Teoretičeskaâ i prikladnaâ nauka

Theoretical & Applied Science

Generalization of scientific results

Philadelphia, USA
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

Editor-in Chief:
Alexandr Shevtsov

Editorial Board:
Prof. Vladimir Kestelman USA h Index RISC = 1 (65)
Prof. Arne Jönsson Sweden h Index Scopus = 3 (38)
Prof. Sagat Zhunisbekov KZ h Index Scopus = 4 (21)
Assistant Prof. Boselin Prabhu India -
Lecturer Denis Chemezov Russia h Index RISC = 2 (61)
Senior specialist Elnur Hasanov Azerbaijan h Index Scopus = 2 (6)
Associate Prof. Christo Ananth India h Index Scopus = - (1)

ISSN 2308-4944

© Collective of Authors
© «Theoretical & Applied Science»
International Scientific Journal
Theoretical & Applied Science

Materials of the International Scientific Practical Conference

Generalization of scientific results

December 30, 2017
Philadelphia, USA

The scientific Journal is published monthly 30 number, according to the results of scientific and practical conferences held in different countries and cities.

Each conference, the scientific journal, with articles in the shortest time (for 1 day) is placed on the Internet site: http://T-Science.org

Each participant of the scientific conference will receive your own copy of a scientific journal to published reports, as well as the certificate of the participant of conference

The information in the journal can be used by scientists, graduate students and students in research, teaching and practical work.
ISPC Generalization of scientific results, Philadelphia, USA

Impact Factor ICV  = 6.630
Impact Factor ISI  = 0.829
based on International Citation Report (ICR)

The percentage of rejected articles:

38% Accepted  62% Rejected

ISSN 2308-4944
SECTION 25. Technologies of materials for the light and textile industry.

**Requirements for Manufacturing of a Speedometer Scale of a Car**

*Abstract:* Method of printing of a speedometer scale of a car on the automatic lines "SAKURAI" and "THIEME" is presented in the article. Printing on the automatic lines allows with high accuracy to manufacture scales using high-quality paints, solvents and a polycarbonate film of the company "BAYER".

**Key words:** a scale, paint, printing. Language: English

**Citation:** Chemezov D (2017) REQUIREMENTS FOR MANUFACTURING OF A SPEEDOMETER SCALE OF A CAR. ISJ Theoretical & Applied Science, 12 (56): 1-4.

**Soi:** http://s-o-i.org/1.1/TAS-12-56-1 **Doi:** (crossref) https://dx.doi.org/10.15863/TAS.2017.12.56.1

**Introduction**

A mass paint production is economically advantageous in manufacturing of significant number of parts. In the composition of a paint shop (or a shop of paint coatings) are included production areas, where there are performed processes of surface preparation, priming, primary and final painting, a technological group, production and dispatch bureau, a shop laboratory, departments for preparation and distribution of paints, warehouses for storage of paint materials and a repair shop, planning and economic bureau.

The functions of the department and laboratory of paint coatings are included verification of incoming on a plant varnishes, paints, enamels and auxiliary materials, replacement if it is necessary some materials by others, development and implementation of the paint materials and new technological processes, control after painting processes and participation in designing or reconstruction of painting areas and etc. Directly, painting departments and areas serve the shop laboratories, in whose the function it is usually included systematic control and verification of production. With any method of applying coating it is verified purity of source working paint compositions (absence of any pollutions and impurities), their viscosity and the correctness configuration of products on suspensions of a conveyor. When painting by jet spraying, except for viscosity, it is verified temperature and degree of acidity of the working compositions, concentration of solvent vapors in a steam tunnel, spraying time and exposure time in vapors. When painting by electrodeposition it is verified dry residue, temperature and degree of acidity of the working compositions, presence of organic solvents, voltage, amperage and etc. In the department for preparation of paints, materials diluted to necessary viscosity for applying them on a surface one way or another method. The warehouses for storage of the paint materials are located in separate heated rooms which must be equipped with ventilation devices and fire-extinguishing means. Air temperature in these warehouses must be from 17 to 25 °C which allows to preserve good quality of the materials.

Let us consider printing method and requirements for manufacturing of a speedometer scale for cars "KamAZ" [1].

**Materials and methods**

The scale 87.3802.201 installs on the speedometer 87.3802. The speedometer is designed for inform of a driver about a vehicle speed, distance traveled (total and daily kilometrage), display and adjustment of current time, an alarm about exceeding of speed limit, display of a ratio of a showing device traveled (total and daily kilometrage), display and adjustment of current time, an alarm about exceeding of speed limit, display of a ratio of a showing device.
Impact Factor:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>PHHII (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>IBI (India)</td>
<td>4.260</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
</tbody>
</table>

"KrAZ". Drawing of the scale 87.3802.201 is presented in Fig. 1.

Mass of the scale is 2.8 g. Material is the polycarbonate film, optical, based on biphenol A "MAKROFOL DE 6-2 0.375 mm" (company "BAYER", Germany) [3]. The film has high heat resistance, excellent dimensional stability, easy exposed by machining: cutting, punching, stamping that identifies it for use in electronics and instrument engineering.

The technical requirements for manufacturing of the scale:
1. *The size for references.
2. **Unspecified limit deviations of dimensions ±0.5 mm to provide by a tool.
3. Limit deviations of dimensions of letters, marks and numerals ±0.05 mm to provide by the tool.
4. Unspecified limit deviations of dimensions at a location of the marks, numerals and inscriptions ±0.1 mm to provide by the tool.
5. General tolerances according to GOST 30893.1-2002 [4]: H12, h12, ±IT12/2.
6. General tolerances of angular dimensions according to GOST 30893.1-2002 – m.
7. Trade mark N2.5 3802226 DT.

Figure 1 – Drawing of the scale 87.3802.201: A – operating mode "day", B – operating mode "night", C – rear view, D – reference designation of coating color.
8. Graphical construction of the symbol A to perform in accordance with OST 37.001.012-85, coefficient is 0.87.

9. Numerals of the marks of the speedometer to perform by basic uppercase font 6 GOST 2930-62 [5], the inscription "km/h" – letters – lowercase font 4 GOST 2930-62, the mathematical sign 4 GOST 2930-62.

10. The front surface of the scale is matte.

11. Coating of surfaces of the speedometer scale to see in Fig. 1. Coating class is IV. The group of operating conditions is T2.

12. White transparent paint (retouch) applies:
   a) in one layer under the numbers 40, 80, as well as under the marks, appropriate 25, 30, 35, 40, 80, 85, 90, 95, 125 km/h;
   b) in three layers under the numbers 0, 20, 100, 120, as well as under the marks, appropriate 0, 5, 10, 15, 20, 100, 105, 110, 115, 120 km/h.

13. Work of the scale of dual mode: "day" and "night".

14. Medium brightness of irradiance according to OST 37.003.061-84 (allowed according to a control sample).

15. Glue is applied to the reverse surface of the scale except in areas Б and also places under the inscriptions, marks at a distance of 1...2 mm from a corresponding contour. Glue is colorless with absorption coefficient not more than 10% and temperature range of operation from -60 to +100 °C.

16. For manufacturing of masks of the scale to use a file of this drawing.

17. Appearance by the control sample.

18. Alternate material: the polycarbonate film, optical "LEXAN 8B 35E 0.375 mm" (Netherlands).

  Printing of the scale is performed from both sides (transparent polished/finely matted).

  The technological process of manufacturing of the scale 87.4802.201:

  1. Stencil printing of the scale on the automatic line "SAKURAI" (Japan) or "THIEME" (Germany) [6]. The size of the film is 0.375×320×470 mm or 0.328×450×470 mm. Weight of the one sheet is 65 g.
  Time standard: 559 minutes on 1000 parts;
  2. Punching of basic holes on a punch press.
  Time standard: 192 minutes on 1000 parts;
  3. Glue application (for further fixation on a lightguide).
  Time standard: 480 minutes on 1000 parts;
  4. Cutting of sheets to the necessary size for subsequent die-cutting of the scale.
  Time standard: 94 minutes on 1000 parts;
  5. Die-cutting of the scale on the hydraulic press of the company "SCHOEN" (Germany). Output is 4 pieces in one stroke of the press. For die-cutting it is used a cutting die, a control template and guide retainers.
  Time standard: 313 minutes on 1000 parts;
  6. Control of appearance and on "gap".
  Time standard: 155 minutes on 1000 parts;
  7. Counting and packaging of the product.
  Time standard: 107 minutes on 1000 parts.

Information about composition of paints applied to the scale and printing modes is presented in the tables 1 and 2.

### Table 1

**Colors and composition of paints.**

<table>
<thead>
<tr>
<th>№</th>
<th>Color</th>
<th>Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Light green &quot;illumination&quot;, No. 5529</td>
<td>SR064 (green, 1 g)</td>
</tr>
<tr>
<td>2</td>
<td>Black &quot;retouch&quot;, No. 5533</td>
<td>SR073 (black)</td>
</tr>
<tr>
<td>3</td>
<td>White &quot;retouch&quot;, No. 5542, one layer</td>
<td>SR070 (white)</td>
</tr>
<tr>
<td>4</td>
<td>White &quot;retouch&quot;, No. 5543, two layers</td>
<td>SR070 (white)</td>
</tr>
<tr>
<td>5</td>
<td>Dark varnish, No. 5530</td>
<td>SR2408873</td>
</tr>
<tr>
<td>6</td>
<td>White &quot;substrate&quot;, No. 5528</td>
<td>SR070 (white)</td>
</tr>
<tr>
<td>7</td>
<td>Black &quot;finish&quot;, No. 5540, two layers</td>
<td>SR073 (black)</td>
</tr>
<tr>
<td>8</td>
<td>Matte varnish, No. 5534, sieve 120</td>
<td>SR35998910</td>
</tr>
<tr>
<td>9</td>
<td>Matte varnish, No. 5534</td>
<td>SR35998910 (70%) + SR46698910 (30%)</td>
</tr>
</tbody>
</table>

### Table 2

**Printing modes of the scale.**

<table>
<thead>
<tr>
<th>№</th>
<th>Flow rate, mm/s</th>
<th>Squeegee rate, mm/s</th>
<th>Capture rate, mm/s</th>
<th>Productivity, imprint/h</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>250-300</td>
<td>250</td>
<td>250-300</td>
<td>652-684</td>
</tr>
<tr>
<td>2</td>
<td>300</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>200-300</td>
<td>250</td>
<td>250-300</td>
<td>624-684</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Impact Factor:

<table>
<thead>
<tr>
<th>Country</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>PII (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>IBP (India)</td>
<td>4.260</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>250-300</td>
<td>300</td>
<td>300-400</td>
<td>200-300</td>
</tr>
</tbody>
</table>

Note to the tables.
No. 1...4 – printing with the matte reverse side, wiping of the stencil through 100-120 sheets.
No. 5...9 – printing with the front (glossy) side, wiping of the stencil through 50-80 sheets.

For stencil printing there are used paints from the company "MARABU" (Germany) [7] and glue No. 5544.

For the module of stencil printing "MF-80" of the automatic line "SAKURAI" to set the squeegee pressure from 3 to 4 atm. On the remote control to set: rate of the filler squeegee is 5 units, rate of the printing squeegee is 3 units [8].

During operation it is necessary continuously to control quality of printing and on "gap" before and after drying of printed on the sheet of images. Drying temperature must be 100 °C. On the line of stencil printing temperature in the curing module must be 90±5 °C, temperature in the cooling module must be 15±5 °C. The parameters within specified limits are maintained automatically.

To avoid of sticking not to accumulate large number of the sheet on a palletizer (to remove and put small stacks by 40-50 sheets).

Conclusion
The technological process of manufacturing of the speedometer scale of the car in production conditions includes the mechanical, paint and control operations. According to the printing modes for the same operation it was determined processing productivity of the speedometer scale. A sequence of applying of different colors paints on surfaces of the speedometer scale was given.

