мифы подобного содержания, созданные древними племенами послужили идейными источниками мотивов о чудесном рождении героев в эпосах, легендах, сказках.

Известный ученый К.Мамбетов в труде «Родословная каракалпаков» пишет: «Бог знал, для того чтобы создать основу жизни в мире, человека нужно пользоваться почвой. Бог посылает на землю одного из своих ангелов Азраила алайхиссалама для того чтобы он принес почву и он приносит почву из земли. Из этой почвы Бог создает человека. Через сорок дней дал ему душу, он родился как Адам. Из его ребра сотворил Еву, они 36 раз породили близнецов одного мальчика и одну девочку, так у них появились 72 ребенка» [15, с. 235].

Известны легенды с такими чудесами, связанные с генеалогией Пророка Мухаммада. Во многих арабских сказаниях отмечается, что с

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рождением этого ребенка произошли разные чудеса. Якобы в день, когда он появился на свет солнце светило и ночью. От этого явления земля и небо содрогнулись. Озеро Сава сразу осушилось, выпиталась на почву, а река Тигр наполнилась, вышла из своего русла, произошло наводнение. Трехмесячный Пророк Мухаммад встал на ноги, в семь месяцев он бегал, а десятимесячном возрасте он стрелял из лука. В восемь месяцев он начал говорить, а через месяц своим умом поразил народ» [14, с. 11].

Если рассматривать родословную Чингизхана, можем увидеть мифические, сказочные элементы. Например, когда жена Есукай Бахадры дочь кунграда Хоелун-уджин рожала Чингизхана (Темуджина), он в руках сжимал свернувшуюся кровь [2, 1. 101]. Появление таких сказаний и легенд охватывают очень долгий период. Например, народные легенды «У Искендера Зулкарнайна были рога» (Александр Македонский), «Хирургия Платона и находчивость Аристотеля», также «Муралы-шер и Султан Суйин» [12, с. 183] широко распространены в народе.

Такая мифическая генеалогия об исторических личностях приведена в некоторых письменных источниках. В каракалпакских народных мифах и легендах о чудесном рождении приводится следующим образом, например, прородители каракалпаков жили на берегах Волги, Дона, Днепра. Ханством у Днепра правил Золотой хан. У него была единственная дочь. Хан единственную дочь не показывал никому, она жила в комнате без окон. Когда строили комнату, оставили маленькое отверстие, через это отверстие в комнату попадал луч солнца. Девушка влюбилась в солнце, и она забеременела. Узнав об этом, отец посадил дочь в золотой сундук и опустил в реку. Двое охотников Томагул и Шабанкол находят золотой сундук, они делят между собой находку. То, что находится внутри сундука, принадлежит Томагулу, а золотой сундук принадлежит Шабанколу. Они открывают сундук, а оттуда выходит красивая девушка. По истечению срока девушка родила мальчика. Мальчика называют Кунес, так как мать была влюблена в солнце. После него она родила еще двоих сыновей. Одного называют Богентаем, второго Боргентаем. Когда дети выросли, Кунеса отправляют на охоту в лес. Так как дети Арыухан, рожденные от Томагула, хотели навредить ее старшему сыну Кунес, поэтому он, спросив разрешения у матери, уходит. Проходит время, Майки бий нашел Кунес и посадил его на престол хана. Он женился на Алмалы Корикли и жил долгое время счастливо.

Кунес умирает. После смерти Кунес сыновья Арыухан и Томагула Богентай и Борентай хотели жениться на Алмалы Корикли. А перед смертью

Кунес сказал ей: «Ты родишь мальчика, и назовешь его Чингизом. Как он говорил, ребенка назвали Чингизом» [7, с. 43]. Об одной из таких исторических личностей уместно даны сведения в эпосе «Темурнома» Солохиддина Ташкендия. Как описывается в эпосе, когда сын Карашора нояна Амир Тарагай Бахадыр охотился одна лань бежит от него и прячется в стаде баранов. Но Тарагай Бахадыр среди испугавшихся баранов увидел не сбежавшую лань, а серого волка. Он убивает волка, будит чабана и спрашивает о случившемся у него, а тот умоляет, чтобы его не убивали, что «во сне он увидел его судьбу». По рассказам чабана, к нему подошел человек в синем одеянии и сказал «Пойди к Тарагаю, скажи ему, чтобы он пришел к Шайх-ул-аьламу, женился на дочери Садр-аш-шарията, и родится у них счастливый сын». Такое рождение Амира Темура видела во сне и его старшая жена Иукуна. Во сне солнце, которое выходит из-под полов госпожи Тегине и охватил всю землю с востока до запада, а далее идет в Хиндистан. Госпожа Иукуна посылает раба Мойдуна к предсказателю снов Сабулаку, он предсказывает, что госпожа Тегине родит мальчика под счастливой звездой Сахипкырана, его наследники будут править миром восемь столетий [8, с. 46-47].

В эпосе «Манас отец Манаса тоже увидел рождение сына во сне. Во сне Жакып отец Манаса увидел орла со львом и понял, что ребенок, который должен родиться будет обладать божественной силой [2, 100-101].

Такие традиционные сюжеты о божественном рождении и о его жизненном пути часто встречаются в каракалпакских народных сказках, легендах и эпосах. Например, в сказке «Жансап» у царя был единственный сын, когда ему исполнилось пятнадцать лет, вместе с шестью богатырями вышел на рыбалку. Когда они рыбачили, начался шторм, они долго сопротивлялись, заблудились и только на шестой день вышли к подножью большой горы. Шесть дней они голодали и захотели приготовить себе еду, поднялись на гору и там приготовили себе еду. В этот момент их окружают одноглазые, полуногие, полуголовые люди и они еле сбегают от них.

Рассмотрим мотив о волшебном рождении героя одной из таких сказок «Полуголовый богатырь». Один бездетный старик увидел сон. Во сне дед с волшебным посохом дал ему пару яблок, и сказал: дай это жене, если жена съест яблоко у вас будет ребенок. Старик принес жене яблоко, но случайно, половину яблока съела коза, а остальное съела жена старика, от того что жена съела половину яблока, ребенок родился с половиной головы [16, с. 87]. Сказочное яблоко было не простое, оно было с иного мира, оно было подарено духами. Здесь мы наблюдаем, что

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понятие, связанное с плодотворностью фруктов обретает религиозный характер.

В казахской народной сказке «Одноглазый див» человек с одним глазом интерпретируется как див. Герой сказки, сам не ведая, попадает во дворец дива, во дворце никого не было, поэтому герой живет во дворце. Однажды, придя с охоты, он уснул, проснулся от громкого землетрясения и видит одноглазого дива. В сказке одноглазый человек описывается следующим образом: «На лбу блестит только один глаз, от его голоса сотрясается земля, а след его коня равен земляному очагу, рыча, заходит к себе во дворец» [8, с. 46-47].

В вышеприведенных примерах деталь рождения ребенка с некоторыми физиологическими недостатками использованы в связи с народными поверьями, происходит явление демифологизации, то есть, события приближены к действительности.

Были созданы много легенд о происхождении человечества. В древнегреческих мифах о сотворении мира могущественные, сильные титаны дали жизнь и другим дивам: Родились три дива у каждого, из которых по сто рук, дивы с пятидесятью головами, здоровые, одноглазые циклопы, которых называют «гекатонхейр» [6, 232]. Как видно, греческие мифы о сотворении мира и возникновении богов сходны в плане сюжета с тюркскими народными сказками и легендами.

Тюркские народы созданы на основе религиозных и тотемных мифов. Каракалпакские легенды не могли сохранить общественные понятия о причинах рождения человека в древности. Поэтому, в них не отражаются виды древних чудесных рождений (происхождение от дерева, камня, печки и т.д.). В эпосах и легендах *наших народов* занимают огромное место культ деда, культ животных, культ природы (солнце, вода), культ предков, магическая сила слова, а также чудесные рождения, связанные с понятиями мусульманской религии. Во многих народных эпосах сохранились традиции отношения ко многим зверям и птицам как к тотему. Например, в сказаниях «Деда Коркута» огуз-кипчацкие племена происходят от волков и львов. В сказании описывается, что родной сын Аруза Бисат в момент, когда враги напали на огузские племена, выпал из поклажи матери, в лесу кормился молоком льва, и повзрослел [11, с. 4]. Этим дед Коркут дает понятие, что прадедом племени, распространившиеся от приемного сына кыпчаков Аруза, был Лев. Такая традиция тотема, то есть, связывание своего происхождения с животными, издревле существует у тюрков и монголов. Синие тюрки видели своего «бога» в лице синего червя, синий Волк означал Небесного Волка,

защищающий синий волк понимался как властелин небес.

По легендам и мифам, распространенным в татарском народе, волк является их тотемом. Причиной является то, что когда татары переселялись и ходили в лесах и горах они заблудились, их окружили враги, они хотели уничтожить татар, именно в тот момент они встретили благородного Белого волка, через знакомые ему в горах и лесах тропы волк отвел их в безопасное место, и спас от врагов [2, 103-105].

В песнях и легендах тюркские народы связывают свое происхождение с тотемными мифами. Некоторые из этих традиционных тотемных мифов вошли в эпосы с изменениями, а некоторые встречаются в неизменном виде.

Мифические сюжеты, о создании героев эпоса семьи с полулюдьми, с полуптицами, о рождении у них детей, их превращение в птиц и уход, переходя в содержание эпосов и легенд, обретают новое идейное содержание. Этот мотив служит выявлению силовых качеств героя, который должен родиться, выполняет социально-бытовую и поэтическую функцию.

Почти во всех версиях эпоса «Едиге» существуют мифическо-легендарные сюжеты о рождении исторического героя Едиге и его родителей. В.М.Жирмунский источников сюжетов о рождении Едиге и его родителей связывает с тотемными мифами [4].

Исследователь эпоса «Едиге» К.Алламбергенов в ногайской национальной версии эпоса деталь о вскармлении Едиге собакой видим явление мифического мышления, то есть должны рассматривать его как остатки тотемизма. Так как мы не наблюдали другого значения данной детали в эпосе. По-видимому, ногайские сказители тотем мангитских племен связывают с волками и собаками.

Но, останавливаясь на исторической основе и художественной роли сюжетного мотива о рождении Едиге от девушки-пери в голубиных перьях в каракалпакской версии: « В детали о рождении Едиге от девушки-пери в голубиных перьях отображаются остатки тотемизма с архаического периода мифического мышления. Ни в науке, ни в художественной литературе среди каракалпаков нет такой традиции, где они поклоняются голубям. Но, в эпосе Едиге рожден не от пери, а от девушки-пери в голубиных перьях. Значит, это означает, что в эпосе встречаются и элементы периода матриархата в развитии древнего мифического мышления» [1, 84-85].

В народных эпосах очень часто встречаются мифические мотивы, в эпосе «Мунлык Зарлык» герой повзрослел благодаря тому, что его вскармила газель. Например:

Зарлыкку оставшемуся в горах,

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Встретилась одна газель,
Она тоже была бедняжкой,
Разлученной от детей,
Увидев детей-голышей
Она начала лизать их
Пошла и обняла их,
Детей-голышей спрятала в подмышки
Дала свое вымя двум детишкам,
Газель лижет детей,
Смотрит по сторонам,
А детишки сосут газель вдоволь
И наслаждаются ее молоком [9, с. 453].

Как видно, ребенок вырастает, употребляя молоко газели, а это является признаком мифологии тотемного периода. Тотемизм существовал до исламской религии у народов Средней Азии также как и у буддийских арабов. Его последствия существовали у народов степей даже после Ислама. Данная идеология в свою очередь, породила собственный духовный мир – миф [2, с. 103].