References:

TRADITIONAL PROTOTYPES TECHNOLOGY LACE

Abstract: Innovative developments in the textile industry always have an underlying cause in the form of authentic prototypes, which represent the conventional technology. This base element defines the development of innovative solutions in the field of technological and engineering developments. As a result, and the necessity of saving the national craft technologies that are at the same time and the factor of self-identification of peoples, and the inexhaustible source of innovation.

Key words: authentic technology, tradition, lace, nubby weave, openwork embroidery, macrame, transformation, innovation.

Language: Russian
Citation: Zelenova JI, Belgorodskiy VS (2017) TRADITIONAL PROTOTYPES TECHNOLOGY LACE. ISJ Theoretical & Applied Science, 12 (56): 5-9.
Soi: http://s-o-i.org/1.1/TAS-12-56-2 DOI: https://dx.doi.org/10.15863/TAS.2017.12.56.2

TRADITIONAL PROTOTYPES TECHNOLOGY LACE

Introduction
В современном мире текстильная промышленность ориентирована на использование технологических инноваций в системе производства, что позволяет улучшить динамику экономического роста и конкурентоспособность. Сам термин «инновация», введенный в 1930-х гг. австрийским ученым Шумпетером, в данном контексте подразумевает внедрение нововведение, включающее новые технологические продукты и новые процессы их производства [1]. Новые промышленные разработки широко применяются в коллекциях сегмента прет-а-порте.

Параллельно с интенсификацией производства прет-а-порте, такие ведущие модные бренды, как Шанель, Диор, Александр Маккуин, Оскар де ла Рента и др. продолжают развивать сегмент от кутюр, в котором используют и традиционные ручные технологии, способствующие обогащению образного восприятия костюмов, повышению их моральной ценности для потребителя.

Materials and Methods
Визуальное сходство в коллекциях различных по исполнению ручных техник с кружевом указывает на их единое происхождение. Еще с первобытных времен развивалось два основных вида технологий: узелковое плетение и вышивка, предваряющих появление утонченного искусства кружевоплетения в Италии в XV веке [2, с. 96]. На протяжении нескольких столетий эти виды ремесленных технологий, совместно с кружевоплетением, продолжают развиваться, не
теряя актуальности применения как в костюме, так и в интерьере.

Техника узелкового плетения «макраме» (от арабск. «миграмах» - тесьма, кружево, от турецк. «макрама» - шарф с бахромой) известна более 4-х тысяч лет. В культурах Китая, Японии и индейцев Северной Америки эта техника появилась в виде системы узелковой письменности, как способ накопления и передачи информации в поколениях по поколению.

В IX в. до н.э. простейшее узелковое плетение в виде ромбовидной решетки филе (фр. filet — сеточка) использовалось для плетения рыболовных и охотничьих сетей. С развитием мореплавания вязание сложных морских узлов было абсолютной необходимостью для надежного крепления тросов корабля. Некоторые виды морских узлов и стали прообразами для плетения макраме.

В XVII—XVIII веках макраме обрело большую популярность в Англии и Северной Европе в качестве декора интерьера. Этот досуг считался увлечением знатных дам и королевских особ. Мария Медичи, королева Франции, в 1600 году обучалась искусству макраме в Голландии, а Шарлотта Мекленбург-Стрелицкая, жена британского короля Георга III, своими руками выпила кайму для декорирования изгороди во внутреннем королевском дворике.

Французский термин «макраме» (macramé) был закреплен в истории рукоделия, благодаря созданию энциклопедии «Полный курс женских рукоделий» (1884 г.) Терезой Дильмон. Вся вторая половина XIX века ознаменована повсеместным увлечением техникой плетения макраме наряду с кружевоплетением, которая является синтезом «филе» и «морских узлов». Ее особенностью является использование грубых плотно скрученных нитей без дополнительных инструментов.

В настоящее время известные модные бренды, используя технику макраме, демонстрируют на подиумах множество моделей костюмов и в стиле «фолк» (фольклорный) — Марк Фаст (рис. 1 а), Гуччи, и в стиле «футуризм» — Элеанор Аморосо (рис. 1 б), Мартин Марджела, Кирилл Минцев.

Одним из первых утонченных видов декора костюма является вышивка. В качестве отделки одежды высших сословий вышивка использовалась еще в Древнем Египте, Древней Греции и Риме, что подтверждают археологические находки: вышитые куски древнеегипетской материи (С.-Пб. Эрмитаж) и статуя Дианы из города Портичи (Италия), цветная роспись одежды которой напоминает вышивку [3].

Парадные одежды русских князей, бояр и духовенства богато расшивались золото-серебряной канителью по византийской моде. Вышивка льняных крестьянских рубах, преимущественно красной нитью, по вороту и краям рукавов приобретала магическую функцию защиты от порчи и «дурного глаза». Иглы для вышивания в этот временной период, до усовершенствования ковки в XV веке, и

ISPC Generalization of scientific results, Philadelphia, USA
натуральные нити были достаточно грубые, поэтому вышивка имела плотную структуру.

Ажурное шитье по полотну, напрямую предшествующее кружеву, является разновидностью вышивки [4, с. 45]. Традиционно это шитье белыми нитями с продергиванием нитей основы или утка ткани (остаются ажурные ровные линии) [5, с. 490]. Такой вид шитья используется для декорирования льняных полотен, сотканых из толстых нитей еще со времен европейского Средневековья.

У славянских народов шитье с продергиванием нитей полотна называется «прошва» или «мережка» (рис. 2). Оно имело большую популярность у крестьян в отделке льняных рубах, постельного и столового белья.

Вышивка «мережка» развивалась во всем мире наравне с другими видами рукоделия, как замена дорогостоящему кружеву. Но в первой половине XX века из-за затяжных войн были утрачены многие рукотворные ремесла.

Начиная со второй половины ХХ века и до настоящего времени изысканность ажурного шитья способствует привлечению художников к этому виду искусства и его совершенствованию.

Рассмотренные в статье виды декорирования костюма и предметов быта предопределяют и способствуют появлению еще одного нового более сложного вида декоративно-прикладного искусства — кружевоплетения. На рис. 3 представлена трансформация традиционных технологий во времени, от которых берут начало две основных технологии кружевоплетения. В конечном итоге от вышивки зародилось игольное кружево «punto in aria» (с итал. стежок в воздух) [6, с. 22], а от техники узелкового плетения — заключенное плетеное кружево. Благодаря развитию данного ремесла в различных европейских странах (Италия, Франция, Испания, Англия, Бельгия, Австрия, Германия, Голландия) и России, кружево на данный момент насчитывает более 10 разновидностей по технике исполнения (ирландское, вязанное крючком, фриволите и пр.), многие из которых получили свое название от кружевных городов-мануфактур, принесших в его ажурный орнамент свою культурную самобытность: алансонские кружева (Франция, Алансон), брюггские кружева (Бельгия, Брюгге), вологодские кружева (Россия, Вологда), елецкие кружева (Россия, Елец) и др [7, с.96].
<table>
<thead>
<tr>
<th>Country</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>IBI (India)</td>
<td>4.260</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
</tbody>
</table>

**Autehtнические технологии**

- Узелковое плетение
- Плетение «филе»
- Плетение «морских узлов»
- Макраме
- Коклюшечное кружево
- Вышивка
- Ажурное шитье по полотну («мережка»)
- Узорное обшивание края изделия
- Игольное кружево

**Рисунок 3 - Трансформация традиционных технологий декорирования.**

Имея эстетическую особенность, способствующую обогащению образно-стилевого решения костюма, кружево и его подлинные прототипы приобрели необыкновенную популярность не только в Евразии, но и во всем мире. К примеру, существует бразильское кружево «соль» (солнечное кружево или Тенерифе, рис. 4) и мексиканское кружево (макраме), которое укоренилось в этих странах вследствие проникновения кружева и плетения макраме из Европы во время морских экспедиций.

**Рисунок 4 - Кружево Тенерифе (страна происхождения — Испания)**
Кружево является самой тонкой синтетической технологией плетения и шитья. Распространившись по всему миру в качестве отделки одежды и жилого пространства, оно обрело статус всемирного достояния, благодаря бережному сохранению традиционных технологий и их совершенствованию, а также совершенствованию художественного уровня изделий, выполненных с помощью данных технологий. Классическое кружево — это плоскостной вариант существования ниточного переплетения, зародившееся от объемного плетения и вышивки — из многомерного наложения нитей и объемных узлов и грубых плетений в самый тонкий слой ажурного полотна [8, с.123]. От простого декора — к символизму и знаковости в костюме [9, с. 94], где кружево является первым определяющим элементом хорошего вкуса и аристократического статуса.

**Conclusion**

Традиции являются основополагающим фундаментом для развития технологий и разработки инноваций. К примеру, кружево послужило прототипом для первых печатных структур при помощи 3D-принтера. Таким образом, без учета традиционных технологий и их сохранения развитие инноваций станет нецелесообразно, так как инновации и создаются как способ улучшения эстетических характеристик изделий, создаваемых с помощью аутентичных технологий, и как способ интенсификации данного производства. Ежи Шацкий в своей книге «Утопия и традиция» отмечал такую особенность диалектизма традиций и инноваций: «Традиция живет только обновляясь, а у новации нет другого способа выжить, как доказать свою органичность, укорененность в культуре и добиться статуса традиции, выработать механизм взаимной адаптации традиции в конкретном месте и времени» [10].

**References:**

2. Lorentsa NF (1898) Ornament vseh vremen I stiley. 100 tablic s objasnitelnym tekstom. Spb. Izdanie AF.
Archeology.

ABOUT RESEARCH OF SOME MAIN EARLY MIDDLE AGES CHRISTIAN MONUMENTS OF AZERBAIJAN (BASED ON MATERIALS OF GARABAKH TERRITORY)

Abstract: Based on the materials of different monuments in Azerbaijan for the early middle ages have been investigated some basic Christian architectural samples. In the territory of Garabakh are archaeological monuments of different types of the early middle ages and many Albanian Christian monuments on the surfaces, is one of the centers of ancient civilization of Azerbaijan. On all the historical evidence, the Albanian Christian monuments, belongs to the national cultural heritage of our people.

Key words: Azerbaijan, medieval settlements, Christian monuments of architecture, archeology.

Language: English

Citation: Gahramanova ZN (2017) ABOUT RESEARCH OF SOME MAIN EARLY MIDDLE AGES CHRISTIAN MONUMENTS OF AZERBAIJAN (BASED ON MATERIALS OF GARABAKH TERRITORY). ISJ Theoretical & Applied Science, 12 (56): 10-12.

Soi: http://s-o-i.org/1.1/TAS-12-56-3  Doi: https://dx.doi.org/10.15863/TAS.2017.12.56.3

Introduction

Orthodox monuments in Garabakh have been investigated in the ground. This type of construction of the monument started in the early Middle Ages, the Middle Ages continued.

Orthodox began to Albania, Syria and Palestine. Therefore, from the outset, as in other countries of the South Caucasus, Albania religious language, the language of orthodox worship were Syrian and Greek languages. Religious literature has been translated into Albanian language, for the first time in Syria. It is clear from the information given by Moses Kalankatly, yet very ancient times, Albania, Syria and Palestine, with individual states keeping in touch. [1, 138]

Stone church built of hewn stone head on the roof of the four-columned grow Raton. XIII-XIV centuries, the Albanian church in the worship hall and a large square-shaped rooms in cylindrical columns, arches completed. Monastery complex renovation and construction work was carried out repeatedly. [8, 191].

Cross the river on the left bank of the mountain village of Agdam region Vangli Gandzasar monastery erected in the famous monuments of Caucasian Albania is one of the most prominent Church architecture. Epigraphic inscriptions on the stone wall of the monastery, it becomes clear that this monument, "the ruler of the land of Artsakh up high and wide, ruler of the region, the grandson of Hassan, son of Vakhtang, Hasan Celal and her mother by the state was built in 1216-1238.