В заключении можно сказать что, в каракалпакском устном народном творчестве, в том числе и в народных эпосах, поэтически отображены первые шаги, интересы

эволюционного развития мышления в понимании окружающего мира. Мотив чудесного рождения является одним из ведущих в народных эпосах, сказках, легендах, особенно, в генеологических и этногенеологических эпосах. В идеализации образа героя, а также в создании художественности и содержательности данный мотив имеет особое значение. Исторические корни данного мотива связаны с древними архаическими понятиями, тотемными культурами, созидательной силой природы, магией слова, а также с мифическими мотивами о рождении человека на основе религиозных понятий, возникших в последнее время. Таким образом, с развитием мифического мышления эти мотивы начали меняться в структурно-семантическом плане. Также постепенно освобождаются от мифических функции и впитываются в структуру эпосов. Обретают различные виды в связи с жизненными условиями, возникшими в определенный период, понятиям и поверьям в духовном сознании народа на различных этапах развития общества. Мотив чудесного рождения сыграл большую роль в эволюционном развитии и художественном обогащении эпосов.

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SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 18.06.2020 <http://T-Science.org>

QR – Issue



QR – Article



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ON SOLVING BIOLOGICAL PROBLEM BASED ON FUNCTIONAL- DIFFERENTIAL EQUATIONS OF DELAY TYPE WITH DISCRETE EXPERIMENTAL DATA

Abstract: The article is devoted to modeling the regulatory mechanisms of biological systems based on functional-differential equations with delayed argument with discrete experimental data as a initial conditions. Approximate method for the initial functions on the basis of discrete values of a biological experimental data is considered. Results show that under certain conditions during mathematical description of biological processes by functional-differential equations with delayed argument, we can plan in advance the necessary amount of experiments.

Key words: mathematical model, regulatory mechanisms, biological systems, functional-differential equations, experimental data.

Language: English

Citation: Saidalieva, M., & Hidirova, M. (2020). On solving biological problem based on functional-differential equations of delay type with discrete experimental data. *ISJ Theoretical & Applied Science*, 06 (86), 66-70.

Soi: <http://s-o-i.org/1.1/TAS-06-86-12> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.06.86.12>

Scopus ASCC: 2604.

Introduction

In mathematical modeling of the regulatory mechanisms of complex, interconnected systems, such as living systems, it is very important to choose a class of mathematical equations that have an “native” ability to oscillate modes of solutions, as well as suitable for modeling biosystems in normal conditions, anomalies, and when there is exist sudden activity death [1, 2]. Such equations are functional differential equations with a delayed argument, constructed on the basis of the methods of regulating living systems [3, 4]. Functional differential equations of regulatory mechanisms of biological systems are not integrated and obtaining exact solutions is generally impossible [1-9]. Using methods of qualitative analysis allows us to identify the general

properties of solutions, to determine the characteristic stationary solutions and the existence of periodic solutions. Solutions can be obtained with the required accuracy based on the implementation of the model on a computer [6-10]. To solve the equations of the regulatory mechanisms of biological systems, it is necessary to set the initial conditions on a segment of length h [11-14]. This is rather difficult for models of biological systems due mainly to discreteness of experimental data. As a result of this, the question arises of approximating the initial functions on the basis of discrete values of the variable equations and obtaining approximate solutions for their finite number. Obtaining solutions of differential equations with high accuracy allows us to study the basic laws of the behavior of solutions based on methods of

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qualitative analysis and selective numerical solutions on a computer.

STATEMENT OF A PROBLEM

The use of functional differential equations with a delayed argument in the modeling of biological systems involves an analysis of the general patterns of solutions based on the theory of qualitative analysis and the most accurate assessment of solutions near critical points, where, depending on the values of the parameters, qualitative changes in the behavior of the model can occur. Let $M(m_1, \dots, m_n)$ be the point of interest to us in the phase space. Then the equations of the regulatory mechanisms of biological systems in an infinitely small neighborhood M can be linearized by expanding the right-hand side in a power series and taking into account only linear deviations from the point M . We introduce small $z_i(t)$

$$X_i(t) = m_i + z_i(t), \quad i = 1, 2, \dots, n$$

for which the general equations of the regulatory mechanisms of biological systems have the following form:

$$\frac{dz_i(t)}{dt} = A_i^n (M + z(t-h)) e^{-\sum_{j=1}^n (m_j + z_j(t))} - b_i m_i - b_i z_i(t), \quad (1)$$

where

$$A_i^n (M + z(t-h)) = \sum_{j=1}^n \sum_{k_1, \dots, k_j=1}^j \prod_{m=1}^j (m_i + z_i(t-h))$$

$$i = 1, 2, \dots, n$$

After consecutive calculations we

$$\frac{dz_i(t)}{dt} = \sum_{j=1}^n \alpha_{ij} z_j(t-h) - b_i z_i(t) + q_i, \quad (2)$$

where α_{ij} ($i, j = 1, 2, \dots, n$) are constants expressed in terms of parameters (1), and

$$q_i = A_i^n (M) e^{-\sum_{j=1}^n m_j} - b_i m_i. \quad (3)$$

If to replace in (2)

$$u_i(t) = z_i(t) e^{-b_i(t)},$$

then we obtain the following equations in an infinitesimal neighborhood of the point M of the phase space.

$$\frac{du_i(t)}{dt} = \sum_{j=1}^n \alpha_{ij} u_j(t-h) + q_i \quad (4)$$

$$i = 1, 2, \dots, n$$

If M is not an equilibrium of the equations of the regulatory mechanisms of cell communities, then by (3) we have $q_i \neq 0$ ($i = 1, 2, \dots, n$). The considered "biological" problem for differential-delay equations (3) allows, under the indicated conditions, solutions to be obtained from the point values of the desired functions. We study some questions of obtaining approximate solutions of inhomogeneous, linear

differential-delay equations with for a limited number of specified point values of the desired functions.

THE PROBLEM DECISION

Let us consider the following equation

$$\frac{du_i(t)}{dt} = a(t)u(t-h) + q(t). \quad (5)$$

Let the boundary conditions be given in the following form:

$$U(t_0 - kh) = U_k, \quad k = 0, 1, 2, \dots \quad (6)$$

here $t_0 = Ph$ and $P > 1$, where P is positive.

We introduce the following notation: let $u_0(t)$ be a solution (5) satisfying the boundary conditions:

$$u(Ph - kh) = u_k, \quad k = 0, 1, 2, \dots$$

and let $u_p(t)$ be a solution (5) satisfying the following boundary conditions:

$$u(kh) = u_k, \quad k = 0, 1, 2, \dots, P$$

$$u(-kh) = 0, \quad k = 0, 1, 2, \dots$$

We consider the behavior of the approximate solution $u_p(t)$ of equation (5) under boundary conditions (6) at $t \geq t_0$. Let $q(t)$ be a continuous function in $(-\infty, \infty)$ and $|q(t)| < M$, and the function $a(t)$ has in $(-\infty, \infty)$ all derivatives and

$$\left| \frac{d^n a(t)}{dt^n} \right|_{t \in (-\infty, h)} < N^{n+1}$$

$$n = 0, 1, 2, \dots$$

$$|u_k| < L, \quad k = 0, 1, 2, \dots$$

Then for $[t_0 + kh, t_0 + (k+1)h]$ ($k = 0, 1, 2, \dots$) we obtain:

$$|u_0(t) - u_p(t)| \leq (1 + Mh)^k (e^{Mh} - Mh) \frac{L(Mh)^{p+1}}{(p+1)!}.$$

Indeed, the function $r_p(t) = u_0(t) - u_p(t)$ satisfies the equation

$$\frac{dr_p(t)}{dt} = a(t)r_p(t-h)$$

and the following boundary conditions

$$r_p(kh) = 0, \quad k = 0, 1, 2, \dots, P.$$

$$r_p(-kh) = u_{p+k}, \quad k = 0, 1, 2, \dots$$

At $t \in [t_0, t_0 + h]$ we have:

$$r_p(t) = \sum_{n=p+1}^{\infty} \frac{u_n \left[\int_0^t a(\theta) d\theta \right] \dots \left[\int_0^t a(\theta) d\theta \right]}{n!}.$$

Consequently:

$$r_p(t) = \sum_{n=p+1}^{\infty} \frac{L(Mh)^n}{n!} \leq \frac{L(Mh)^{p+1}}{(p+1)!} \left(1 + \frac{Mh}{p+2} + \frac{(Mh)^2}{(p+2)(p+3)} + \dots \right)$$

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we obtain

$$|r_p(t)| \leq \frac{L(Mh)^{p+1}}{(p+1)!} (e^{Mh} - Mh), \quad t_0 \leq t \leq t_0+h$$

For $[t_0+h, t_0+2h]$ we have:

$$r_p(t) = r_p(t_0+h) + \int_{t_0}^t a(\theta)r_p(\theta-h)d\theta$$

and

$$|r_p(t)| \leq |r_p(t_0)| + Mh \max |r_p(t-h)| \leq (1+Mh)(e^{Mh} - Mh) \frac{L(Mh)^{p+1}}{(p+1)!}, \quad t_0+h \leq t \leq t_0+2h$$

Thus, after sequential integration, we obtain:

$$|r_p(t)| \leq (1+Mh)^k (e^{Mh} - Mh) \frac{L(Mh)^{p+1}}{(p+1)!}$$

at $[t_0+kh, t_0+(k+1)h]$.

Let us consider approximate solutions for the system of equations

$$\frac{du_i(t)}{dt} = \sum_{j=1}^n a_{ij}(t)u_j(t) + q_i(t), \quad (7)$$

$i = 1, 2, \dots, n$

Let $q_i(t)$ be continuous on $(-\infty, \infty)$ and $|q_i(t)| < N$, $k = 0, \pm 1, \pm 2 \dots$ and the functions $a_{ij}(t)$ have derivatives of all orders on $(-\infty, \infty)$ and

$$\left| \frac{d^m a_{ij}(t)}{dt^m} \right|_{t \in (-\infty, h)} < M^{n+1}$$

$i, j = 1, 2, \dots, n$

$m = 0, 1, 2, \dots$

Let's also we have

$$u_i(t_0 - kh) = |U_{ik}| < L,$$

$$k = 0, 1, 2, \dots; \quad i = 1, 2, \dots, n; \quad t_0 = Ph \quad (p > 1).$$

Then for $[t_0+kh, t_0+(k+1)h]$ ($k = 0, 1, 2, \dots$) we obtain:

$$|u_{oi}(t) - u_{pi}(t)| \leq (1+nMh)^k (e^{Mh} - Mh) \frac{n^n L(Mh)^{p+1}}{(p+1)!},$$

where u_{oi}, u_{pi} are exact and approximate solutions (7). Since the functions

$$r_{pi}(t) = u_{oi}(t) - u_{pi}(t), \quad i = 1, 2, \dots, n$$

satisfy the system of equations

$$\frac{dr_{pi}(t)}{dt} = \sum_{j=1}^n a_{ij}(t)r_{pj}(t-h)$$

$i = 1, 2, \dots, n$

and the following boundary conditions

$$r_{pi}(kh) = 0, \quad k = 0, 1, 2, \dots, P.$$

$$r_{pi}(-kh) = u_{p+ki}, \quad k = 0, 1, 2, \dots$$

$i = 1, 2, \dots, n$

we obtain:

$$r_{pi}(t) = \sum_{n=p+1}^{\infty} \frac{\sum_{l_1, l_2, \dots, l_j=1}^n u_{l_1, p+l_j} B_0'(p, p+j)}{j!}, \quad t_0 \leq t \leq t_0+h$$

Then

$$|r_{pi}(t)| \leq \frac{n^n L(Mh)^{p+1}}{(p+1)!} (e^{Mh} - Mh).$$

Having carried out similar sequential integrations as in the previous case, we have:

$$|r_{pi}(t)| \leq (1+nMh)^k (e^{Mh} - Mh) \frac{n^n L(Mh)^{p+1}}{(p+1)!}.$$

DISCUSSION

These studies show that approximate solutions to the biological problem for differential-delay equations can most effectively be applied in the immediate vicinity of the initial point t_0 . If the permissible error of the solution is given in $[t_0, t_0+h]$, then, using the proved inequalities, we can determine the smallest number of boundary conditions necessary for this. This allows for the mathematical description of biological processes by functional-differential equations with delayed argument, under certain conditions, to plan in advance the necessary amount of experimental data.

Indeed, let some biological process be described by the system of differential-delay equations (7) and experimental data can be obtained at the points $t_0, t_0 - h, t_0 - 2h, \dots$. It is required to determine the required number of experimental points for the mathematical description of the process on the time interval $[t_0, t_0+T]$ up to a certain $\varepsilon > 0$.

The required number of experimental points can be determined from the following relation:

$$|r_{pi}(t)| < \varepsilon, \quad t \in [mh, (m+1)h], \quad \text{где } m = [T/h]$$

or

$$(1+nMh)^m (e^{Mh} - Mh) \frac{n^n L(Mh)^{p+1}}{(p+1)!} < \varepsilon.$$

By entering the notation

$$k = \frac{(1+nMh)^m (e^{Mh} - Mh) n^n L}{\varepsilon}, \quad (8)$$

We obtain

$$\frac{(p+1)!}{(Mh)^{p+1}} > k.$$

Keeping in mind, that

$$(p+1)! = \left(\frac{p+1}{e} \right)^{p+1} \sqrt{2\pi(p+1)},$$

we have

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$$\left(\frac{p+1}{Mhe}\right)^{p+1} > \frac{k}{\sqrt{2\pi(p+1)}}. \quad (9)$$

Thus, the required number of experimental points (p) can be determined using the following equation:

$$\sqrt{2\pi(p+1)}\left(\frac{p+1}{Mhe}\right)^{p+1} - k = 0. \quad (10)$$

Consider an example. Let the process be described by the following equation

$$\frac{du(t)}{dt} = 9 \sin tu(t-1) + q(t) \quad (11)$$

and it is required to determine the necessary number of experimental points that allow one to obtain solutions on $[t_0, t_0+10]$ with an accuracy of 10^{-4} . We calculate k from (8). Then equation (10) has the form:

$$\sqrt{2\pi(p+1)}\left(\frac{p+1}{Mhe}\right)^{p+1} = \frac{10^{10}(y^9 - 9)}{10^{-4}}.$$

An analysis of this equation shows that the minimum number of experimental points that make it possible to obtain a solution on $[t_0, t_0+10h]$ with an accuracy of 10^{-4} , is not more than 48.

An important task, when we realizing differential-delay equations on a computer, is to determine the initial functions. In this case, $T = h$ ($m = 1$). Therefore, to estimate the amount of necessary

data in order to obtain the initial function with the required accuracy of 10^{-q} , we have

$$\sqrt{2\pi(p+1)}\left(\frac{p+1}{Mhe}\right)^{p+1} = \alpha 10^q,$$

where

$$\alpha = (1+nMh)^m(e^{Mh} - Mh)^{n^2L}.$$

Then for q we obtain

$$q = \frac{1}{2\alpha} \log(2\pi(p+1)) + \frac{p+1}{\alpha} \log \frac{p+1}{Mhe},$$

which shows a very rapid increase in the degree of accuracy with an increase in the amount of data.

Conclusion

Thus, the studies results for some aspects during applying differential-delay equations for the mathematical description of biological processes show that in many cases when it is impossible to reliably determine continuous experimental curves on the initial segment of length h , effective results can be obtained with using the biological problem formulated above for differential-difference equations with a delayed argument, taking into account the specific character of biological data.

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SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 18.06.2020 <http://T-Science.org>

QR – Issue



QR – Article



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IN VITRO STUDY OF THE PHOTOPROTECTIVE PROPERTIES OF COMPOSITIONS CONTAINING LICHEN EXTRACTS AND CASTOR OIL

Abstract: The paper presents the results of an *in vitro* assessment of the photoprotective properties of compositions containing extracts of lichens *Hypogymnia physodes*, *Evernia prunastri*, *Ramalina pollinaria* and *Cladonia arbuscula*, 95% ethanol and castor oil in an amount of 15% of the volume. An increase in SPF, a decrease in λ_{crit} and UV-A / UV-B due to the introduction of 15% castor oil are shown.

Key words: Lichen extracts, castor oil; compositions, sun protection factor (SPF); critical wavelength (λ_{crit}); alcohol solutions of extracts; absorption spectra; UV-A / UV-B ratio.

Language: Russian

Citation: Khranchankova, V. M. (2020). *In vitro* study of the photoprotective properties of compositions containing lichen extracts and castor oil. *ISJ Theoretical & Applied Science*, 06 (86), 71-77.

Soi: <http://s-o-i.org/1.1/TAS-06-86-13> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.06.86.13>

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ОПРЕДЕЛЕНИЕ IN VITRO ФОТОЗАЩИТНЫХ СВОЙСТВ КОМПОЗИЦИЙ, СОДЕРЖАЩИХ ЭКСТРАКТЫ ЛИШАЙНИКОВ И КАСТОРОВОЕ МАСЛО

Аннотация: В работе изложены результаты *in vitro* оценки фотозащитных свойства композиций, содержащих экстракты лишайников *Hypogymnia physodes*, *Evernia prunastri*, *Ramalina pollinaria* и *Cladonia arbuscula*, 95 % этанол и касторовое масло в количестве 15 % объема. Показано увеличение SPF, снижение λ_{crit} и УФ-А/УФ-Б за счет введения 15 % касторового масла.

Ключевые слова: Экстракты лишайников, касторовое масло; композиции, солнцезащитный фактор (SPF); критическая длина волны (λ_{crit}); спиртовые растворы экстрактов; спектры поглощения; отношение УФ-А/УФ-Б.

Введение

Использование растительных экстрактов для защиты от солнца является современной тенденцией косметической промышленности. В последние годы возросло количество косметической продукции с использованием растительных экстрактов, что связано с растущим спросом потребителей на «зеленые» и «натуральные» ингредиенты в готовом продукте. Соответственно, появились исследования, демонстрирующие фотозащитную активность экстрактов и физиологически активных веществ [1–3]. Довольно интересным объектом

исследования являются экстракты лишайников, содержащие биологически активные вторичные метаболиты. Для некоторых вторичных метаболитов лишайников (атранорин, усниновая, вульпининовая и другие кислоты) показана способность поглощения ультрафиолетового излучения [4, 5].

В фотозащитные средства обязательно вводят различные растительные масла. Касторовое масло растворимо в 95 % этиловом спирте, не высыхает, не образует пленок, устойчиво к окислению. Все эти свойства послужили причиной введения касторового масла

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в композиции, содержащие экстракты лишайников.

При *in vitro* исследованиях эффективности фотозащитных средств определяют: величины фактора солнечной защиты (SPF); критической длины волны ($\lambda_{\text{крит}}$); отношения УФ-А/УФ-Б и др. [6, 7]. SPF является отношением равноэффектных минимальных эритемных доз ультрафиолета на защищенную и не защищенную кожу. Для определения величин $\lambda_{\text{крит}}$ и отношения УФ-А/УФ-Б используют кривые поглощения ультрафиолета в диапазоне 290÷400 нм. Под $\lambda_{\text{крит}}$ понимают длину волны, при которой площадь под кривой спектра поглощения в диапазоне $\lambda = 290\div 400$ нм достигает 90 % от максимального значения. Показатель УФ-А/УФ-Б является мерой широты защитных свойств анализируемых субстанций. Его рассчитывают как отношения площадей под кривой спектра поглощения в диапазонах УФ-А и УФ-Б нм [8–10].

УФ-А ($\lambda = (315)320 - 400$ нм) называют длинноволновое, хорошо проникающее в кожу, ультрафиолетовое излучение. Такое излучение является преобладающей частью солнечной радиации, оно слабо поглощается в атмосфере, достигает поверхности земли. УФ-Б ($\lambda = 280(290) - 320$ нм) называют средневолновое ультрафиолетовое излучение. Значительная часть этого излучения (до 90 %) поглощается озоном стратосферы.

Чем выше SPF, тем эффективнее фотозащитное средство. Уровень фотозащиты анализируемой субстанции считается низким при SPF от 2 до 6; средним – при SPF от 8 до 12; высоким – при SPF от 15 до 25; очень высоким – при SPF от 30 до 50; сверхвысоким – при SPF > 50. Для категоризации величин критической длины волны предложена пятибалльная шкала эффективности: 0 ($\lambda_{\text{крит}} < 325$); 1 ($325 < \lambda_{\text{крит}} < 335$); 2 ($335 < \lambda_{\text{крит}} < 350$); 3 ($350 < \lambda_{\text{крит}} < 370$) и 4 ($370 < \lambda_{\text{крит}}$). Субстанции с критической длиной волны $\lambda_{\text{крит}} > 370$ нм и SPF > 15 признаются солнцезащитными. По показателю величины отношения УФ-А/УФ-Б солнцезащитные средства делятся на слабые (0–0,2); средние (0,2–0,4); хорошие (0,4–0,6); превосходные (0,6–0,8) и максимальные (свыше 0,8) [8, 9].

Нами показаны фотозащитные свойства экстрактов лишайников, оценена цитотоксичность некоторых из них в отношении культур кератиноцитов человека (HaCAT) [11–13].

Целью настоящего исследования является оценка фотозащитных свойств композиций, содержащих экстракты лишайников и касторовое масло.

Методы исследований

Для исследования выбрали виды лишайников, широко распространенных в лесах

Беларуси: гипогимния вздутая – *Hypogymnia physodes* (L.) Nyl. (Syn. *Parmelia physodes* (L.) Ach.), эверния сливовая – *Evernia prunastri* (L.) Ach. рамалина пыльцеватая – *Ramalina pollinaria* (Westr.) Ach. и кладония лесная – *Cladonia arbuscula* (Wallr.) Flot. (Syn. *Cladonia sylvatica* (L.) Hoffm.). Биомассу лишайников отбирали на территории Государственного лесохозяйственного учреждения «Гомельский лесхоз» на типичных для каждого вида субстратах; высушивали до воздушно-сухого состояния, очищали от детрита, измельчали.

Экстракцию лишайников проводили этанолом, метанолом, ацетоном, бензолом, этилацетатом и хлороформом в аппарате Сокслета, полноту экстракции контролировали стандартным способом. После завершения экстрагирования растворитель отгоняли на ротационном испарителе, экстракты высушивали при комнатной температуре до порошкообразного состояния. Выход экстрактов составлял 1,5 ÷ 16,4 % воздушно-сухой массы лишайника, и зависел от вида лишайника и природы растворителя. Выбор растворителей для получения экстрактов лишайников был основан на работах [14–20].

Навески сухих экстрактов лишайников, соответствующие нетоксичным для культур кератиноцитов человека (HaCAT) концентрациям [12, 13], растворяли в 95 % этаноле, содержащем 15 % касторового масла. Одновременно готовили растворы экстрактов лишайников в этаноле, не содержащем касторового масла. Полученные растворы подвергали спектрофотометрии. Средством измерения служил УФ-спектрофотометр Solar PB 2201, измерительные кюветы – кварцевые. Величину SPF рассчитывали по формуле Мансура [10]:

$$SPF = CF \times \sum_{290}^{320} EE(\lambda) \times I(\lambda) \times Abs(\lambda);$$

где: CF – поправочный коэффициент (равен 10); $EE(\lambda)$ – спектр эритемного эффекта; $I(\lambda)$ – спектр солнечной интенсивности; $Abs(\lambda)$ – оптическая плотность образца. Произведение $EE(\lambda) \times I(\lambda)$ является константой [8, 10].

Одновременно для каждого образца снимали спектр поглощения в диапазоне $\lambda = 290\div 400$ нм.