"Catholicos of Albania in the early eighth century, the terrain - mountainous part of Karabakh principality, ruled sense "Artsakh" or "Artsakh" was called. It is not accidental that came to power in Albania in the middle of the first century descendants of Tsar Vachagan Arshakids dynasty of kings "Artsakh" state Mehranids dynasty was in power at the beginning of the sixth century to the eighth century Artsakh "aranaskh" called.

Mongol-Tatar invaders in 1261 in Iran, who was killed by his son, Prince Hasan Celal Dovlani Gandsazar to Atabay was buried in the monastery. Since 1511 the monastery until 1836, Albanian church until terminated by the decision of the Russian Sinod diophisite official residence of Albanian Church have been.

Hassan Jalal, a descendant of the Albanian religious figures, many of which were buried in the monastery complex. Gandzasar complex surrounded by high walls Albanian church was built in the style of architecture, the building adjacent to the
monastery rising rotunda four sloping roof and walls built into the side of the building included.

Khachshakilli head of the church dome composition, drum and dome rising above the 16-cornered pyramid-shaped stone dome cover of an umbrella in the last residence of the grandeur and beauty of Albanian believers. Unlike the north and south facades of the east and west facades of architectural solution, is almost the same. Each of them is decorated with five arches, the middle arch of the highest-profile cross has been completed. The church was consecrated in the upper parts of arches decorated with bas-reliefs of heads of cattle and sheep.

Monastery complex architectural planning and solution composition, sculpture and elements of diophisite nature of the architecture of the monuments of Caucasian Albania confirms that the centuries-old traditions. Alban temple, which was the residence of orthodox for a long time in terms of religion Ganjasar called Treasure.

Materials and Methods

The main ideology of the fourth century feudal Garabakh as orthodox became the state religion. During this period, the unit adopted orthodox as a religion, the religion of ancient ruins on the one hand, on the other hand struggled against zoroastrianism propelled by the Persians. But the split within the orthodox religion and its various sects formed (Monophysite, diophisite, Nestorian) was created.

1. Under such circumstances, the Albanian ruler Vachagan III (487-510) Aliun (now Agdam) and 20 close to the matter, a special council makes a decision. [2, 27].

2. After the adoption of orthodox in Albania in the early mid-century historical lands of Azerbaijan in the Karabakh region of IV-VII centuries of orthodox culture, characterizing the type of architecture, architectural constructions - Albanian orthodox monuments were created.

3. After the adoption of orthodox in Albania orthodox burial customs are observed. Orthodox graves dug in the ground, but also in the form of boxes were made of stone. Both types of Caucasian Albania is typical for the type of grave [3, 106].

4. Unlike the Armenians to come to the main population of the region, origin, language and culture for thousands of years by the Aras River in the Caucasus Mountains and the Caucasian language group of Turkish origin, who lived among the ethnic groups, which consisted of. When orthodox was replaced by Islam and orthodox in the territory of Nagorno-Karabakh, which continue to practice indigenous religious ideology using the fact that the Orthodox Albanians, there are many Armenian families moved from the nineteenth century.

5. Scientists who have studied architectural monuments of Caucasian Albania, many characteristics of these monuments and architectural planning styles differ according to the Armenian religious monuments. All the historical evidence of the monuments of the cultural heritage of national concern.

Among those monuments Agoglan monastery in the town of Lachin, Kelbajar, Khudavang monastery, temple complex in Agdam region, the Elysee, Agdam region is Ganjaser.

Agoglan ninth century monastery built and operated for a long time Agoglan river is located in the territory of Lachin region. This magnificent monastery built a solid basalt stone architecture Albanian Orthodox monuments, according to a constructive solution to the sophisticated special place. [7, 181]. Monastery consists of three parts of the interior volume. Keeping open the roof of a tall stone columns built of stone arches are complemented by a cylindrical shape. To illuminate the area within the sanctuary walls are narrow and elongated windows.

Impact Factor:

<table>
<thead>
<tr>
<th>ISRA (India)</th>
<th>SIS (USA)</th>
<th>ICV (Poland)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.344</td>
<td>0.912</td>
<td>6.630</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>PHHII (Russia)</td>
<td>PIF (India)</td>
</tr>
<tr>
<td>0.829</td>
<td>0.207</td>
<td>1.940</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>ESJI (KZ)</td>
<td>IBI (India)</td>
</tr>
<tr>
<td>0.564</td>
<td>4.102</td>
<td>4.260</td>
</tr>
<tr>
<td>JIF</td>
<td>SJIF (Morocco)</td>
<td></td>
</tr>
<tr>
<td>1.500</td>
<td>2.031</td>
<td></td>
</tr>
</tbody>
</table>

Conclusion

The territory of the Kelbajar region, located on the left bank Tartar, or Khudavang Khotaveng across the nation, the “temple of God”, a century after the collapse of the so-called state of Caucasian Albania monastery in the mountainous part of Garabakh in the ninth century religious cross has been the center of the Albanian principality. Albanian bishop's residence and religious and educational center operated. It is clear from the results of archaeological research; the monastery was founded in VI-VII centuries.

Prince Hassan Jalal, the son of the dynasty Mehranies Cross Vakhtang construction work carried out in the territory of the complex, Arzu Khatun and her two sons in 1214 in memory of her husband Vakhtang church was built in the complex.

On the stone facade of the church of Prince Vakhtang east, south facade of the two sons of the desired khatun engraved images. Alban church was built by the Prince of neighboring nations, according to the architectural characteristics of the different churches. [7, 196].

This monument is located in the Khojavand region of the Albanian church. IV century monastery complex Amaras are many sources, Amaras restored by princes of the Church of the Cross in the ninth century, has been reconstructed in the XIII century, has become a monastic complex. The church is rectangular in plan structure built of neatly cut white stones.

Stones on the roof of a six-column rises Raton. And four circular towers in a rectangular courtyard that surrounds the monastery walls were built of rough-hewn stones.

The walls of the fortress was built in the courtyard adjacent to the residential and commercial...
Impact Factor:

<table>
<thead>
<tr>
<th>Metric</th>
<th>ISRA (India)</th>
<th>SIS (USA)</th>
<th>ICV (Poland)</th>
<th>JIF</th>
<th>ESJI (KZ)</th>
<th>SIS (USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.344</td>
<td>0.912</td>
<td>6.630</td>
<td>1.500</td>
<td>4.102</td>
<td>2.031</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
<td>RRIV (Russia)</td>
<td>0.207</td>
<td>PIF (India)</td>
<td>0.912</td>
<td>PI F (India)</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
<td>ESJI (KZ)</td>
<td>4.102</td>
<td>ICV (Poland)</td>
<td>6.630</td>
<td>4.260</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
<td>SJIF (Morocco)</td>
<td>2.031</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

premises. The narrow window above the entrance of the church facade, made of a cross on it and a large bas-relief.

Yelisey who made great contributions to the memory of the apostolic spreading of church over the centuries, many temples have been built in the country. One of the adults in these days to come, the Nagorno-Karabakh region of Agdam Elysee monastery complex. 2000 meters above sea level, surrounded by high walls built on top of a mountain, the monastery complex was founded in the fifth century. Cross the extensive construction work was carried out in the principality, the head of the church, six small church, built several houses and farm buildings.

References:


BOTANICAL STUDY AND EVALUATION OF THE IN VITRO ANTIBACTERIAL ACTIVITY OF 70% ETHANOLIC EXTRACT OF PIPTADENIASTRUM AFRICANUM HOOK (FABACEAE) ON STAPHYLOCOCCUS AUREUS ISOLATED FROM URINE

Abstract: Objective: To know the antimicrobial medicinal plants of the Haut-Sassandra region (in the west center of Côte d’Ivoire) and to evaluate the antibacterial activity of the most requested species. Methods and results: An ethnobotanical survey conducted in the Haut-Sassandra Region using questionnaires allowed to gather information on the therapeutic uses of antimicrobial plants in the Region. It allowed to make a list of 58 species of plants. The taxon Piptadeniastrum africanum Hook (Fabaceae) is most in demand. The method of double dilution in the liquid and solid medium was used for the evaluation of the antibacterial activity of the extracts of the stem bark of this plant. In the liquid and solid medium used for the evaluation of the antibacterial activity of the extracts of the stem bark of this plant. The MBC / MIC ratio ranges from 1 to 2.25 mg / mL. The ethanolic extract (EE70 %) of the stem bark possesses bactericidal activity on all the tested strains of Staphylococcus aureus.

Conclusion: These results reveal that the Haut-Sassandra Region contains interesting antibacterial plants.

Key words: ethnobotany, antibacterial, MIC, MBC

Language: English


Soi: http://s-o-i.org/1.1/TAS-12-56-4 Doi: https://dx.doi.org/10.15863/TAS.2017.12.56.4
INTRODUCTION
The resistance of microorganisms against classical antibiotics poses a real public health problem. Faced with this situation there is a pressing need for constant renewal of active principles [1]. The molecules sought must have various other chemical properties and mechanisms of action against these pathogenic microbes [2]. Medicinal plants represent a significant source of new medicines; especially since they have inedesirable effect [3]. It therefore becomes logical to continue or even to intensify research in this direction knowing that plants remain an almost inexhaustible source of biomolecules. In addition, special attention is being paid to drugs and products of natural origin [4]. It is estimated that 80 % of the world’s population depends mainly on traditional medicine for the treatment of diseases [5]. The dependence on remedies derived from indigenous plants is particularly marked in developing countries where Western medicine is often absent or simply too expensive. An ethnobotanical survey carried out in the Haut-Sassandra region of Côte d'Ivoire allowed us to select Piptadeniastrum africanum (Fabaceae), a plant used in the treatment of bacterial diseases in the traditional environment. The aim of this study is therefore to contribute to the valorisation of Côte d'Ivoire medicinal plants. It aims at evaluating the antibacterial activity of the ethanolic extract of the stem bark of Piptadeniastrum africanum on Staphylococcus aureus, germs that are often involved in urinary disorders.

1. MATERIAL
1.1. Vegetal material
The vegetal material used consists of the stem bark of Piptadeniastrum africanum harvested in the Haut-Sassandra region of Côte d'Ivoire in August 2015, the identification of which was made by the National Floristic Center of Côte d'Ivoire.

1.2. Bacterial material
The bacterial material consists of a reference and five multi-resistant strains of Staphylococcus aureus and it is provided by the Laboratory of Bacteriology and Virology of the Institut Pasteur of Côte d'Ivoire.

2. METHODS
2.1. Monographic study of Piptadeniastrum africanum
To allow easy identification of this plant in a natural environment, a full monographic study was carried out; it took into account:
- the botanical family of the plant;
- general information on this botanical family;
- detailed description of the plant;
- some traditional therapeutic uses in the West African Pharmacopoeia.

2.2. Preparation of extracts
The stem bark of Piptadeniastrum africanum harvested was rinsed with water and dried in the shelter of the sun. These dried plant organs were then reduced to a fine powder using an IKA-MAG RTC electric grinder. A gray powder is obtained. The extracts (total aqueous and ethanolic 70 %) were prepared according to the method described by [6].

Total aqueous extract: One hundred grams (100 g) of bark powder are homogenized in 1 liter of distilled water in a Blender (Mixer) of Life’s Superb brand (LS-317) for three times three minutes at room temperature. The homogenate is filtered successively on hydrophilic cotton and then on Wattman paper (3 mm). With an oven set at 50 °C, the extraction solvent is eliminated. The dry evaporate is recovered in powder form which constitutes the total aqueous extract (TAE).

Ethanol / water partition: Ten grams (10 g) of the TAE are dissolved in 100 mL of a 70 % ethanol solution and then homogenized in a Blender [7]. After decantation in a separatory phial, the supernatant is collected, filtered on cotton to remove any residue and dried in an oven (50 °C). The powder obtained constitutes the 70 % ethanolic extract (70 % EE).

2.3. Calculation of the yield
The yield is the amount of extract obtained from the vegetable powder. It is expressed as a percentage. In practice, it is determined by the ratio of the weight of the dry extract after evaporation to the weight of the powder of dry plant material used for extraction multiplied by 100. This results in the following formula: \( R_d = \frac{(m \times 100)}{M} \). (Rd: extraction yield in percentage, m: mass in gram of the dry extract, M: mass in gram of the powder of the drug).

2.4. Sterility test of 70 % ethanolic extract
The purpose of this test was to verify that the extract contained no bacteria or fungus. To do it, 0.1 g of this extract to be tested was placed in 10 mL of thioglycholate broth and incubated at 37 °C for 24 hours. After this time, the broth was seeded on a Petri dish containing the ordinary agar and another containing the Sabouraud agar and then incubated under the same conditions. The extract is declared sterile, if no colony is visible on the agar box [8].

2.5. Preparation of the bacterial inoculum
Two isolated colonies of 18 hours bacterial culture were homogenized in 10 mL of Muller-Hinton broth and incubated for 3 hours at 37 °C for pre-culture. A 0.1 mL sample of the pre-culture broth was diluted in a tube containing 10 mL of Muller-Hinton broth. This bacterial suspension produced was the bacterial inoculum of dilution 100. Two isolated colonies of an 18 hours bacterial culture were homogenized in 10 mL of Muller-Hinton broth and incubated for 3 hours at 37 °C for pre-culture. A 0.1 mL sample of the pre-culture broth was diluted in a tube containing 10 mL of Muller-Hinton broth.
This produced bacterial suspension was the bacterial inoculum of dilution 100.

2.6. Numeration of bacterial inoculum

The bacterial inoculum was diluted 10 to 10-fold until 10^4 dilution. Four successive dilutions of 10^4 to 10^0 are obtained. The initial bacterial inoculum and the four successive dilutions were inoculated with a 2 μL calibrated loop on Muller-Hinton agar plates with 5 cm long stripes constituting the A box.

2.7. Preparation of the concentration range of the substance

The concentration range was prepared in 16 test tubes numbered from T₁ to T₁₆ by the double-dilution method in liquid medium. This concentration range varies from 200 mg / mL to 0.006 mg / mL. For this purpose, 10 mL of sterile distilled water were put in the T₁ tube and 5 mL in all the other tubes. In the T₁ tube, 2 g of plant extract were dissolved at a concentration of 200 mg / mL. A 5 mL volume of the T₁ tube was transferred into the T₂ tube and then homogenized. This operation was repeated until tube T₁₆, 5 mL of tube T₁₆ was rejected. The contents of the tubes were filtered on a membrane (MILLEX GV®) of diameter 0.45 μm and stored in a refrigerator at 4 °C.

2.8. Antibacterial testing

The antibacterial tests were carried out using the dilution method into liquid medium [9,10] in a series of 16 experimental tubes, a growth control tube and a control tube for the test of sterility. 1 mL of the extract of the highest concentration is transferred to the T₁ tube, the next concentration in the T₂ tube, and so on until the lowest concentration in the T₁₆ tube. This procedure ultimately resulted in the concentration of T₁ to T₁₆ being reduced from double to single, i.e from 100 mg / mL to 0.003 mg / mL. The sterility control tube receives 2 mL of Muller-Hinton broth. All of these tubes were incubated for 24 hours at 37 °C. This operation has been repeated 3 times in succession. Thereafter, the contents of the tubes in which no disturbance was observed was used to inoculate the Muller-Hinton agar on 5 cm streaks starting with the first tube without turbidity and incubated at 37 °C for 24 hours. Thus, the MIC was therefore the concentration of the first tube from which no disturbance to the naked eye was observed. After 24 hours of incubation at 37 °C, the minimum bactericidal concentration (MBC) was determined by comparing the density of the streaks with that of the previously prepared A box.

3. RESULTS

3.1. Monographic study of the plant

Piptadeniastrum africanum belongs to the family Fabaceae

- Family of Fabaceae

Fabaceae are one of the largest families of flowering plants, with more than 730 genera and 19400 species distributed in both temperate and tropical environments [11]. They are herbaceous plants, shrubs, trees or lianas. The family is cosmopolitan of cold and tropical areas. The leaves are generally alternate, pinnate or trifoliolate and stipulated. However, there are some evolutions.

According to [12] the Fabaceae can be divided into 3 subfamilies:
- the subfamily of Mimosoideae;
- the subfamily Caesalpinioideae;
- the subfamily Papilionoideae or Faboideae.

Some therapeutic uses of Fabaceae

Currently, several molecules are used in therapeutics and are extracted from various species of Faboideae: spartéine, a ganglioplégique alkaloid used in cardiology and obstetrics, isolated from Cytisus scoparius L. Link, rutin, a flavonoid used in phlebology, isolated from Sophora japonica L. or physostigmine from Physostigma venenosum Balf. The latter is a reversible inhibitor of cholinesterases, used as an antidote by parasympatholytic intoxication and tested in the treatment of Alzheimer’s disease [13].

Description of the plant

Piptadeniastrum africanum or Piptadeniastrum africanum is a large tree. It is a leguminous plant of the subfamily of mimosoideae whose crown is more or less tabular. I can reach a height from 50 to 65 meters. Dense foliage and dark green dominate the forest (Figure 1). It is supported on buttresses provided but sometimes very big. Its bipinnate leaves are composed of tiny leaflets suggestive of a fern [14].

Therapeutic use of Piptadeniastrum africanum

It is used in the treatment of infections during circumcision. It is also used against childhood diseases; toothache and superinfections of the skin [14].

3.2. Extraction yield

We extracted 6.40 g of 70 % ethanol extract from 10 g of total aqueous extract, i.e an extraction yield of the stem bark of Piptadeniastrum africanum of 64 %.

3.3. Sterility test

The sterility tests of the 70 % ethanol extract allowed to check the sterility of the extract to be tested. The 70 % ethanolic extract of Piptadeniastrum africanum showed no signs of contamination after three readings separated with 24 hours of incubation.

3.4. Antibacterial testing

After 24 hours of incubation at 37 °C, the increasing concentrations of the 70 % ethanol extract caused a gradual decrease in bacterial growth and a dose dependent on the turbidity of the culture medium and that for each bacterial strain studied (Figure 2). The values of the antibacterial parameters
obtained for each bacterial strain are given in Table 1.

**Table 1**

<table>
<thead>
<tr>
<th>Bacterial strains</th>
<th>Code</th>
<th>MIC (mg/mL)</th>
<th>CMB (mg/mL)</th>
<th>MBC/MIC</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>S. aureus</em></td>
<td>ATCC</td>
<td>0.09</td>
<td>0.19</td>
<td>2.11</td>
<td>Bactericidal</td>
</tr>
<tr>
<td><em>S. aureus</em></td>
<td>408 C/14</td>
<td>0.04</td>
<td>0.09</td>
<td>2.25</td>
<td>Bactericidal</td>
</tr>
<tr>
<td><em>S. aureus</em></td>
<td>438 UB /15</td>
<td>0.09</td>
<td>0.09</td>
<td>1</td>
<td>Bactericidal</td>
</tr>
<tr>
<td><em>S. aureus</em></td>
<td>310 CA/15</td>
<td>0.09</td>
<td>0.19</td>
<td>2.11</td>
<td>Bactericidal</td>
</tr>
<tr>
<td><em>S. aureus</em></td>
<td>1541 C/14</td>
<td>0.39</td>
<td>0.78</td>
<td>2</td>
<td>Bactericidal</td>
</tr>
<tr>
<td><em>S. aureus</em></td>
<td>446 C/14</td>
<td>0.09</td>
<td>0.19</td>
<td>2.11</td>
<td>Bactericidal</td>
</tr>
</tbody>
</table>

MIC : Minimal Inhibitory Concentration ; MBC : Minimum Bactericidal Concentration
4. DISCUSSION

The 70 % ethanolic extract gave a good extraction yield, ie 64 %. It could be a good extraction solvent for the active principle of the stem bark of *Piptadeniastrum africanum*. Tests of the 70 % ethanolic extract of the stem bark of *Piptadeniastrum africanaum* in agar medium showed, as compared to the growth controls, a decreasing variation in the turbidity of the tubes as the concentration of the extract increases. This shows that this extract exhibits antibacterial activity by inhibiting the in vitro growth of strains of *Staphylococcus aureus* according to a dose-response relationship. All the tested bacterial strains showed different sensitivities to the 70 % ethanolic extract of the stem bark of *Piptadeniastrum africanaum*. Thus, *S. aureus* 408 C / 14 is the most sensitive with a MIC of 0.04 mg / mL. Comparison of the activity of the 70 % ethanolic extract of the stem bark of *Piptadeniastrum africanaum* on the basis of the MBC relative to the strains of infections and reference shows that the 70 % ethanolic extract is twice as active on S aureus 408C / 14 and *S. aureus* 412YO / 15 resistant to methicillin. We deduce that the 70 % ethanol extract exerts different inhibitory actions on the tested bacterial strains at different concentrations. Our results are in agreement with that of [14] which showed that *Piptadeniastrum africanaum* had a bactericidal effect on S. aureus. The table of values of the antibacterial parameters also shows the different activities of the 70 % ethanolic extract of the stem bark of *Piptadeniastrum africanaum* on the different strains of *Staphylococcus aureus*. The activity ratios (MBC / MIC) are less than 4. According to [15], this fraction has a bactericidal activity with regard to the tested germs. Indeed, there are differences in the solubilizing capacity and the extraction of the solvents, with regard to the phytomolecules. According to [16], during the liquid-liquid extraction, the phytomolecules are distributed between the solvents according to their polarity and their solubility. We could say that the antibacterial substances contained in the stem bark of *Piptadeniastrum africanaum* are more soluble in ethanol than in water. Ethanol would better then concentrate the active principle. The work of [17] have shown that the stem bark of *Piptadeniastrum africanaum* contains, among others things, tannins, saponins which possess antibacterial properties. The presence of these chemical compounds could explain its activity on the strains of studied *Staphylococcus aureus*. All these results provide a scientific basis for the traditional use of this plant, especially in the treatment of wounds, supplicative collectors and urinary tract infections.

CONCLUSION

Our study showed that the 70 % ethanolic extract of the stem bark of *Piptadeniastrum africanaum* has antibacterial activity on strains isolated from the urine. The extract of the stem bark of *Piptadeniastrum africanaum* could therefore be a less costly alternative for the treatment of urinary tract infections.

References:

### Impact Factor:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>RИНЦ (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>IBI (India)</td>
<td>4.260</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
</tbody>
</table>

#### Impact Factor


CALCULATION OF PRESSURE LOSSES OF LIQUID AT A CYLINDRICAL STRAIGHT PIPELINE SECTION

Abstract: Results of a computer simulation of liquid flow and a calculation of resulting pressure loss at a cylindrical straight pipeline section are presented in the article. It is determined that pressure drop at an inlet and an outlet of the cylindrical straight pipeline section by a length of 1000 mm is 26%.

Key words: liquid, velocity, pressure, length, flow.

Language: English


Introduction

Hydraulic resistances in pipelines lead to significant hydraulic losses. These losses are caused by a change of a direction and velocity of liquid flow at a certain length of the pipeline [1 – 3]. The constant direction of liquid flow is observed across entire a transverse section of the straight pipeline. However, variable velocity of liquid in different layers of flow (laminar and partially transitional flow) leads to the change of hydraulic pressure of fluid, and thus to an increase of energy costs on pumping liquid [4 – 8]. The change of hydraulic pressure and velocity of liquid flow at an inlet and an outlet of the pipeline can be determined by analytical formulae, measuring of pressure drop by special measuring instruments and a computer simulation (calculation) in special engineering programs subject to initial conditions of the researched process. The detailed change of velocity of liquid flow at the length of the straight pipeline advisable to consider by the results of the computer simulation.

Materials and methods

The calculation of pressure losses of liquid at the cylindrical straight pipeline section was performed in the Flow Simulation software environment.

A solid model of the straight pipeline section was built in the SolidWorks software environment. An inner diameter of the model was adopted by 30 mm, a wall thickness is 5 mm and the total length of the pipeline section is 1000 mm. Steel was selected by material of the pipeline section. The solid model of the cylindrical straight pipeline section is presented in the Fig. 1.