Критическую длину волны определяли по формуле [8, 9]:

$$\int_{290 \text{ нм}}^{\lambda_{\text{крит}}} Abs(\lambda) d\lambda = 0,9 \times \int_{290 \text{ нм}}^{400 \text{ нм}} Abs(\lambda) d\lambda;$$

где: $Abs(\lambda)$ – оптическая плотность образца.

Площадь под кривой спектра поглощения в диапазоне $\lambda = 290\div 400$ нм принимали за 100 %; $\lambda_{\text{крит}}$ рассчитывали как длину волны, при которой данная площадь достигает 90 %.

Соотношение УФ-А/УФ-Б рассчитывали по [8, 9]:

$$УФ - А / УФ - Б = \frac{\int_{320 \text{ нм}}^{400 \text{ нм}} Abs(\lambda) d\lambda}{\int_{290 \text{ нм}}^{320 \text{ нм}} Abs(\lambda) d\lambda}.$$

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Анализ результатов исследования производили с помощью программного продукта Microsoft Excel.

Результаты и их обсуждение

Композиции с нетоксичными концентрациями экстрактов лишайников и 15 % содержанием касторового масла в хорошо поглощали ультрафиолет в диапазоне 290 – 320 нм (УФ-Б) и гораздо слабее в диапазоне 320 – 400 нм (УФ-А) – рисунок.

Вид спектров поглощения ультрафиолета соответствует величинам вводимых нетоксичных для клеток кожи человека концентраций экстрактов лишайников. Композиции с участием метанольных экстрактов лишайников гипогимнии вздутой и рамалины пыльцеватой; бензольных экстрактов лишайников эвернии сливовой и кладонии лесной в наибольшей степени поглощали ультрафиолетовую излучение. Все остальные экстракты, введенные в композиции в нетоксичных количества, проявляли практически одинаковые оптические свойства.

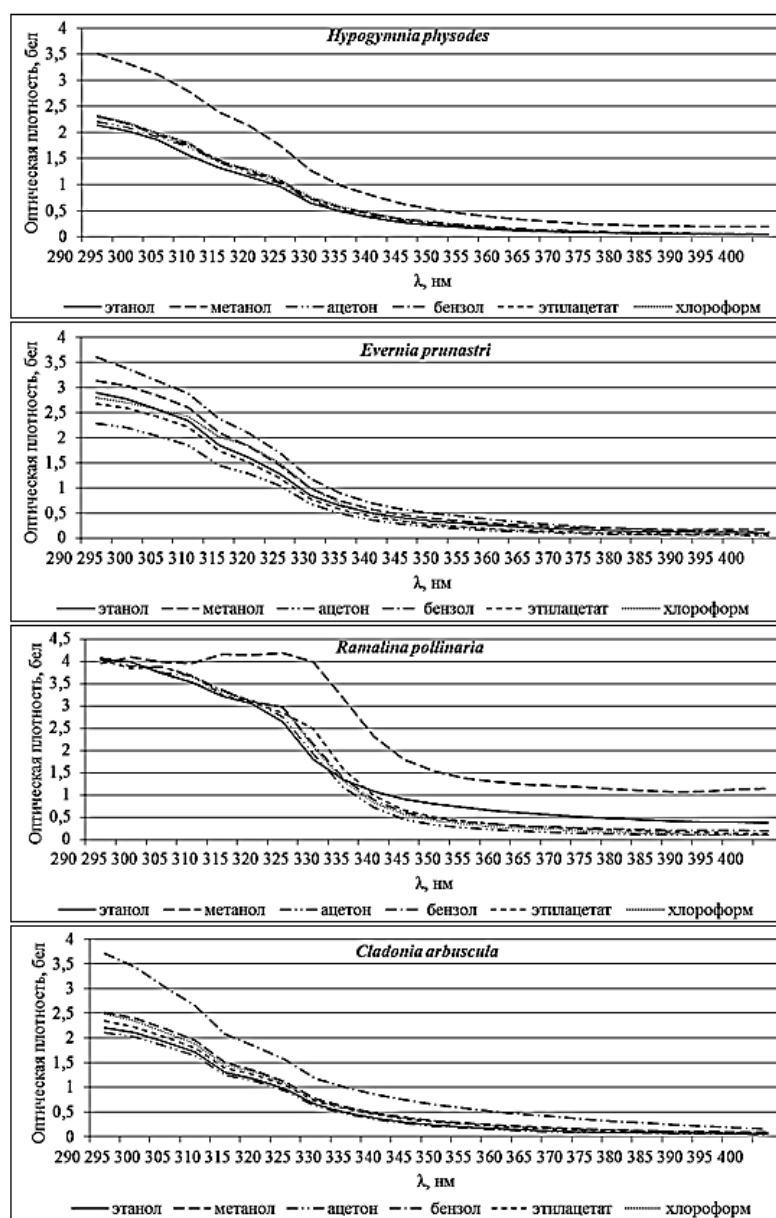


Рис.1. Спектры поглощения композиций из экстрактов лишайников и 15 % раствора касторового масла.

На рисунке использованы следующие обозначения:

- этанол – в составе композиции входили: 95 %-ный этанол, этанольный экстракт

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соответствующего вида лишайника и касторовое масло;

- метанол – в составе композиции входили: 95 %-ный этанол, метанольный экстракт соответствующего вида лишайника и касторовое масло;

- ацетон – в составе композиции входили: 95 %-ный этанол, ацетоновый экстракт соответствующего вида лишайника и касторовое масло;

- бензол – в составе композиции входили: 95 %-ный этанол, бензольный экстракт соответствующего вида лишайника и касторовое масло;

- этилацетат – в составе композиции входили: 95 %-ный этанол, этилацетатный экстракт соответствующего вида лишайника и касторовое масло;

- хлороформ – в составе композиции входили: 95 %-ный этанол, хлороформный экстракт соответствующего вида лишайника и касторовое масло.

Результаты оценки основных параметров фотозащитности созданных композиций из спиртовых растворов экстрактов лишайников и 15 % касторового масла в сравнении с аналогичными растворами, не содержащими касторового масла, приведены в таблице.

Табл.1. Фотозащитные свойства композиций экстрактов лишайников и касторового масла.

Вид лишайника	Вид экстракта	SPF	$\lambda_{\text{крит}}$	УФ-А/УФ-Б
<i>H.physodes</i>	этанольный	$16,1 \pm 2,12$	$340 \pm 5,4$	$0,34 \pm 0,061$
		$2,1 \pm 0,31$	$354 \pm 3,8$	$0,69 \pm 0,029$
	метанольный	$27,9 \pm 3,41$	$352 \pm 6,2$	$0,45 \pm 0,078$
		$18,4 \pm 1,05$	$362 \pm 5,4$	$0,72 \pm 0,026$
	ацетоновый	$17,1 \pm 2,93$	$341 \pm 4,6$	$0,34 \pm 0,065$
		$2,9 \pm 0,25$	$349 \pm 2,8$	$0,61 \pm 0,035$
	бензольный	$17,5 \pm 3,62$	$344 \pm 5,9$	$0,38 \pm 0,088$
		$3,6 \pm 0,43$	$359 \pm 4,7$	$0,84 \pm 0,039$
	этилацетатный	$17,6 \pm 4,23$	$342 \pm 5,1$	$0,36 \pm 0,064$
		$4,2 \pm 0,19$	$351 \pm 3,9$	$0,59 \pm 0,027$
	хлороформный	$17,7 \pm 4,52$	$343 \pm 4,7$	$0,37 \pm 0,068$
		$4,5 \pm 0,22$	$347 \pm 4,1$	$0,62 \pm 0,053$
<i>E.prunastri</i>	этанольный	$22,7 \pm 5,41$	$347 \pm 6,0$	$0,37 \pm 0,051$
		$10,4 \pm 1,12$	$360 \pm 4,7$	$0,49 \pm 0,039$
	метанольный	$25,3 \pm 4,83$	$350 \pm 6,6$	$0,39 \pm 0,052$
		$19,8 \pm 2,42$	$366 \pm 5,4$	$0,52 \pm 0,034$
	ацетоновый	$18,1 \pm 2,14$	$339 \pm 3,8$	$0,32 \pm 0,022$
		$5,1 \pm 0,18$	$338 \pm 3,5$	$0,31 \pm 0,018$
	бензольный	$28,2 \pm 5,4$	$348 \pm 5,7$	$0,41 \pm 0,052$
		$25,4 \pm 3,48$	$357 \pm 4,6$	$0,49 \pm 0,025$
	этилацетатный	$21,4 \pm 1,93$	$340 \pm 4,5$	$0,32 \pm 0,033$
		$11,9 \pm 1,23$	$345 \pm 4,9$	$0,34 \pm 0,021$
	хлороформный	$23,5 \pm 6,11$	$337 \pm 3,4$	$0,32 \pm 0,037$
		$16,1 \pm 1,95$	$334 \pm 3,8$	$0,32 \pm 0,015$
<i>R.pollinaria</i>	этанольный	$35,2 \pm 7,32$	$362 \pm 6,1$	$0,56 \pm 0,049$
		$33,7 \pm 4,36$	$361 \pm 5,4$	$0,51 \pm 0,028$
	метанольный	$40,4 \pm 3,12$	$377 \pm 3,7$	$1,08 \pm 0,116$
		$38,3 \pm 4,38$	$377 \pm 4,3$	$1,05 \pm 0,109$
	ацетоновый	$36,3 \pm 5,51$	$334 \pm 3,2$	$0,34 \pm 0,028$
		$36,8 \pm 3,74$	$332 \pm 2,9$	$0,27 \pm 0,015$
	бензольный	$36,1 \pm 7,22$	$344 \pm 4,8$	$0,44 \pm 0,032$
		$34,1 \pm 4,42$	$348 \pm 4,2$	$0,35 \pm 0,017$
	этилацетатный	$36,2 \pm 8,01$	$342 \pm 4,4$	$0,46 \pm 0,071$
		$35,4 \pm 3,65$	$344 \pm 3,9$	$0,54 \pm 0,029$
	хлороформный	$35,5 \pm 6,42$	$338 \pm 3,9$	$0,39 \pm 0,069$
		$34,3 \pm 3,49$	$339 \pm 4,2$	$0,45 \pm 0,021$

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<i>C.arbuscula</i>	этанольный	$16,8 \pm 2,73$	$342 \pm 6,6$	$0,35 \pm 0,043$
		$2,7 \pm 0,29$	$366 \pm 5,1$	$0,72 \pm 0,054$
	метанольный	$19,1 \pm 2,44$	$349 \pm 7,0$	$0,41 \pm 0,031$
		$7,4 \pm 0,86$	$350 \pm 4,6$	$0,76 \pm 0,039$
	ацетоновый	$16,1 \pm 1,36$	$340 \pm 6,2$	$0,33 \pm 0,025$
		$1,3 \pm 0,11$	$342 \pm 5,5$	$0,65 \pm 0,033$
	бензольный	$26,4 \pm 2,24$	$359 \pm 6,9$	$0,53 \pm 0,042$
		$22,2 \pm 2,63$	$359 \pm 6,1$	$0,82 \pm 0,056$
	этилацетатный	$17,7 \pm 1,59$	$348 \pm 7,1$	$0,39 \pm 0,019$
		$4,5 \pm 1,18$	$349 \pm 6,7$	$0,89 \pm 0,068$
	хлороформный	$18,5 \pm 3,26$	$348 \pm 4,2$	$0,41 \pm 0,026$
		$6,2 \pm 1,92$	$351 \pm 3,5$	$0,75 \pm 0,059$
В числителе – показатели фотозащиты, присущие композициям из экстрактов лишайников и 15 % касторового масла; в знаменателе – показатели фотозащиты, присущие растворам экстрактов лишайников без касторового масла.				

Величины SPF созданных композиций соответствуют уровням высокой и очень высокой фотозащиты. Таких показателей удалось добиться путем введения 15 % касторового масла в их состав – величины SPF возросли в 3,6 – 12,4 раза растворов экстрактов лишайников с низким уровнем фотозащиты.