Figure 1 – The solid model of the straight pipeline section.
Impact Factor:

<table>
<thead>
<tr>
<th>Source</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>PIIH (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>IBI (India)</td>
<td>4.260</td>
</tr>
<tr>
<td>RINCS (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
</tbody>
</table>

For implementation of the simulation of liquid flow it was adopted by the task type “Internal”, since a calculated area was a volume of a channel of the pipeline section. Cavity of the pipeline section without flow conditions was excluded from the calculation. Orientation of the solid model of the pipeline section was carried out in the global coordinate system.

The model of the straight pipeline section was split into the following finite elements: partial cells – 3760, solid cells – 528, fluid cells – 3264. The total number of the finite elements was amounted to 7552. The calculated number of the finite elements along the axes X and Y was amounted to 4, along the axis Z was amounted to 66. At set parameters of splitting of the solid model, accuracy of the obtained results was amounted to 3. The values of minimum gap and minimum wall thickness were adopted by default.

As fluid was adopted by water at a temperature of 293.20 K. For a set temperature, density of water is 997.56 kg/m³. Laminar and turbulent flow types of liquid at the straight pipeline section with an adiabatic wall were considered. Roughness of the inner wall of the straight pipeline section is 0 micrometer. Development of turbulent liquid flow in the pipeline was occurred at the length of $8 \times 10^{-4}$ m when turbulence intensity of 2%. Mass flow rate at the inlet of the straight pipeline section was adopted by 0.45 kg/s. At the outlet of the straight pipeline section was acted normal atmospheric pressure (static pressure is 101325 Pa).

The set calculation control options: maximum travels – 4, analysis interval – 0.5, refinement – disabled.

**Results and discussion**

The velocity change of liquid flow at the length of the straight pipeline section (transverse section) is presented in the Fig. 2.

**Figure 2** – The velocity fields of liquid flow across entire the length of the straight pipeline section. The unit of measurement of flow velocity is m/s.

In the figure – (1) corresponds by the velocities field of liquid flow at the inlet of the straight pipeline section, (2) is the velocities field at the distance of 100 mm from the inlet, (3) is the velocities field at the distance of 200 mm from the inlet, (4) is the velocities field at the distance of 300 mm from the inlet.
### Impact Factor:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>RINCS (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
</tbody>
</table>

**Inlet, (5) is the velocities field at the distance of 400 mm from the inlet, (6) is the velocities field at the distance of 500 mm from the inlet, (7) is the velocities field at the distance of 400 mm from the outlet, (8) is the velocities field at the distance of 300 mm from the outlet, (9) is the velocities field at the distance of 200 mm from the outlet, (10) is the velocities field at the distance of 100 mm from the outlet and (11) is the velocities field at the outlet of the straight pipeline section.**

At the distance of 300 mm from the inlet of the straight pipeline section, velocity of liquid flow uniformly increases throughout the transverse section. In considering the plots (5) – (10) it can be concluded that the layers of liquid, located closer to the axis of the straight pipeline section, are moved with higher velocity than the upper layers. At the outlet of the straight pipeline section, velocity of liquid flow was amounted to 0.213 m/s (contours of red color on the corresponding plot). Significant drop of static liquid pressure was determined at 1/3 of the length of the straight section to the outlet opening of the pipeline.

Vorticity intensity of liquid flow at entire the length of the straight pipeline section can be presented in the Fig. 3.

**Figure 3 – Vorticity intensity of liquid flow: A – the model of the straight pipeline section with the calculated trajectories of vorticity, B – the dependencies of vorticity from the length of the straight pipeline section.**

The length of the calculated trajectory of turbulent liquid flow on the model of the straight pipeline section corresponds to the length of the particular dependence in the graph. In accordance with the graph of dependence it is determined that the highest vorticity intensity is observed in the layers of liquid located close to the inner wall. This liquid flow is observed at 1/2 of the length of the straight pipeline section from the side of the inlet opening.

The change of average static liquid pressure at the inlet and at the outlet of the straight pipeline section is presented in the Fig. 4.

**Figure 4 – The dependence of average static liquid pressure at the length of the straight pipeline section from the number of iterations.**
Hydraulic liquid pressure at the inlet of the straight pipeline section was amounted to 127503.98 Pa, at the output hydraulic liquid pressure was amounted to 101325 Pa. Pressure drop at the inlet and at the outlet of the straight pipeline section was amounted to 26%. The results of calculation of the average value of static liquid pressure at the straight pipeline section are presented in the table 1 [9].

The results of calculation of the average value of static liquid pressure at the straight pipeline section.

<table>
<thead>
<tr>
<th>Name</th>
<th>Unit</th>
<th>Value</th>
<th>Progress</th>
<th>Delta</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static Pressure</td>
<td>Pa</td>
<td>121720.95</td>
<td>5</td>
<td>7780.55083</td>
<td>382.606315</td>
</tr>
</tbody>
</table>

Conclusion
Thus, it is determined that at the straight pipelines sections of the short length (no more than 300 mm) the change of static liquid pressure is practically not observed. Herewith, vorticity intensity of liquid flow at this length of the straight pipeline section is maximum. Constancy of the trajectory of liquid flow at the straight pipeline section doesn't guarantee maintaining of initial static pressure at the outlet. Pressure drop at the inlet and at the outlet of the straight pipeline section by the length of 1000 mm was amounted to 26%.

References:

THE PROBLEM OF FORMATION OF STUDENTS COMMUNICATIVE SELF-EFFICACY AT THE STAGE OF THEIR PROFESSIONAL TRAINING AT THE HIGHER EDUCATIONAL ESTABLISHMENT

Abstract: The article deals with the problem of the communicative self-efficacy of the person. The attention is paid to the development of this personal meta-quality among students and cadets at the stage of their professional training at the university. A brief analysis of theoretical approaches to understanding the phenomenon "communicative self-efficacy" is given. The relevance of the research is indicated in the context of looking for methods aimed to the formation of this meta-quality. The results of using techniques of critical thinking development are presented.

Key words: communicative self-efficacy, development of personal potential, peculiarities of modern students, professional training, methods of development of critical thinking.

Language: English

Introduction.
Nowadays, high demands are made to future specialists. Some personal qualities are more important than professional ones. These qualities are: the ability to use self-internal resources, the development of personal potential, that is, the desire for constant self-development, the ability to overcome difficulties, to cope effectively with situations of uncertainty, to choose necessary strategies of behavior and communication.

In this connection, the notion "self-efficacy" is heard in pedagogy and psychology very often. This concept determines the possibility of becoming a person as an active subject of his life, who is capable to estimate his own abilities and resources adequately on the hand and to reach the maximum acceptable results in various fields of activity on the other hand [6, p. 60]. Within the framework of our research, the most actual issue is the studying and formation of communicative self-efficacy of students, cadets at the stage of their professional training at the higher educational establishment.

The main text.
Despite the available researches of the phenomenon “self-efficacy”, the concept "communicative self-efficacy" is still not sufficiently developed in domestic scientific works. So M.I. Gaidar, according to his own understanding of self-efficacy, singles out activity, communicative and personal self-efficacy [3, p. 6]. He notes that communicative self-efficacy is a person's idea that he has such a communicative potential and experience which allows him to use different means of communication in combination with confidence that the person will be able to effectively implement them.

The work of T.V. Belykh is of great interest for our research. The scientist indicates that communicative self-efficacy refers to an unrealized personal potential, determining the way in which professional or educational activities will be realized, what strategies of implementation, style, individual characteristics of activity will be chosen for this [2, p. 5].

We, in our turn, consider the notion "communicative self-efficacy" of students as the ideas about their own forces and possibilities, the ideas about their ability to act effectively in situations of uncertainty, to choose effective strategies of behavior and communication, and also as a successful demonstration of their own...
communication potential in different situations as well as development of this potential.

The results of our research [4] indicate the need for formation of students’ communicative self-efficacy at the stage of their professional training at the higher educational establishment.

It should be also taken into account that in our high-speed multilevel society, controlled by computers and technologies, effective verbal communication is extremely necessary. It is important for modern employers that young specialists have developed communicative skills, the ability to correctly and logically construct their speeches. Public speaking is a necessary skill in the modern world. Specialists in different fields have to prepare and conduct lectures, presentations, participate in discussions, negotiations.

Unfortunately, quite often interesting content is lost under an inexpressive performance. Fears of the audience, stiffness, nervousness don’t allow to achieve a good effect during a presentation or a business conversation. The ability to properly represent oneself, to structure information, to answer questions is a necessary condition for success in situations where an oral presentation of information is required. For successful public speech the following things are necessary: a positive emotional attitude to communication, public speaking skills, as well as thorough preparation which requires a deep understanding of the topic of the speech, and the elaboration of possible questions from the audience and the arguments.

All this requires from a student the ability to analyze, to choose the most optimal decisions, to reasonably refute the false, to question decisions and information, to understand the illogicality of statements and to react to them; to solve problem situations, to work in a group, to speak competently.

However, it’s no secret that the development of digital technologies has made modern students a generation that has grown up in the digital environment. Unrestricted access to information gives them confidence in their views, which are not always correct.

The main distinguishing feature of the modern generation of students is clip thinking. They operate only with fixed-length meanings, which means they cannot focus on any information for a long time, they have a reduced ability to analyze. Today’s students quickly get tired and lose attention, especially if the information is not very interesting; they prefer visual symbols to logic and deepening into the text.

It should also be noted that modern young people organize problem communication with great difficulty and generally cease to appreciate real communication. Being under the influence of various sources of information students, as a rule, are completely unaware where and how they got the information, why they suddenly start to speak this way, and not otherwise. They willingly enter into a language game on any subject, but they are not able to differ when they think for themselves and defend their own position, and when they only reproduce the information that was downloaded the day before.

The Internet hinders the formation of thinking of students. A computer creates the illusion that a person can penetrate into any space and act there. In fact, students find themselves in great difficulty when they have to set goals, interact with others, transmit their plan, implement it, re-formulate goals and design an action, based on already gained experience etc.

Organization of the educational process using the methods of development of critical thinking makes it possible to activate the cognitive activity of the students, to teach them to be critical about information, to prove their point of view reasonably, to correctly disagree with the opinions of others, to listen and to hear, to improve the ability of asking questions in order to obtain more accurate information or its verification. Orientation of students to develop critical thinking (through conversations, examples, focus on problem points) helps to realize that it is necessary to be well-informed, to understand the views of others; to aim to expand own horizons; to show flexibility, persistence, readiness to correct own mistakes, to seek compromise.

The idea of using methods for developing critical thinking takes its roots from western pedagogics (Halpern D., Hell L., Ziegler D.J. Steele, K. Meredith, C. Temple [9;7]). It should be noted that the organization of the educational process, focused on the development of critical thinking, requires the teacher serious preparation, in-depth analysis of the material content, and a great erudition.

This article presents only a few methods of developing critical thinking that are most often used by us during the work with students and cadets at English classes.

A method "Tables" (graphical organization of the information, may be used at any stage of the lesson). The table "Know - Want to learn - Learn" is being drawn up. In the first column all the ideas on the issue are fixed; the controversial thoughts and questions that arose during the discussion on the topic are written in the in the second column, and the answers to the questions (after reading the text) are fixed in the third column. After filling in the table, it is necessary to compare what you knew before with the information obtained from the text. In this case it is desirable to present information, concepts or facts only in your own words, without quoting a textbook or other text that you worked with.

After independent or group work, the correctness of the completed material is discussed, clarification, addition, correction.
A method "Composing a cluster" (pic.1) means the systematization of material in the form of a branching scheme, when semantic units of text are allocated, may be a method of motivation for reflection before studying a topic or a form of systematizing information when summarizing. This technique develops the ability to build predictions and substantiate them, helps to draw analogies, to make connections, to develop a skill of simultaneous consideration of several options which is necessary in solving life problems. It promotes development of system thinking.

A method "Correct and incorrect statements" presupposes the choice of correct variants by the students and justification of this choice. After getting the basic information (from a textbook, a lecture, a video) it is necessary to return to the statements and evaluate their authenticity.

A method "Thick and thin questions" accentuates the attention of students that there are questions that can be answered unequivocally (thin questions), and those to which it is not possible to answer definitely (thick questions). Thick questions are problematic questions, involving ambiguous answers. Examples of "thin questions": who ...; what ...; when ...; may it be ...; will it ...; could he ...; what's the name ...; was it (there) ...; do you agree ....etc. Examples of "thick" questions: explain, why ...; why do you think ...; what is the difference ...; what will happen if etc.

This work helps to develop thinking and attention of students, as well as to develop their ability to ask "smart" questions. Classification of questions helps in finding answers, makes students think about the text and helps them to understand its content better. This method stimulates the dialogical speech of students.

A method "Insert". When reading the text, students note the following signs on the edge of the pages: v (information corresponds to what I know); - (information contradicts my beliefs); + (information is new for me); ? (information is contentious, incomprehensible). After reading the text with the marking, students fill in the “insert table” according to the signs. This method makes visible the process of accumulating information, the path from "old" to "new" knowledge becomes clear and precise, it provides thoughtful and careful reading.

A method "Reading / viewing / listening with stops" allows to work through the text in detail, and also to train the ability to predict, to discourse logically, to argue and convince, to examine the situation creatively.

A method "Two-part diary." (eg. Table 1). This technique is used when students themselves work with the text and then train each other on the question studied. During the explanation of the material such diaries are kept, consisting of two parts. The first part contains a summary of the material presented, and questions arise or not clear moments are fixed in the second part. Two-part diaries enable students to closely link the content of the text with their personal experience.

Impact Factor:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>ISRA (India)</th>
<th>SIS (USA)</th>
<th>ICV (Poland)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JIF</td>
<td>1.344</td>
<td>0.912</td>
<td>6.630</td>
</tr>
<tr>
<td>IS (Dubai, UAE)</td>
<td>0.829</td>
<td>0.207</td>
<td>1.940</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
<td>4.102</td>
<td>4.260</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>4.102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>2.031</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Picture 1 - Cluster “Arsons".
“Great Britain”.

<table>
<thead>
<tr>
<th>Topic</th>
<th>I know</th>
<th>I found out</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Monarch and the Cabinet.</td>
<td>Students offer their options</td>
<td>The Queen is only a formal ruler. But she looks through all important information and no Bill becomes a Law without the Royal Assent.</td>
</tr>
<tr>
<td>The Houses of Parliament.</td>
<td></td>
<td>There are 2 houses in the English Parliament: the House of Lords and the House of Commons. The House of Lords consists of nearly 1200 peers, created by the monarch on the advice of the Prime Minister. The House of Commons is elected. They are 630 members.</td>
</tr>
</tbody>
</table>

A method "Table of arguments". One of the students gives arguments, and the rest should refute them or confirm them with facts from the text.

A method "Argumented evaluation" involves the use of pre-specified criteria for monologic or dialogical speech for self and mutual evaluation. This technique allows students to learn to evaluate each other's speech objectively, to argue their point of view, to be more attentive while listening to each other. In our practice we use such criteria as: content, communicative interaction, vocabulary, grammar, pronunciation.

It is important to note that all our lessons are held according to the scheme: challenge - comprehension - reflection. The students formulate the tasks of the forthcoming work by themselves and at the final stage of a lesson return to them in order to analyze the results of their own or group work.

The use of methods of critical thinking development in the educational process involves interaction in groups in order to exchange experiences (both linguistic and social), to create conditions for discussions and debates on the topic under study, and to organize competent work with information resources. Such work help to develop the ability to solve the problems collectively, the ability to convey information clearly, the ability to defend one's point of view using arguments and evidence based on a critical analysis of the received information and their own experience. It serves to develop thinking, imagination, maintain cognitive activity and develop skills for building effective communication.

All this, in turn, leads to the formation of communicative self-efficacy. As it was noted by many researchers (A. Bandura, S. N. Gonchar, J. Maddux, M. Scheer, etc.), a personal experience of achievements has the greatest influence on self-efficacy. The feeling of self-efficacy grows more if success is achieved independently, through efforts and through overcoming difficulties. It helps a person to believe in their ability to achieve the necessary results. After the successes has achieved, the expectation of efficiency is strengthened, while the negative impact of casual failures is weakened. Self-efficacy is also affected by indirect experience. It also grows when a person watches others successfully cope with difficult tasks. Conditions for solving complex communicative problems, problem situations are provided at our classes, including the using the techniques of critical thinking development.

**Summary and Conclusions.**

Today, the task of forming communicative self-efficacy of students in higher education becomes very important. This work assumes several stages: reflection of the learners of their communicative goals, abilities, attitudes, awareness of the ineffectiveness of some communicative actions and attitudes; definition of the most optimal communicative strategies, techniques, types of conflict resolution through observation of communicative actions of others, familiarization, information, joint search, awareness of the importance and need to develop their own communication potential; development of effective communication skills through mastering of communicative techniques, modeling situations that require flexible use of communicative techniques, changing their own communicative attitudes.

**References:**


<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>ПИП (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>3.860</td>
</tr>
<tr>
<td>IBIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>РИНЦ (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>3.860</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
</tbody>
</table>

SECTION 31. Economic research, finance, innovation, risk management.

“UZBEK MODEL” OF DEVELOPMENT
FAMOUS FOR THE NAME OF ISLAM ABDUGANIYEVICH KARIMOV CURRENTLY APPRECIATED BY THE WORLD COMMUNITY

Abstract: This article is devoted to the research of the famous “Uzbek model” of the development which widely recognized and appreciated throughout the world associated with the name of Islam Abduganiyevich Karimov. The main aim of researching recognition and appreciation of the “Uzbek model” by the world community is, first of all, a comprehensive study of the activity of Islam Karimov as a founder of the democratic state and civil society which he could achieve after gaining the independence by a hard work. Moreover, the article pursues the aim to publicize the contribution of Islam Karimov as the creator of “Uzbek model” to the development of the world relations. The results of the research can facilitate perpetuation of the outstanding performance and valuable inheritance of our First President, Islam Karimov. In addition, achievements gained by Uzbekistan during such a short period of time can serve as an appropriate experience for the developing countries of the world.

Key words: Islam Karimov as a founder of the independent uzbek state, “Uzbek model”, world development, recognition of the international community, economic independence, “shock therapy”, “Made in Uzbekistan” label, peace and cooperation, religious tolerance, professional diplomacy, single transport data sett system.

Language: English


DOI: https://dx.doi.org/10.15863/TAS.2017.12.56.7

1. INTRODUCTION

Currently it is impossible to imagine that Uzbekistan, which is actively integrating into the international community, 27 years ago used to be under the influence of a former totalitarian dictatorial regime, but at present time is one of the leaders among the countries of Central Asia. The ideas and programs that Islam Karimov put forward with a clear vision of the future of Uzbekistan during that difficult period of time, clearly demonstrate the great confidence that he had expressed to our country’s bright future. Therefore, the questions “why” and “how was it possible” referred to the achievements of Uzbekistan made within 25 years, are recognized and highly appreciated by the world community.

2. UREGENCY OF THE RESEARCH

All the great achievements and outcomes of the people of Uzbekistan during the years of independence are associated with the name and performance of the first President of Uzbekistan. The founder of the independent Republic of Uzbekistan Islam Abduganiyevich Karimov gained a high reputation in the country and the international cooperation as a great statesman who had developed and implemented a comprehensive strategy of constructing a legal democratic state based on the civil society and market economy. It should be noted that international experts have thoroughly studied and highly appreciated so-called “Uzbek model” of the development that could withstand any crises or obstacles and currently this model is associated with the name of Islam Karimov.

Islam Abduganiyevich Karimov supported the idea that political independence can not be achieved without the achievement of economic independence and with the account of this concept he worked out the “Uzbek model” of the development based on five principles which later became wide-known and highly appreciated throughout the world leaders. This model represents the program for implementing reforms in the economy and structural changes in Uzbekistan. Therefore, in our opinion, it is necessary to conduct a comprehensive study of the activity of
Islam Karimov as a founder of the democratic liberal state and civil societies as well as his contribution as the creator of “Uzbek model” to the development of the world economy and these facts prove topicality of our research.

3. STEPS TO ACHIEVE INDEPENDENCE OF UZBEKISTAN

By the 90s of the 20th century, the political influence of the leading countries in the world resulted in the collapse of the former Soviet Union. This led to the formation and occurrence of new independent states in the world map. In Uzbekistan the founder of independence I.A. Karimov carefully prepared those processes in advance and developed a set of measures to overcome possible problems. I. A. Karimov was the first among leaders of the CIS countries to set up the presidency and on August 31, 1991, Uzbekistan proudly proclaimed its independence. Since the first days of the independence, under heavy and complicated issues, our First President devoted all his life to ensure peace, happiness and prosperous future not only for Uzbekistan but also in the whole Central Asia region.

4. NECESSITY FOR THE NEW DEVELOPMENT MODEL TO SOLVE SOCIO-ECONOMIC PROBLEMS

By the end of the 80s of the 20th century, the economic constraint became extremely sharp and risky. This was primarily due to the complete decline in manufacturing, non-provision of the production capacity with work, the growth of the unemployment rate, non-compliance of the monetary and fiscal political systems. The main economic indicators such as GDP, national income, and labor productivity had been steadily declined. Foreign trade turnover declined, negative balance of foreign trade and public debt increased and continuous inflation was irritating everybody. As a result, incomes and living standards of the people in such poor conditions had been steadily declined. A constant reduction in the scale and volume of production made a more severe impact on the living standards of the population, particularly in terms of Uzbekistan with a sharp demographic environment. Uzbekistan turned to be one of the last among the former Soviet republics with its national income per capita, real income, salary, and labor productivity.

Uzbekistan used to be ranked the 12th by GDP per capita, while national income per capita was twice lower than the average national income in the territory of the former Soviet Union. In terms of industrial labor productivity during this period, Uzbekistan was 40 per cent below the average ratio and labor productivity in the agricultural sector was almost twice lower. The share of the production of consumer goods per capita in the Republic of Uzbekistan accounted for 40 per cent of the ex-Soviet Union level [2].

Due to the cotton exported from Uzbekistan, other raw materials were imported in our country and the difference between the products exported and the products imported accounted for 898 million rubles lower. Meat, dairy products and eggs consumed by the population of the Republic amounted to 50 per cent in relation to the average population. The majority of the population earned only about 70 rubles a month. Ultimately, the infant mortality rate was one of the highest in the world, and the worst thing was that in the early 1990s, the country approached the state of famine and the reserves of the grain were enough only for 12-15 days.

As a result, there was an imbalance in the economy of Uzbekistan and social sphere. In particular, the problem of unemployment increased and reached its peak in 90-years period of time. There were 9 million unemployed in the former Soviet Union and one million of them lived in Uzbekistan.

At that time reputable organizations and experts in foreign countries were aware of this complicated situation in Uzbekistan. Therefore, at the beginning of the 90s of the 20th century, the most influential newspapers of the nearest foreign countries published articles about our country on such topics as “Uzbekistan is a boiling samovar”, “Uzbekistan is the country of starving”, and “Before sunset”. Many observers predicted that the country was about to experience a terrible crisis and it was impossible even to imagine its consequences.

In the book entitled “Islam Karimov-the New President of Uzbekistan” written by the great lawyer Leonid Levitin and Donald S. Carlyle from the USA on political issues in Central Asia the authors wrote that “in the early 1990s none of the Soviet Union republics experienced such difficult and terrible conditions as Uzbekistan did. The people of the republic were forced to work hard under conditions of cotton monopoly, lack of resources needed for living and generally suffering from unfair social order”.