Величины критической длины волны созданных композиций соответствуют оценке «2» по шкале эффективности. Композиция с ацетоновым экстрактом лишайника рамалины пыльцеватой соответствует эффективности «1»; композиции с метанольным экстрактом лишайника гипогимнии вздутой, этанольным экстрактом лишайника рамалины пыльцеватой и бензольным экстрактом лишайника кладонии лесной – оценке «3». Композиция с метанольным экстрактом лишайника рамалины пыльцеватой может быть признана фотозащитной (SPF = $40,4 \pm 3,1$; $\lambda_{\text{крит}} = 377 \pm 3,7$). Следует отметить, что введение в растворы экстрактов лишайников 15 % касторового масла понижает величину показателя $\lambda_{\text{крит}}$. Данный показатель уменьшался на 5 – 15 нм для растворов экстрактов лишайников гипогимнии вздутой и эвернии сливовой; на 10 – 24 нм для растворов экстрактов лишайника кладонии лесной.

Широта защитных свойств (УФ-А/УФ-Б) созданных композиций соответствует критериям «средние» и «хорошие», тогда как композиция с метанольным экстрактом лишайника рамалины пыльцеватой соответствует критерию «максимальные». Введение 15 % касторового масла в их состав способствовало снижению данного показателя – в большинстве композиций

широта защитных свойств из категорий «максимальные», и «превосходные» перешла в «хорошие» и «средние».

Композиции из нетоксичных количеств экстрактов лишайника рамалины пыльцеватой и 15 % касторового масла по своим фотозащитным свойствам практически не отличались от растворов тех же количеств экстрактов в этаноле без участия касторового масла. Другими словами, введение 15 % касторового масла в композиции с нетоксичными для кератиноцитов количествами экстрактов лишайника рамалины пыльцеватой не изменяло их фотозащитных свойств.

Заключение

Оценивали фотозащитные свойства композиций, содержащих экстракты лишайников *Hypogymnia physodes*, *Evernia prunastri*, *Ramalina pollinaria* и *Cladonia arbuscula*, 95 % этанол и касторовое масло в количестве 15 % объема. Показано, что композиции хорошо поглощали ультрафиолетовое излучение при $\lambda = 290 - 320$ нм, слабо при $\lambda = 320 - 400$ нм. Композиции с участием метанольных экстрактов лишайников гипогимнии вздутой и рамалины пыльцеватой; бензольных экстрактов лишайников эвернии сливовой и кладонии лесной в наибольшей степени поглощали ультрафиолетовую излучение. Введения 15 % касторового масла в состав композиций в 3,6 – 12,4 раза повышало величину SPF; на 5 – 24 нм понижало величину $\lambda_{\text{крит}}$, способствовало уменьшению широты защитных свойств.

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PIF (India) = 1.940
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OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 18.06.2020 <http://T-Science.org>

QR – Issue



QR – Article



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MASTER WHO DEVOTED HIS LIFE TO SPORTS

Abstract: The article tells about the life and work of Yuldash Kamilov, who made a worthy contribution to the development of sports in Denau district of Surkhandarya region, played an important role in the entry and development of modern sports in Denau. At the same time, a detailed analysis of the work done in the field of physical culture and sports in the second half of the XX century - early XXI century in the city and district of Denau, the achievements and shortcomings.

Key words: physical culture and sports, ears of independence, spartakiad, sports infrastructure, complex sports games and competitions, swimming pool, sports federations, sports school, national wrestling, sports committee, national team, republican championship.

Language: English

Citation: Nazirov, B. S. (2020). Master who devoted his life to sports. *ISJ Theoretical & Applied Science*, 06 (86), 78-82.

Soi: <http://s-o-i.org/1.1/TAS-06-86-14> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.06.86.14>

Scopus ASCC: 3612.

Introduction

There will be a lot of people coming to the sport. However, it is rare for people to live and work faithfully for a lifetime. Kamilov Yuldash Tursunovich is one of such people. When it comes to this man, he can be considered born for sports. His life proves it. For Comrade Kamilov, sports is not only a profession, a task, working from month to month, but also a way to accumulate work experience before retirement, but a meaningful life.

Materials and methods

Kamilov Yuldash Tursunovich was born on February 1, 1947 in the city of Denau. In his biography - the documents state that the servant was born into a family. His father, Tursun Kamilov, was the director of the Denau district printing house before World War II. He later worked as an editor at the Red Denov newspaper. His mother, Khadija Abdulina, worked in a printing house for many ears. [1]

In 1953 he studied at the Lenin School in Denau, then at the Lomonosov Secondary School №1, and then at the H.H. Niyazi School for evening education. The dedication of Kabaev Mitkhat Talipovich and Migranov Gelmas Mengalievich, who worked as sports coaches at Yuldash Kamilov's school when he

was studying at Lamonosov's school, aroused great interest in physical culture and sports.

In the early 1960s, at the initiative of Migranov Gelmas Mengalievich, one of the sports coaches of the Lomonosov Secondary School №1, cycling competitions were organized on the Denau-Dushanbe route. Kamilov Yuldash regularly took part in these competitions.

In 1961, Yuldash Kamilov and several of his classmates were taken to the basketball team by one of the sports coaches, Musaniy Fesovich, and taken to the regional center to compete. They deservedly participated in this competition as well.

After graduating from the 8th grade, Kamilov Yuldash studied at the College of Physical Culture and Sports in Dushanbe in 1963-66. He first studied volleyball at the technical school. Then, on the recommendation of tennis coach Abramov Viktor Borisovich, he studied tennis at the technical school. Later, in 1970-1974, he studied by correspondence at the Uzbek State Institute of Physical Culture. [1]

After graduating from the technical school, Kamilov Yuldash was sent to Kulob in 1966 as a physical education teacher. In the first ear of his teaching career, he received a conscription. From 1966 to 1968 he served in the military in Belarus. [5]

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After Kamilov Yuldash returned from the army in 1968, he joined OCW (Office chief work) as a sports methodologist on the recommendation of Fatkhulin Rafik Badriddinovich, chairman of the Spartak Voluntary Sports Society. He was such a state in large industrial enterprises at that time. During his tenure in this position, he built football and volleyball courts. He formed the football team of the Denau oil refinery "Kuruvchi". [10]

In 1970, on the initiative of the chairman of the Surkhandarya regional sports committee Varankov Evgeny Mikhailovich and the chairman of the Denau city sports committee Valashuk Vladimir Fyodorovich, the establishment of the Denau city sports school was entrusted to Kamilov Yuldash. Denau previously had a sports school for children and teenagers, with only five coaches. On March 3, 1970, a youth sports school was established under the Denau City Sports Committee. [8] Yuldosh Kamilov was appointed director.

Kamilov Yuldosh had a lot of difficulties in organizing the work of the sports school. The reason was that there was no material base at that time. Under such circumstances, a number of enterprising sports coaches were hired at the sports school. Since the sports school was established in March, it took a long time before it attracted sports coaches. The funds allocated in the annual budget for the purchase of a sufficient number of sports equipment were available. The head of the district's finance, Ismail Bozorovich, also transferred the saved monthly salaries to buy sports equipment. The chairman of the Pakhtakor society Kabaev Vazikh Asadovich, the chairman of the Denau city sports committee Valashuk Vladimir Fyodorovich, the chairman of the Spartak volunteer sports society Fatkhulin Rafik Badriddinovich also played an important role in the establishment of this sports school. Thanks to the efforts of Kamilov Yuldash, the building of the railway, which is currently vacant, was allocated for a sports school. Initially, the building brought all the equipment for 3 sports: weightlifting, boxing and national wrestling, and organized circles. An equestrian club was also established at the Akhunboboev collective farm at that time. [1]

Valashuk Vladimir Fyodorovich in weightlifting, Azam Abdullaev in national wrestling, Abdulla Hakimov in national wrestling and sambo started coaching at the sports school. Laverensky Aveninsov taught volleyball and Soy Vasiley taught boxing. The tireless hard work of their coaches gradually began to bear fruit. Pupils of the sports school began to achieve success in various competitions.

In those ears, Fergana hosted the Republican Equestrian Championship. Fayzulla Buriev from Denau, who took part in it, became the republican champion. [1]

In 1971, an intercity spartakiad was held in Tashkent. The Denau team took part in the fourth zone (cities were divided into zones according to population). [2] Kamilov Yuldosh, Laverensiy Aveninsov, Plaston Anatoly, and Khairullo Ibragimov competed in volleyball as part of the Denau team. In this competition, the Denau team successfully participated in the national sports of wrestling, athletics, chess, volleyball.

This ear, the chairman of the Surkhandarya regional sports committee Musaev Muhiddin Ismatovich instructed the Denov sports committee to hold the Republican championship on the Bukhara method of national wrestling. He stressed that the team will not come from Termez, and only two wrestlers will be sent. Thanks to the efforts of Hakimov Abdulla and Azam Abdullayev, coaches of the Denau Sports School, two teams were formed from Denau itself. Yuldashev Abdukayum and Hamza, who were sent from Termez, were also originally from Denau. Wrestlers from 7 regions of the country took part in the two-day competition. The first team from Denau took the 1st place, the second team took the 2nd place, and the team from Tashkent took the 3rd place. Yuldashev Abdukayum, the champion, and Hamza, the wrestler, took the second place. [8]

After this competition, Nabi (Jabbor) Mahmarasulov and Jaloliddin Ruzikulov from Denau were invited to Tashkent and included in the Uzbek wrestling team. They took part in the 5th Spartakiad of the Soviet Union in Moscow in 1972. Nabi Mahmarasulov took the 2nd place in sambo. [3]

Yuldosh aka worked for ten ears (1972-1981) as a physical education teacher at the 6th secondary school named after G. Gulom in Denau.

From 1973 to 1974, at the initiative of the trade union of the Department of Public Education of Denau, Spartakiad competitions were held among teachers in the region. Comrade Kamilov participated in the Denau national team in volleyball and cross-country athletics. Due to the poor material base for sports in Termez, volleyball competitions were held in the circus building, not in the gym. [5]

For some time, Yuldash Kamilov also worked as a tennis coach at the Children and Youth Sports School of the Denau City Department of Public Education. At that time, the director of this sports school was Gennady Mekhailovich Migranov. He was a man devoted to sports. At the sports school, Kim Anatoly Andreyevich, Kabaev Mitkhat Talipovich were coaches in basketball, Matveev Olim Saidovich in handball, Abdulin Mansur Nizamovich in athletics. During his time working with this team, many athletes have grown up from sports school.

In 1978-1979, the Council of Ministers of the Uzbek SSR decided to develop tennis. At the initiative of Abdullaev Azam Abdullaevich, director of the Children and Youth Sports School under the Department of Public Education of Denau, a tennis

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circle was opened at the 3rd secondary school named after MT Oybek, and Yuldosh Kamilov was invited as a specialist to manage this circle. In 1980, at the initiative of Kamilov Yuldash, the construction of a tennis court began at the school and was completed in 1981. Since that ear, Kamilov Yuldash has been working as a full-time tennis coach at the school. Kamilov Yoldosh also achieved great success during his coaching career. His students Tvetkovskaya Marina, Tvetkovskaya Lyuba, Muhammadi Mirzaev, Anvar Kadyrov, Kamilova Alisa, Komilova Sayyora and others deservedly took part in tennis competitions throughout the country. Later, his students Kamilov Akmal and Nasriddinov Otabek became regional champions in tennis. [5]

In the early 1980s, badminton was added to all sports at the Republican Spartakiad. At that time, the chairman of the Surkhandarya regional sports committee Kholboy Khurramovich Kamilov summoned Yuldash and appointed him coach of the Surkhandarya badminton team. [5]

Since 1981, Yuldash Kamilov has been the chairman of the Denau city and district committee for physical culture and sports for 19 ears. [1] During the chairmanship of the committee, under the leadership of Yuldash Kamilov, a number of works were carried out in the district and many sports achievements were achieved. He was instrumental in the construction of many gyms and sports grounds.