Islam Abduganiyevich Karimov at that time was the only government leader who was thinking about the people and how to deal with those difficult socio-economic issues and overcome obstacles. However, all of these unresolved issues were a political game coordinated by the central government of the former Soviet Union and Karimov on his own initiative put an end to that political game. Thus it became possible to overcome the issues of administration and commanding over the economy of our country.

5. HISTORY OF DEVELOPING “UZBEK MODEL”

Impact Factor:

<table>
<thead>
<tr>
<th></th>
<th>ISRA (India)</th>
<th>JIF (Australia)</th>
<th>SIS (USA)</th>
<th>PHHII (Russia)</th>
<th>ICV (Poland)</th>
<th>PIF (India)</th>
<th>ESJI (KZ)</th>
<th>IBI (India)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.344</td>
<td>0.564</td>
<td>0.912</td>
<td>0.207</td>
<td>6.630</td>
<td>1.940</td>
<td>4.102</td>
<td>4.260</td>
</tr>
<tr>
<td></td>
<td>1.500</td>
<td>2.031</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ISPC Generalization of scientific results, Philadelphia, USA
Whenever a society turns from one regime to another, it undoubtedly tries to choose a specific and appropriate way of the development process to study errors and accomplishments of developed nations. After achieved the independence, our young country faced a very interesting issues on national state building. Even at that time, some media resources spread information about relevancy and favour of Turkish, Chinese or Korean models as a development way for our country.

Undoubtedly, during the first years of the independence our so-called “big brothers” tried to give their own proposals from outside. Some proposed the way of “Curing by paralyzing”, the others proposed the “Turkish model” of the development, the thirds, relying on our cooperation with South Korea, promoted the Korean model for the development of Uzbekistan. They made conclusions based on their upbringing knowledge and didn’t consider the necessity to create economic, legal and political base without taking into account customs, traditions and mentality of the people after gaining the independence [3].

Then it was suggested that other models from Malaysian, American, and Southeast Asian countries should be copied and although they were applied in other industrialized countries. They did not match the values and mentality of our nation. In some cases several “ready” recipes were steadily repeated. One of them was so-called “shock therapy”. However, this model could boost the economy of the country and overcome crisis but at the expense of making 40 per cent of the working population unemployed, worsening living standards and strengthening the social constraint.

President Islam Karimov strongly believed that such kinds of approaches for market relations were inaccurate and unacceptable and our main task was move to a new stage of socio-economic development without any losses.

Under difficult conditions the idea of choosing our own way and standards of the socio-economic development were very important so it was natural to put the question on which global or regional model could Uzbek model easily and rapidly comply with. Islam Karimov strongly insisted on the point that Uzbekistan had to follow its own way of development and possess its own development model with the account of country’s unique conditions and opportunities, economic and cultural tiers arisen as a result of short period and long-term cooperation.

The model for the economic development of Uzbekistan is based on the historical background, experience of our people, national customs and traditions [10]. This idea was developed and promoted by the President of Uzbekistan and later on it became famous almost all over the world with its principle “Don’t destroy the old house without building a new one”.

The complete breakdown of the previous system, existing economic relations and old economic relations were gradually transformed into new market and it became possible to transit to the efficient market economy system. Taking into account the structure of the economy and population of our country, the level of development of the country at the time and the way of gradual transition to the market economy were more acceptable as it could avoid political shocks.

The liberalization of foreign economic activity and the integration into the world economy also represented a complicated and difficult process for a country that had gained independence. The head of our country clearly identified the most important directions and destinations regarding valuable “Uzbek Model”. As an equal member of the world community, Uzbekistan intensified opportunities for bilateral and multilateral trade and expanded economic relations with all the countries of the world.

One of the main priority of the renewal was a particular attention to the changes in the agrarian sector. The solution of the problem of land ownership, the elimination of state-owned enterprises, especially low-efficient and loss-causing collective and cooperative farming, the transfer of their land to farms or dehkan household on the long-term basis and the involvement of unskilled labor in industrial enterprises constituted the main issues in the agrarian policy of Uzbekistan as well as the priority of the strategy of transition to the market economy. Ensuring macroeconomic stability, implementing a thoroughly elaborated financial policy, achieving radical changes and transformations in the economy were also considered to be the most important advantages for the elimination of the image of our republic as a raw material base.

In general, Islam Karimov determined the essence and peculiarities of the model for the national development which has been widely recognized as the “Uzbek model of the development” in the world at present times since the early years of independence.

In the aftermath our own way of the development gained a worthy place among German, Swedish, Chinese and Japanese models. Uzbekistan efficiently applied all the advantages and positive experience accumulated by the countries in the process of their development. The point was not to simply copy any model even though it could provide positive results. Certain technique and methods designed for a particular country can bring a positive effect only in the specific conditions of that country [4].

The five main principles of the transition to the market relations in Uzbekistan which were determined by the head of our state justified results
of consistent, sound and long-term pursuit of efficient and wise policy. In this regard, Uzbekistan selected its own way of the development. This approach was developed with the account of the experience of advanced countries and aimed at the creation of the national model of economic reforms. So far, as results of the comprehensive analysis of the existing situation created Uzbek model" by the First President were widely recognized and appreciated.

6. BRIGHT FUTURE OF UZBEKISTAN

Evidence-based response worked out by us 26 years ago to the questions “What should be done? How should we start? How can we achieve these accomplishments?” is recognized throughout the world and its efficiency is being studied. However, at that time, the situation was more complicated and uncertain, the first stage of privatization in the republic was not over yet, independence of fuel and energy resources and grain hadn’t been achieved yet, industry as well as the whole economy hadn’t gained macroeconomic stability, and the country couldn’t leave a ruble zone yet. The national currency hadn’t been introduced, there were scarcity and inflation, the chaotic, uncontrolled system of prices and taxes, the unbalanced exchange rate, and the bank interest rates became really unbearable.

At that time the President Islam Karimov fearlessly began to gradually implement newly created Uzbek model. It should be noted that the President of Uzbekistan created the model which wasn’t expected by world famous policy-makers and economists. Moreover, he promoted the following idea: “Speaking about economic freedom and economic independence we should never forget about one important point: economic independence is the main independence, and it is impossible to achieve political independence without economic independence”. And that economic independence will never be political independence unless it is a fundamental independence, economic independence”.

From the first day when Karimov was elected as a president, he started working to ensure the peace and tranquility of his population. Moreover, maintaining of peace and stable safety as the glorious treasure of the world were one of the most important and priority ideology of Islam Karimov’s leadership.

He could realize great accomplishments which were not implemented by any state leader or commanders before. That is, Islam Karimov curbed the interethnic constraint, extinguished the civil war, saved lives of hundreds of thousands or millions of people, and provided peace and tranquility in our republic and in the multinational region of Central Asia region.

On December 8, 1992 the Constitution of the Republic of Uzbekistan was adopted on the initiative of Islam Karimov and it constituted the legal basis of the independent state building.

The First President paid a particular attention to social issues, primarily to the development of healthcare system to ensure the health of our people, and the government programs aimed at improving the welfare of the population and their future. In particular, he was the creator of the program for further deepening of economic reforms and developing of a civil society, the National Program on Personnel Training, the qualitative changes in the field of education and healthcare, the gradual development of children’s sports, the construction of housing and infrastructure based on model projects in rural areas.

Rich customs and traditions of the Uzbek people have been restored. The names of famous scholars and poets, great statesmen, and the generals who sacrificed their lives for the country were honored. The national and spiritual heritage of Imam al-Bukhari, Imam at-Termizi, Bahouddin Nakshband, Khoja Ahmad Yassaviy, Al-Khorezmiy, Al-Ferghani, Ibn Sino, Mirzo Ulughbek, Alisher Navoi, Zahiriddin Bobur and many other great ancestors who had contributed greatly to the development of our national culture and world civilization were returned to our people, their birthdays were celebrated throughout the country, their souls were remembered, their works were published and historical monuments, mosques, museums registered under UNESCO heritage. Their cultural inheritance contributes to the efforts of our people in building a new society and facilitates the spiritual renewal of our community.

Since early days of independence Karimov established diplomatic relations and cooperation with many foreign countries. Total world saw the Uzbek people as the reflection of Islam Karimov.

While Uzbekistan was following the chosen way of development, Islam Karimov was the first among the CIS countries to promote the idea of setting up modern farms, supporting small business and private entrepreneurship, developing privatization and competition, and modernizing the manufacturing and service sectors, industries through the national entrepreneurship. Thanks to the wise policy of Islam Karimov during the years of independency our economy has grown almost six times, the real income per capita has risen by more than twelve times, and our gold and foreign exchange reserves have grown steadily. The share of industry increased from 14 per cent to 34 per cent. Growth rates of gross domestic product for the last decade have been keeping stable. Gratifyingly, the economy of Uzbekistan has become among the five fastest growing countries of the world.

Islam Abduganiyevich Karimov was an unique world-class leader which built world standard state building policy like Ustyurt and Shurtan gas-

<table>
<thead>
<tr>
<th>Impact Factor: ISRA (India) = 1.344</th>
<th>SIS (USA) = 0.912</th>
<th>ICV (Poland) = 6.630</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISI (Dubai, UAE) = 0.829</td>
<td>PHIIII (Russia) = 0.207</td>
<td></td>
</tr>
<tr>
<td>GIF (Australia) = 0.564</td>
<td>ESJI (KZ) = 4.102</td>
<td></td>
</tr>
<tr>
<td>JIF = 1.500</td>
<td>SJJF (Morocco) = 2.031</td>
<td></td>
</tr>
</tbody>
</table>
To produce vehicles, multiple large automobile plants such as GM Uzbekistan, SamAuto and MAN Auto-Uzbekistan has enabled to produce vehicles which can comply with new international standards.

Under the leadership of the First President Islam Karimov, modern roads and transport logistics infrastructure were built in Uzbekistan. In particular, the Angren-Pop railway system with a unique tunnel through the Kamchik pass was built. High-speed railway train launched, international airports were modernized. At the same time, Uzbekistan created comprehensive opportunities for the development of private property, entrepreneurship and small business. A new social layer - entrepreneurial class appeared in Uzbekistan. The consistent growth of the number of joint ventures established entirely at the expense of foreign capital is connected with the creation of a favorable investment climate for investors. This was evidenced by the fact that during the years of independence the investments in the amount of 190 billion USD, including foreign investments in the amount of 65 billion USD were attracted in the economy of Uzbekistan.

Uzbekistan is an attractive country for investments. This can be justified by the fact that famous joint-ventures – “General Motors”, “MAN”, “Klaas”, “Isuzu”, “Lotte chemical”, “Kogas”, “Daewoo Textile”, “Yang Von”, “Huawei”, “Peng Sheng”, “Maxami”, “Indorama”, “Nestle”, “Nobel”, “Rither” were established with the participation of foreign investors from over 90 countries such as the United States, Germany, Japan, South Korea, China, Spain, Switzerland, Singapore. Currently more than 4,000 joint ventures are successfully operating in our country. Cooperation with them enables to implement radical modernization of the national economy, introduction of modern technologies, improvement of production management, active access into the world markets with new products.

The creation of Navoi Free Industrial Economic Zone, Angren and Jizzakh Special Industrial Zones which provided investors wide tax concessions and preferences contributed to the development of high-tech enterprises. In addition, Gijduvan, Urgut and Khazarasp free economic zones and small industrial zones were established in 2017.

Nowadays cars and telecommunication equipment, computers and mobile phones, a wide range of consumer electronics, and many other products with the label of “Made in Uzbekistan” can be found not only in local but also in many foreign trade malls. Due to the ongoing global crisis when in many countries the demand for consumer goods is decreasing, in the middle of the current year 493 new enterprises were involved in export activities with resulted in production of 168 types of products and total sales in the world markets is over 64 million USD.

7. CHALLENGES OF UZBEK MODEL OF DEVELOPMENT TO THE WORLD COMMUNITY

Over the past 26 years, the concept of “Uzbek model” has come into our reality. Though it is not a long term for the history within a short period of time, the Uzbek model has successfully passed through three major challenges as a protection pillar of the economy.