In 1982, in the first ears of his leadership of the Sports Committee, Yuldash Kamolov together with the coach of athletics Hayitboy Hojimurodov of the 2nd secondary school named after Y. Ohunboboev won the Republican competition "Cheerful Starts" with his students. In the same ear, the Denau City Sports Committee was instructed by the team of the 2nd secondary school named after Y. Ohunboboev "Cheerful Starts" to compete with the team of Latvia "Cheerful Starts" Bauskaya district. Before the match, the Latvian coaches Yaniz and Beruz came to Denau and got acquainted with the conditions for its holding and came to the conclusion that it does not meet the requirements. The reason is that the sports grounds are not built to the standard, and there are no stands for spectators. After that, Yuldash Kamolov talked to the Republican Sports Committee and received permission to hold the competition with Latvian athletes at the Yoshlik Sports Complex in Tashkent. [5]

Preparations for the competition have been going on for 6 months. Leonid Konstantinovich Petrov, chairman of the Spartak Voluntary Sports Association, Nikolai Grigorevich Chernov, coach of the Lomonosov School, Shamil Fazulyanov and Denov from Tashkent. Chairman Yuldash Kamolov was sent. Thorough preparation for the competition spoke for itself. The team from Denau "Cheerful Starts" defeated the team from Latvia "Cheerful Starts" 22-18. [5]

In the fall of 1983, the return match was scheduled to take place in the Bauska region of Latvia. Yuldash Kamolov headed the Denau team "Cheerful Starts" and its coaches to take part in the competition. He admitted that the Denau people, who visited a remote village in the Bauska region of Latvia, were shocked to see the conditions created for sports. The complex of sports grounds built there, 40x20 gyms built on a standard basis, grandstands for 300 people, swimming pools made a great impression on the people of Denau. [5]

At the beginning of the competition, on the initiative of the chairman of the sports committee of Bauskaya district Ivanov, the director of the secondary school No. 2 named after Y. Ohunboboev in Denau Davlatov Nurmat Ruzibaevich agreed to hold a friendly test exercise between Denau and Bauskai "Cheerful Starts". In this test exercise, under the guidance of Davlatov Nurmat Ruzibaevich, Denau lost to rivals to calm down.

In the main match, Denau's "Cheerful Starts" again defeated its Latvian rivals 24-16. Comrade Kamilov admitted that after the competition, a representative of the Latvian Council of Ministers spoke at the dinner table in honor of the guests and said without any greetings: "Asiatis we fell into a lesson in physical education, we will never forget it for this lesson, those who were involved in the preparation of this kamandi we will punish".

Even the bus to the Denau sports team to return from Latvia was deliberately delayed at the airport after the plane flew to Dushanbe, and the Denau residents were left behind. After that, Davlatov Nurmat Ruzibaevich appealed to the Latvian Sports Committee to comment on the situation, and the Denau athletes were sent through Leningrad in two rounds. [5]

At the initiative of Yuldash Kamilov, since 1985, Denau district and city level GTO standards have been passed not only by schoolchildren, but also by the leadership of all organizations. A charter has been developed for this. On April 24, 1985, the GTO standards were first adopted. All leaders took an active part in it. [6]

In February 1985, Yuldash Kamilov was awarded a certificate of honor by the Surkhandarya Regional Sports Committee for his selfless work in the field of sports. [5]

In the fall of 1987, the chairman of the regional sports committee, Leonid Borisov Semonovich, called Yuldash Kamolov and said that in 20 days the sports team of the Balkh region of Afghanistan would visit Denau. Preparations will begin immediately to welcome the guests. Sports grounds, stadiums, grandstands will be renovated and the hospitable team will be welcomed. In the sports competitions with the Afghans, the Denau football team will win. While there was a draw in chess, the guests dominated in table tennis and volleyball. [5]

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Before Yuldash Kamilov, on the initiative of Ergash Karimov, who served as chairman of the Denau city sports committee, federations for all sports were established in Denau city and district. Yuldash Kamilov decided to develop this work as well. At that time, the head of SMU Abdurahmon Jabborov was the chairman of the Athletics Federation. Yuldash Kamilov together with him organized athletics competitions. The district trade union committee allocated 12 large bubbles for the competition. Initially, the competition was held separately for girls and boys among schoolchildren. Then it was held separately for girls and boys among college students. Then a competition was organized between different labor teams. The winners were awarded various prizes by Abdurahmon Jabborov. This competition was held regularly from 1988 to 2000. [8]

At the initiative of Abdunazar Turakulov, Eshniyoz Rustamov, Nina Kudinova, Salim Tuychiev, Rustam Mirzaev, Mengqobil Norkobilov, who worked as leaders in Denau district and cities at that time, 3 swimming pools were built on the right bank of the Kizilsuv River. When the construction was completed, the place became a real swimming school for young people. [1]

Comrade Kamilov in the development of Denau sports in those ears Safar Samadov, Nemat Alimardanov, Tursun Saidov, Lev Kim, Vladimir Niskovsky, Abduolim Buriev, Avazkhon Allanov, Ahmad Narzullaev, Anvar Boymurodov, Rahmonqul Abdullaev, Sayfiddin Kilichev, Jaloliddin Kasimov, Abdurahmon Iminjon Yangiboev, Shokirjon Shukurov, Abdujabbor Urinov, Sh. Nurmatov points out that the share of selfless sponsors is significant. [5]

It should be noted that during the ears of independence of our country, unprecedented and unforgettable events have taken place in the history of sports in our district, and this process is still ongoing. In particular, members of the Denau Football School have spread throughout the country. At the initiative of Yuldash Kamilov, in the first ears of independence, a football club "Umid" was established in our district. It was headed by Khudoyshukur Boronov, the chairman of the city press society at that time, a sportsman and a great man. Under his leadership, the

football teams "Cooperator" and "Matlubotchi" became regional champions. In 1992, the 1st Republican Football Championship was held. The Denau football team, which took part in it, took the 5th place. [3]

In pursuance of the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 27 of January 17, 1996 "On measures to radically improve the organizational framework and principles of football development in Uzbekistan" [7], On the basis of the decision of the regional department of public education No. 6 of June 5, 1996, a football school was organized in the district.

According to the decisions of the mayor of Denau city No. 308 of June 17, 1997 and the mayor of Denau district No. 748 of September 3, 1998, the governor of Surkhandarya region No. 306 of December 3, 1998 transformed Denau football school into a boarding school. [10]

From 1999 to April 2012, Yuldash Kamilov worked as Deputy Director for Sports Affairs of the State Specialized Football School № 2 in Denau district. The period of Yuldash Kamilov's work in this organization has been rich in meaningful and bright pages for Denau football. Former students of the school Fakhridin Vahobov, Akmal Kholmurodov, Dilshod Toshbadalov, Rahmatulla Berdimurodov, Bahridin Omonov, Nemat Togaev, Farhod Usmanov, Akmal Ibragimov, Khurshid Yuldashev, Zohid Toshtemirov, Dilshod Hamroev, Akmal Abdurahmonov, Nasafona, Pakhtakor", "Shurtang", "Bukhara", "Yangier". [10]

We must never forget the services of Yoldosh Kamilov, along with Anatoly Kim, Mansur Abdullin, Hayitboy Hadjimurodov, Marat Kabaev, Yuri Mashkov, Gelmas Migranov, Olim Matviev, who left their mark on the sport of our oasis. The life and experience school of the well-known sports coach Yuldash Kamilov can be a lesson for many. Today, Yuldash Bobo Kamilov, the coach of hundreds, if not thousands, of athletes, is 73 ears old, but he is still alive and well. The importance of sports in human life can be seen from the activities and actions of this person.

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SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 18.06.2020 <http://T-Science.org>

QR – Issue



QR – Article



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THEORETICAL FOUNDATIONS OF RISK MANAGEMENT IN LARGE CORPORATE STRUCTURES

Abstract: This article discusses the objectives of modern risk management, as well as how risk management can lead to beneficial solutions for the enterprise. The article is focused on the study, systematization and development of the theoretical foundations of risk management. The regular nature of the risk of entrepreneurial activity in the conditions of implementing an innovative strategy has been established, based on the classification of risks by economic level, their division into insurance and non-insurance is proposed, which determines the need to provide state guarantees to enterprises implementing innovations.

Key words: risk, losses, benefit, risk management, goals, risk management system, reduce risk, identification, anti-risk control, risk decision, risk assessment, risk analysis.

Language: English

Citation: Maxmudova, N. J. (2020). Theoretical foundations of risk management in large corporate structures. *ISJ Theoretical & Applied Science*, 06 (86), 83-88.

Soi: <http://s-o-i.org/1.1/TAS-06-86-15> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.06.86.15>

Scopus ASCC: 2000.

Introduction

UDC 346.2

The market economy is characterized by various risks and dangers. The observance of the laws of a market economy, limited resources, increased competition, the need to use innovations and a number of other factors shape the likelihood of the emergence of various risks in economic entities.

Today, the conditions of uncertainty surrounding enterprises can become threats to the enterprise at any time, and the threats are more likely to affect the enterprises in the form of risk over time. Now, as a result of globalization and the international division of labor, the flow of international capital is growing, investors are increasing, and they are seeking to invest their capital in low-risk sectors aimed at maximizing profits. This requires the enterprises of our national economy to take into account and manage the risks they face in their activities.

Methodology

In this study, methods such as a systematic approach, comparative analysis, grouping, comparison, induction and deduction were used.

Results and discussion

The attitude to corporate governance around the world has become more noticeable since the beginning of the 90s of the XX century, when national economies began to pay special attention to the formation of large corporate structures. During this period, the principles of corporate governance were improved, international multinational corporations were created, and corporate governance models were introduced. Currently, in the practice of the developed countries of the world, a lot of practical work is being done to study the theoretical and methodological foundations of the development of corporations, select strategies for their management, and comprehensively assess the degree of risk of corporate governance problems in joint-stock companies. In world practice, three types of corporate governance models are widely used: the Anglo-American, German and Japanese models.

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World experience shows that the effectiveness of corporate governance systems of a company depends on the implementation of modern principles and international management standards, studying the practice of effective corporate governance mechanisms in joint-stock companies. Improving the scientific and methodological foundations of corporate governance, modernization, technical and technological updating of strategically important sectors of the economy is the main criterion for the development of joint stock companies in the context of globalization of the global economy.

One of the main goals of the ongoing reforms in the Republic of Uzbekistan is the creation of a multi-layered economic environment, the transfer of ownership to real owners and the creation of ample opportunities for the development of entrepreneurship.

One of the main goals of the ongoing reforms in the Republic of Uzbekistan is the creation of a multi-layered economic environment, the transfer of ownership to real owners and the creation of ample opportunities for the development of entrepreneurship. In order to improve the management efficiency of joint-stock companies in the republic, a regulatory framework has been developed that contributes to the improvement of corporate governance structures. However, the solution of the introduction of effective management mechanisms in corporations entails a number of problems regarding the interests of the state in the corporate sector of the economy, the principles of effective corporate governance, the introduction of international experience, taking into account the socio-economic characteristics of the development of privatized systems. In this regard, today the scientific substantiation of the issues of creating an effective corporate governance mechanism and assessing risk situations in this case is an urgent problem.

In accordance with this, the Action Strategy for 2017-2021, developed in the Republic of Uzbekistan, allows introducing modern standards and principles of corporate governance of joint stock companies, as well as strengthening the role of shareholders in the strategic management of corporations¹. In order to effectively solve the above problems, there is a need to develop scientific and methodological foundations

of corporate governance in the modernization of the economy.

World experience of leading companies shows that business stability and improving management efficiency are impossible without the active use of risk management as an element of the enterprise's management system, regardless of the scale and specifics of the production of products (services). The existing enterprise risk management systems are focused on achieving the necessary balance between making profit and reducing business losses and are called upon to become an integral part of the enterprise management system through integration into the general policy of the company. At the same time, risk management involves making risk management decisions in the presence of several alternatives to managerial decisions that determine the possibility of using limited resources.

Modern risk management is focused on the formation of the culture and infrastructure of the enterprise in the framework of the following goals:

- 1) identification of the main factors and causes of risks;
- 2) identification, analysis and assessment of enterprise risks;
- 3) decision making based on risk assessment;
- 4) development of anti-risk control actions;
- 5) reduction of risk to an acceptable level;
- 6) organization of the implementation of the enterprise anti-risk program;
- 7) control of planned measures to reduce risk;
- 8) analysis and evaluation of the results of making a risk decision.

The distinguished characteristics are consistent with the primary signs of risk management, which are indicated in international standards. At the same time, there is a division of opinions regarding the status of risk management in enterprises: some see it as the prerogative of senior (strategic) management planning and setting tasks, including risk management, others see it as direct execution of risk management. The noted difference is due to different approaches to the organization, both general management and risk management in the organization, and is also associated with the profile of the organization. In the general case, the use of risk management systems allows achieving certain advantages².

¹ Decree of the President of the Republic of Uzbekistan dated February 7, 2017 № PD-4947 "On an action strategy for the further development of the Republic of Uzbekistan" / Collection of legislation of the Republic of Uzbekistan, 2017, № 6, article 70.
² See, for example: Martsinkovsky D.A. Overview of the main aspects of risk management // Management Methods and Tools.

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Table 1. Some possibilities of applying risk management systems in enterprise management

Advantage	Description of Organizational Improvements
1. Reducing the uncertainty factor of entrepreneurial activity	Monitoring risk situations allows you to develop specific actions to reduce the likelihood of risk and its impact on the results. When insurmountable events occur, the enterprise achieves the necessary stability through adequate planning and formation of reserves
2. Seizing Opportunities (Promising Improvement Opportunities)	The implementation of risk management measures allows us to assess the possibility of favorable consequences (chances) in a risky situation. The search for chances is effective when employees have the necessary qualifications in risk management and chance.
3. Better planning and better management efficiency	An objective risk assessment clarifies information about the enterprise, its operations, prospects, targets, which provides more informed planning and forecasting. This indirectly increases the ability to use chances and reduces the possible negative consequences.

Almost all enterprises in their activities are faced with the need to manage risk, which determines the need for risk management. The risk management system has some functional features, which gives it a peculiar character. So, risk management is based on the fact that it is linked with both negative and favorable consequences of entrepreneurial activity. Today, managing risk means determining prospects and identifying opportunities to gain advantages over competitors, preventing or reducing the likelihood of an undesirable result of activity. In addition, risk management involves a serious analysis of decision-making conditions at enterprises, which is a logical and systematic process of choosing ways to improve entrepreneurial activity and increase the efficiency of business processes. Essentially, risk management integrated into the current activities of an enterprise is often considered precisely as a system for ensuring a guaranteed result.

Risk management is also considered as a promising process that requires leading thinking, and not just a timely reaction to accomplished events. Accordingly, the formalization of the risk management system allows working to prevent problems. This determines a clear distribution of responsibility and decision-making authority. In this case, the prerogative of strategic leadership is the distribution of powers and responsibilities among the levels of management and departments of the enterprise. At the same time, it is considered important to establish an optimal balance between responsibility and the ability to control risk.

Risk management also depends on the effectiveness of the interaction of risk management participants, which is carried out both in the internal and external environment of the enterprise. However, the priority is still the interaction in the internal environment of the enterprise. Another important point in risk management of a modern enterprise is the

need for balanced decisions based on the economic feasibility of reducing risk and ensuring the achievement of predicted performance indicators. Sometimes the main goal of risk management is formulated this way: to ensure, even in the worst case scenario, only a certain allowable decrease in the predicted result while ensuring the stability, liquidity and solvency of the enterprise.

Experience shows that the probability of a situation leading to large losses in a relatively stable market is usually quite small. Orientation of risk management to manage such situations often leads to an unjustified reduction in the volume of basic operations of the enterprise. Therefore, the company in solving the problems of current risk management should focus on dynamic (non-stress) losses. Large catastrophic losses as a result of the implementation of enterprise risks should be considered separately[6].

A review of domestic publications and events on the subject of risk management indicates that the problems of risk management today are not discussed more by managers, but by insurers, whose underwriting activities are very similar to those of a risk management consultant (without specific banking risks or exchange risks). At the same time, one cannot fail to note the wider field of application of the concept of risk management than the assessment and transfer of a number of risks to insurance.

A survey conducted by the Russian Polis analytical service under the auspices of the Russian Risk Management Society among the leading companies of the country, members of the Russian Union of Industrialists and Entrepreneurs, to assess the level of development and the place of risk management in modern corporate governance, showed the need to adopt some practical standard for risk management in Russian conditions, which remains relevant in the post-crisis period.

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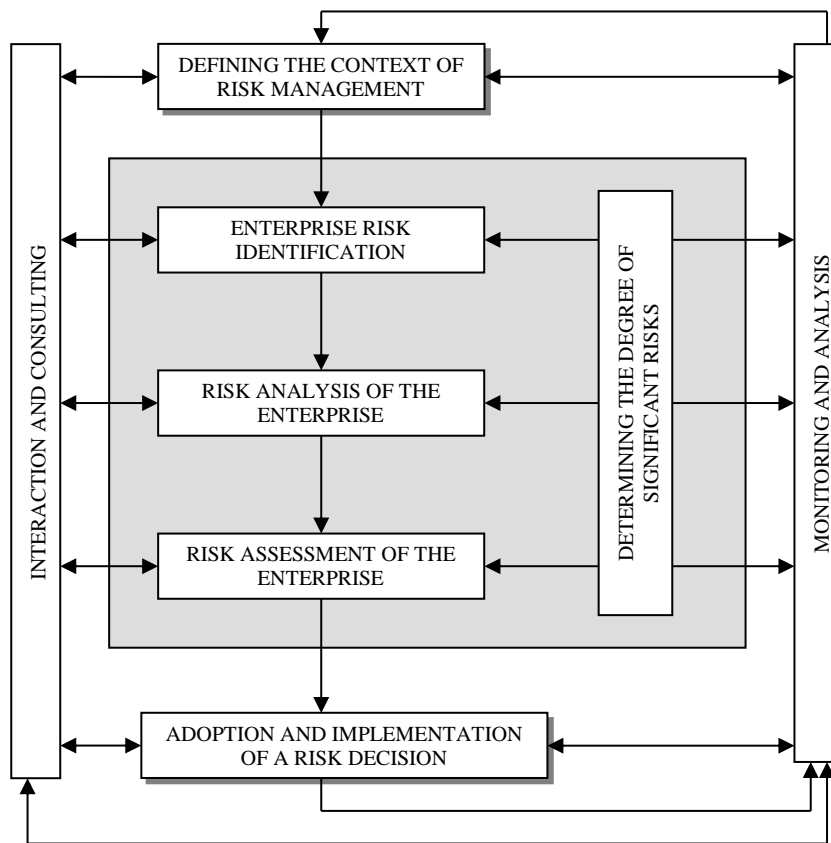


Figure 1. The structural diagram of the risk management process

In turn, the concept of acceptable risk seems methodologically very important for ensuring the risk management of an innovative enterprise, since it is based on the differentiation of risk levels at various stages of its manifestation:

- the initial level of innovation risk (R_{in}) is the risk level of an idea, plan or proposal without taking into account the implementation of risk analysis and risk assessment measures; this risk seems unidentified and unappreciated, therefore, the risk level at this stage is very high due to the unpreparedness of the organization’s decision-makers for risk situations;
- the estimated risk level (R_{es}) is the risk level taking into account measures for identification, analysis and risk assessment in the risk management system; its value R_{es} is a real estimate of the level of risk, which seems to be a risk of a lower level compared to R_{in} ;
- the residual risk level (R_{res}) is the risk level taking into account the measures developed and implemented in the risk management system to reduce the initial risk level R_{in} ;
- the final (acceptable) level of risk (R_{final}) is the level of risk that is acceptable in terms of risk criteria; the final risk level may be equal to R_{res} or less important (in this case, the developed system of risk criteria is the determining condition).

Mathematical modeling of the risk of an innovative enterprise on the basis of the concept of acceptable risk allows us to present it in the form of such dependencies:

$$\begin{cases} R_{in} > R_{es} > R_{res}; \\ \Delta R = (R_{res} - R_{final}) \rightarrow 0; \Rightarrow R_{res} = R_{final}. \end{cases}$$

The resulting assessment of the final (acceptable) risk level can significantly change the opinion of decision makers regarding the “riskiness” of this innovative activity. Given the measures taken to reduce the risk, its final level may be acceptable in a possible risk situation. The considered concept focuses on the following approaches to risk management:

- risk is, as a rule, not static and unchanging, but a controlled parameter, the level of which can and should have a controlling effect;
- the impact can be exerted only on the identified, analyzed and assessed risk;
- a high level of initial risk should not a priori justify the refusal to carry out activities related to this risk;
- you can always find a risky solution that provides some compromise between the expected benefits and the threat of loss in the implementation of an innovative project.

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The implementation of the concept of acceptable risk in the practice of the modern innovative enterprise requires the following procedures:

- 1) identification of the most dangerous options for implementing decisions related to the failure to achieve goals;
- 2) obtaining estimates of possible damage (loss) for various solutions;
- 3) planning and implementation of measures to reduce risk to an acceptable level;
- 4) analysis of the results of innovation and the assessment of risk management costs in the risk management system.

At an enterprise that implements an innovative strategy, as at other enterprises, the risk management process is characterized by a specific set of managerial procedures that is unique to it.

The current stage in the development of management theory and practice is focused on solving the problems of sustainable functioning and development of enterprises in a business environment with an increased risk profile. For management, it is necessary to create adequate diagnostic procedures for risk situations, methods and tools for risk management, and to formulate new requirements for personnel competence.

The problems of risk management in enterprises implementing a modernization strategy based on innovative development have a pronounced systemic character. Sustainable development of the enterprise in the new economy can be achieved through the creation of adequate risk management systems, coordinated within the framework of strategic management systems in the conditions of innovative development, through the use of more advanced risk insurance mechanisms and government regulation.

To ensure efficient modernization of enterprises in the conditions of their innovative development, against an unfavorable background of the crisis and changing risk situations in the world, an adequate risk management system is needed that focuses on enterprise risk management not only at the micro level, but also at the meso and macro levels.

An significant role in solving this problem can be played by expanding the possibilities of insurance of innovative risks (on the basis of expanding the borders of tolerance), which is aimed both at strengthening the internal attitude of enterprises to transferring risks and at the state support policy for innovative development.

It is proposed to single out the least manageable risk elements of the enterprise (risks corresponding to the meso- and macrolevels), concentrating state support on them, and to direct the efforts of the insurance business to form insurance coverage to micro-level risks and, in part, meso-level risks.

The study of theoretical and methodological problems of risk management in the conditions of

domestic enterprises revealed the shortcomings and prospects of its development:

- the functional nature of domestic risk management is preserved, which is expressed in its support of the concept of acceptable risk and determines its weak compliance with the requirements of managing high innovative risk, which contains not only the possibility of negative manifestations, but the possibility of achieving high positive results based on the introduction of innovations;

- the weak point of risk management of domestic enterprises is the lack of qualified specialists and the presence of a number of systemic problems: 1) lack of structured information; 2) lack of work standards; 3) lack of risk management in order to implement the innovative strategy of the enterprise;

- despite the high risk of innovation processes, the interconnectedness and influence of the processes of formation and implementation of an enterprise's innovation strategy are not systematized and generalized, both with the level of innovation risk and with external and internal conditions, and the most important issues of managing the formation of strategic advantages generally remain outside modern models and concepts;

- the lack of identification and assessment models of high innovative risk based on non-markov processes determines the development of risk management methodology in the direction of widespread use of expert methods using the reflexive approach, fuzzy logic and apparatus of the theory of fuzzy sets;

- for a general assessment of the innovative risk of an enterprise that implements an innovative strategy, a hierarchical approach is proposed and an additive model is developed that includes risk characteristics of the enterprise at the macro, meso and micro levels; In addition to a balanced system of enterprise performance indicators, not only these risk indicators are proposed, but also a risk price indicator that characterizes the ratio of the level of innovative risk and the level of strategic advantages generated by the enterprise as a result of the implementation of the innovation strategy.

Conclusion

In order to develop corporate risk management, implementing an innovative strategy, the following is proposed:

- the implementation of the innovation strategy at the enterprise is inevitably fraught with much higher risks, which is due to the lack of adequate methods for the development and justification of innovative solutions, representative and reliable information, and insufficient training of specialists; this determines the need for a significant increase in the status and competence of the risk management of

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an innovative enterprise to the level of the strategic management subsystem of the enterprise;

- to formalize the possible positive results of the innovative strategy of the enterprise, the concept of managing its strategic advantages, based on the organization of systematic work on the formation of the required quality of enterprise resources, providing the necessary capacity for the introduction and use of innovations, is proposed;

- in the framework of the concept of managing strategic advantages of an enterprise that implements

an innovative strategy, a model for assessing their level has been developed, which provides for the systematic participation of experts in the procedure for assessing strategic advantages of an enterprise, the use of fuzzy-multiple descriptions of the processes under study.

Modern management should manage risk effectively, assessing risk management not as losses and risks, but as the key to the opportunities available to the corporation.

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SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 06 Volume: 86

Published: 18.06.2020 <http://T-Science.org>

QR – Issue



QR – Article



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PROSPECTS OF THE DEVELOPMENT OF PILGRIMAGE TOURISM IN UZBEKISTAN

Abstract: *this article discusses the measures taken for the development of pilgrimage tourism in the country, the work carried out for the development of the industry, the importance of the sphere and its role in public relations.*

Key words: *tourism, pilgrimage tourism, religion, “Halal tourism”, political tourism.*

Language: *English*

Citation: *Azimova, C. (2020). Prospects of the development of pilgrimage tourism in Uzbekistan. ISJ Theoretical & Applied Science, 06 (86), 89-91.*

Soi: <http://s-o-i.org/1.1/TAS-06-86-16> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.06.86.16>

Scopus ASCC: 3300.

Introduction

Tourism is an active form of social dialogue, which promotes the development of mutual understanding between peoples and the establishment of cultural and economic ties, as well as the development of cooperation between states and the improvement of the international situation as a whole.

Ancient tourism in Central Asia is associated with the emergence of the Great Silk Road. In the IX – XI centuries thanks to tourism, the scientific type of travel was created, which expands the knowledge of people, and pilgrimage tourism has developed widely.

Pilgrimage tourism (religious or pilgrim tour) it consists of trips and excursions for religious purposes. A pilgrimage for religious purposes is a historical journey that has its roots in history. The first of these travelers is the medieval believers. This type of travel is based on religious beliefs, interest in their own and other religions.

Uzbekistan is a convenient place for pilgrimage tourism. Many famous scholars of the Islamic world have lived and worked in Uzbekistan. At the same time, there are many historical monuments in the country that are also sacred to believers of other religions. It is known that religious sites alone are not enough for pilgrimage tourism. In order to attract tourists, there should be a well-organized propaganda work, favorable conditions should be created in relation to the visa regime, airports, transport and

communication systems, public catering, as well as religious rites in hotels.

In this regard, in the “Halal Tourism” rating compiled by the Crescent Rating organization (Singapore) in 2017, Uzbekistan took 28th place among 130 countries with 54.1 points [1.34]. In the ranking, Uzbekistan is highly rated in such areas as “safe tourism” (84 points out of 100), “free access to the church” (80), “opportunities and guarantees of food” (70). However, in such areas as “visa” (49.9), “conditions at the airports” (48.3), “family vacations” (44.4), “living conditions” (33.2), “conditions for Muslims” (25), “arrival of tourists” (21.3) and “conditions of communication” (19), the country took middle and low positions.

In 2018, attention was focused on improving the areas that were rated as low in the rating, as well as on the development of the sphere itself. The state Committee for tourism development in cooperation with Crescent Rating has developed proposals and recommendations for the development of pilgrimage tourism in the country. On their basis, the necessary conditions were created for performing religious prayers at international airports. In addition, a map of public catering places, national canteens, restaurants, and places for family visits is being prepared to meet the requirements of travel agencies and guests from a number of countries, such as Indonesia and Malaysia.

Religious and pilgrimage tourism, that is, visiting Holy places, consists of two main types,

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namely pilgrimage and religious tourism aimed at educational travel. In this sense, the potential of our country in this sphere of tourism is very high. On the initiative of President Shavkat Mirziyoyev, the first international forum of pilgrimage tourism was held in Bukhara and Samarkand on February 21-23, 2019.

As part of this international pilgrimage tourism, the Bukhara Declaration “On the Recognition of Uzbekistan as One of the Pilgrimage Tourism Centers” was signed, as well as a number of Memorandums within the framework of the “National PR Center” under the State Committee for Tourism and the “Global Muslim Traveler Index” between MATTA associations (Malaysia), “Crescent Rating” (Singapore), Jakarta Propaganda Fund (Indonesia). In 2020, an Islamic organization recognized Bukhara as the capital of Islamic culture.

It should be noted that tourism in Uzbekistan is mainly limited to ancient cities, historical and cultural monuments. However, the unique nature of our country, nature reserves, and mountain areas have great potential for tourism development. In particular, the development of medical, pilgrim tourism and ecotourism will give a great impetus to the development of not only the economy, but also social sectors. In this regard, the Cabinet of Ministers was instructed to develop and ensure the implementation of the National Tourism Development Concept for 2019-2025.

Today, tourism plays an active role in the daily lives of millions of people. For some members of the community organizes labor activities, and for others, social leisure activities and, as a result, contributes to the economic and social development of people's lifestyle.

The main purpose of tourism is recreation, entertainment, hospitality, sports, pilgrimage, business and others. It should be noted that the employment rate in this area is growing several times faster than in other sectors. According to the International Labor Organization, about 200 million people, or about 8% of the total number of people employed in the world, currently work in this area. According to the World Tourism Organization, the number of tourists is growing at 4-5% per year. This sector accounts for 10% of the world gross domestic product (GDP) [2].

The development of tourism is also associated with the emergence of various new tourist destinations. As a feature that allows us to classify tourism in our country, we can use the following motives that encourage people to travel:

- cultural tourism (tourism and pilgrimage).
- public tourism (club tourism, friends, acquaintances, relatives).
- sports tourism (trips for active or passive participation in sports competitions).
- economic tourism (travel from professional and business interests).

- political tourism (participation in congresses, political events, etc.).

As the main tourist destination for tourists in the Central Asian region, Uzbekistan has regional and strategic potential for the development of international and domestic tourism in the future. Uzbekistan is a favorable country for travel and pilgrimage. Because our ancestors, whom the whole world knows, have forever remained in our homeland. In the international arena, there is great interest in the rich spiritual and cultural heritage left by them. For further development of the industry, first of all, it is necessary to improve the necessary infrastructure. The first is transport and the second is logistics [3], – said the President sh. Mirziyoyev.

Indeed, the rich natural conditions and resource capabilities, availability of labor resources, political stability, and the available international airlines, as well as a communications network and communications create opportunities for developing all types of tourism.

Special attention is paid to the development of tourism in Uzbekistan, a number of benefits are provided to representatives of the tourism business, along with the creation of favorable conditions for the entry of foreign tourists to our country. For many years, strict control of the visa regime based on a closed policy has been one of the main reasons for the low flow of tourists to the country. In this regard, at the initiative of the President of our country, special attention was paid to significant changes in the system for obtaining entry visas for foreign citizens. In addition, taking into account the country's potential for pilgrimage tourism, in order to create the necessary conditions for pilgrims, a department for the support of pilgrimage tourism was created under the Committee on Religious Affairs.

By a decree of the President of the Republic of Uzbekistan dated January 5, 2019, a visa-free regime was introduced for an additional 45 countries from February 1, 2019, an increase in the number of countries where electronic visas are issued up to 76 was envisaged from March 15. As a result of the introduction of a visa-free regime for citizens of 86 countries and a simplified the visa regime for citizens of 57 countries last year was visited by 6.7 million foreign tourists. This is 4.7 million or 3.3 times more than in 2016 [4].

In order to develop pilgrimage tourism, active work is being carried out with representatives of the religious leaders of India, Pakistan, Indonesia, Malaysia, Kuwait and other Muslim countries, and visits of these citizens to Uzbekistan are being organized. It also contributes to a sharp increase in the number of tourists visiting our country.

Currently, a number of measures are being taken in Uzbekistan to promote the sustainable development of tourism, the efficient use of tourist facilities, improve the quality of services provided, and increase

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the flow of tourists visiting the country. The ultimate goal of these large-scale reforms is to further develop the country's economy, increase the well-being of our people, promote the existing tourism potential of our

country, especially in the field of pilgrimage, eco-tourism, and make our country one of the most developed countries in the field of tourism.

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Contents

	p.
1. Kurpayanidi, K. I. To issues of development of entrepreneurship in the regions: theory and practice of Uzbekistan (on the materials of Andizhan region).	1-10
2. Akhmedova, M. E., & Mirsaidova, M. K. Regional and international study of Abdullah Avloni, representative of the Uzbek movement jadid.	11-15
3. Sayfiddinov, S., Akhmadiyrov, U. S., Razzokov, N. S., & Akhmedov, P. S. Optimization of modeling while increasing energy efficiency of building structures of public buildings.	16-19
4. Shadmanova, U. A., & Azimdjanova, M. T. Formation of information system in corporate governance.	20-27
5. Shokirova, K. N. The issue of speech act in pragmatics.	28-32
6. Mirkhaydarova, G. S., & Sodikova, G. S. Agrochemical properties of eroded mountain soils and ways to restore these properties.	33-38
7. Sattorova, E. A. Gender-polite euphemisms of the linguistic and cultural concept «woman» in comparison of Russian and Uzbek languages.	39-42
8. Abubakirov, A., Baymuratov, I., Ismandiyarov, A., Otemisov, A., & Uteniyazov, K. Study of statistical description of sensors for the conversion of multiphase currents of reactive power sources in electricity supply systems.	43-47
9. Abubakirov, A., Baymuratov, I., Ismandiyarov, A., Uteniyazov, K., & Yuldoshov, T. Review of dynamic characteristics of secondary current sensors of reactive power sources.	48-53
10. Shatov, I. A. Modern methods of teaching Russian.	54-59
11. Esebaev, M. Motif of divine miraculous birth in Karakalpak folk epos and their historical roots.	60-65
12. Saidalieva, M., & Hidirova, M. On solving biological problem based on functional-differential equations of delay type with discrete experimental data.	66-70
13. Khramchankova, V. M. In vitro study of the photoprotective properties of compositions containing lichen extracts and castor oil.	71-77
14. Nazirov, B. S. Master who devoted his life to sports.	78-82
15. Maxmudova, N. J. Theoretical foundations of risk management in large corporate structures.	83-88

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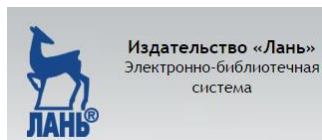
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Signed in print: 30.06.2020. Size 60x84 $\frac{1}{8}$

«Theoretical & Applied Science» (USA, Sweden, KZ)
Scientific publication, p.sh. 49.375. Edition of 90 copies.
<http://T-Science.org> E-mail: T-Science@mail.ru

Printed «Theoretical & Applied Science»