1. First challenge. It was a transitional period of the young independent country covering the 90s of the last century. At the same time Uzbekistan was the first among the countries of the former Soviet Union to achieve macroeconomic stability and growth in the production of industry and Gross Domestic Product (GDP). In other words, the development turned out to be the only acceptable way to overcome negative consequences of the crisis.

2. Second challenge. Global financial crisis 2008. The development model has not only contributed to mitigation of the global financial and economic crisis, but also enabled to maintain the highest rate of economic growth (up to 8 percent per year) among 10 countries of the world.

   In this regard Islam Karimov also published the book by name of “The global financial and economic crisis, ways and measures to overcome it in conditions of Uzbekistan”. This book represented anti-crisis measures for 2009-2012 aimed at eliminating the negative effects of the global economic crisis and contains the program proposing the concept of a stronger, more stable and balanced development of the Uzbek economy after the crisis. Thus it’s not an exaggeration to say that the concepts developed by the First President in this book, made a valuable contribution to the economic theory.

3. Third challenge. Current changes occurring in the international markets and the unserved disagreements for fuel and energy resources, as well as the political and economic scandals in Arab countries are the major factor for the instability of many leading and emerging economies in the world accompanied with a sharp decline in their exports. On the contrary, the stability of Uzbek economy and enhancing the volume of exports once again justify the fact that Uzbek model of the development successfully passed the test and responded to the challenge of the world community.

8. MAIN RESULTS OF UZBEK MODEL AND ITS PROSPECTS

Consequently, the main results of the “Uzbek model” of our republic are the fact that even though Uzbekistan hasn’t achieved the accomplishments of the leading countries of the world, it could achieve...
significant results in the social sphere. All the programs of the “human factor” developed by the UN have been proven in Uzbekistan during the years of independence. In particular, appropriate activities aimed at the development of healthcare, science, culture and arts, sports – the spheres which are of vital importance to our society, the attention and care to older generation, women and youth, ensuring their rights and interests, protection of family, motherhood and childhood have been undertaken. At the same time, annual expenditures of the state budget on social spheres have gradually increased and over the past 10 years this indicator has exceeded 60 per cent.

The issue of upbringing the young generation as healthy and harmoniously developed people has become the most important aspect of the government policy. For this purpose, the Fund for the Development of Children’s Sports as well as a three-tier sports competitions system have been established. At the expense of the Fund, about 300 music and art schools and over 1900 sport facilities have been built in all provinces, cities and districts. During the last decade, regular sports involvement among children and teenagers has risen from 30 to 57 per cent, and among girls - from 24 per cent to 47 per cent. In this regard, the reputation of our country in the world ratings is increasing year by year.

On the initiative of the United Nations, scholars from the Columbia University in the United States have traveled to 158 countries to conduct social studies. According to the indicator “Worldwide Happiness Index” announced on the basis of the results of this survey, Uzbekistan was ranked 44th out of 158 countries involved in that study and recognized first among the Commonwealth of Independent States. It should be noted that as a result of significant improvement of the living standards of the population the maternal mortality rate has decreased by more than 2 times, infant mortality - by 3 times. Moreover, average life expectancy has prolonged from 67 to 73 years, and an average life expectancy of women has reached 75 years.

Winning 4 gold, 2 silver and 7 bronze medals at the XXI Summer Olympics in Rio de Janeiro, Brazil on 5-21 August, 2016 became a great victory for our policy aimed at developing the youth sports.

Our national economy has rapidly changed not only in terms of the size but also in terms of the quality. The share of industrial and service sectors have been steadily rising in the Gross Domestic Product.

Since the first years of independence, Islam Karimov set up a crucial task to solve food problems due to our own reserves, in particular, grain independence. Structure of cultivated lands, placement of agricultural crops was reconsidered and redistributed with the account of internal demand and conditions. Cotton didn’t remain as the only agriculture. As a result, food security and grain independence have been ensured in our country. Over the past years grain production has grown by 7 times, while grain yields have increased by more than 3 times.

A particular attention is being paid to the development of small businesses and private entrepreneurship with the account of the experience of the developed countries and the entrepreneurial skills and craftsmanship of our people.

Currently the share of non-government sector in the economy has exceeded 83 per cent. The share of small business and private entrepreneurship in the Gross Domestic Product increased by 54 per cent. Almost 98 per cent of agricultural products belong to the production of farmers and private entrepreneurs.

The most notable point is that small businesses and private entrepreneurship have become the most important factor which has enabled people to work freely basing on their own knowledge and skills, entrepreneurial abilities, to use the products manufactured, to own property, and to create sustainable income sources. At present, the share of income from entrepreneurial activity in the structure of the total population income accounts for over 50 per cent.

During the first years of independence, the share of food products in the total amount of imported products accounted for 73 per cent. Now this share does not exceed 10 per cent. On the contrary, from year to year the share of foodstuffs in exports is growing. At the same time, fundamental reforms in the agriculture have become the basis for changing the labor relations and the farmer became a true owner of the land. So farmers turned to be a decisive force of our society.

One of the most important and top priorities of the “Uzbek model” is a strong social policy. Market reforms have been based on this principle and it should be noted that they facilitated maintenance of social justice and stability in our society during the most difficult transition period.

Demographic situation was very complicated when our country gained its independence. There were no new work places created at all [12].

One of the most important factors of the development is undoubtedly peace and tranquility. The business community of the world also cooperates with stable, peace-loving countries where security is guaranteed.

Peace and religious tolerance in our country, atmosphere of love and interethnic harmony play an important role in the successful implementation of reforms in all spheres. That’s why “The foundation for all great achievements and accomplishments of Uzbekistan in the way of independent development is peace and tranquility, interethnic and inter-civilian harmony, mutual respect and harmony” - said the First President of our country.
The efficiency of the “Uzbek model” during 26 years is proven by the fact that Uzbekistan has occupied a worthy place in the world and achieved high goals. At present time the world leading organizations study the experience of Uzbekistan as a case study of the “Uzbek model” and forecast bright future of our country.

In particular, as of July 1, 2015, gross national incomes of the world countries per capita (calculated by World Bank Atlas method, in USD) are classified as follows [5].

Today, according to the World Bank, there are 31 countries with low income in the world, the number of lower middle income countries amounts to 51, high middle income - 53 and high income - 80. According to World Bank statistics, in 2014, Uzbekistan GDP per capita accounted for $2,090 and thus our country refers to the lower middle income countries.

Thus, with the aim of improving the situation and being among the countries with high middle income by 2030, with the account of current population it is necessary to double GDP per capita.

The average annual GDP growth per capita in Uzbekistan for 2004 - 2014 is 7 per cent. If such growth rates are maintained within 10 years, GDP per capita can double by 2025. It is well known that the high goals set by the government for the 2030 are the targets which can be accomplished in terms of our potential.

On January 4, 2011, one of the world largest financial institutions, HSBC Holdings plc, the «Eych-es-bi-sio» bank (the largest bank in Europe and the second in the world according to the capitalization level by Forbes magazine’s rating in 2011) has published an analytical study “The World in 2015” that includes forecasting indicators. Its forecasts are based on the level of development of the modern world economy and include opportunities and essential factors, such as current income per capita, law priority, democracy, education, and demographic changes in developing and market transition countries included.

Analysts determined 100 countries with probable achievements of the highest ratings by the economic growth according to three categories: Rapid growth (average annual growth of more than 5 per cent); Growth (average annual growth rate between 3 and 5 per cent); Countries that are expected to be stable (less than 3 per cent per year).

Thus, the current state of development used to be low, but in the shortest period of time it achieved significant renewal and modernization and in the nearest future the number of countries of the first category accounted for 26. They have the opportunity to “inherit” the world’s advanced technology for many years.

HSBC bank estimates that by 2050 GDP of Uzbekistan (in USD unchanged since 2010) will reach 314 billion, GDP per capita will be $8,859 and the economic development level will rise by 22 per cent to the 51st place in the world.

In order to achieve these results, average annual GDP growth in Uzbekistan will reach 8 per cent to the 51st place in the world.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Forecast of growth of income per capita</th>
<th>Forecast of GDP growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azerbaijan</td>
<td>6.1%</td>
<td>5.4% 4.8% 4.4%</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>3.6%</td>
<td>4.4% 5.0% 5.5%</td>
</tr>
<tr>
<td>China</td>
<td>6.5%</td>
<td>5.7% 5.1% 4.6%</td>
</tr>
<tr>
<td>India</td>
<td>4.0%</td>
<td>4.5% 4.8% 5.1%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3.0%</td>
<td>3.7% 4.2% 4.7%</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>5.9%</td>
<td>5.2% 4.7% 4.3%</td>
</tr>
<tr>
<td>South Korea</td>
<td>3.7%</td>
<td>3.4% 3.1% 3.0%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>5.4%</td>
<td>4.6% 4.1% 3.6%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1.5%</td>
<td>2.5% 3.5% 4.4%</td>
</tr>
<tr>
<td>Philippines</td>
<td>6.1%</td>
<td>5.6% 5.2% 4.8%</td>
</tr>
<tr>
<td>Singapore</td>
<td>3.6%</td>
<td>3.2% 2.7% 2.3%</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>5.2%</td>
<td>5.2% 5.0% 4.9%</td>
</tr>
</tbody>
</table>
From the data stated in Table 1 it is obvious that by 2015 the highest and the most reliable indicator of average annual growth of the GDP belong to Philippines and Uzbekistan among Asian countries.

9. RECOGNITION OF THE “UZBEK MODEL” OF DEVELOPMENT BY THE WORLD COMMUNITY AT PRESENT TIMES

The ideas, concepts and proposals developed by the First President Islam Karimov in his book “The world financial and economic crisis, ways and measures to overcome it in conditions of Uzbekistan” were appreciated by Lee Fenlin, the member of State Council of China at the International scientific-practical conference held in Tashkent on May 22, 2009. He mentioned that “It is important to study the experience of Uzbekistan and to take an example from it. It should be noted that Uzbekistan is occupying a leading position in its region”. The consistent implementation of the Uzbek model radically changed the economic and social image of our country. Currently Uzbekistan has obtained a position among the few countries in the world which are developing steadily, actively and dynamically. Great achievements in social and cultural spheres are widely recognized and appreciated by prominent international organizations and experts.

Hans Joachim KNAUPE, CEO of the International Academy of Economics in Berlin, commented on this point: “The most perfect, accurate and well-developed Anti-Crisis Program of Uzbekistan, as well as the economic reforms under complicated conditions of the crisis, reflects the important priorities and measures leading to progress in the post-crisis period. It will undoubtedly serve as a promising program for many countries”.

Indeed, the growth rate of GDP in the country remained stable at the point of over 8 per cent even during the world financial-economic crisis and this fact was very surprising for the world community, including international experts and famous economists.

In particular, the Mission of the International Monetary Fund (IMF) noted Uzbekistan had consistently progressed and was successfully undertaking steps to overcome consequences of the global financial crisis, and thus it became possible to give a positive forecast about maintaining high growth rates in the middle-run perspective. In this regard, the world-wide recognized “Uzbek model” of the development maintained stable high rates of economic growth and macroeconomic balance in 2012 despite the global financial crisis. In particular, last year the country’s GDP grew by 8.2 per cent, industrial production - by 7.7 per cent, agricultural production - by 7.0 per cent. The state budget was executed with a surplus of 0.4 per cent in relation to the GDP. The inflation rate did not exceed the determined forecast.

According to the World Bank Group, if 10 years ago an entrepreneur needed 276 days to launch its business, currently this process requires less than a week in Uzbekistan and complies with the indicators of high income countries. Such measures aimed at improving the business environment are reflected in the rating of international economic organizations. For example, in the short run, our country improved its indicators for almost 70 points.

At present, more than three-quarters of all employed people in Uzbekistan are engaged in the private sector. They also were set up an objective to increase the volume of processing raw materials on the basis of modern technologies application, to enhance the export of ready-made goods and to develop the service sector. The proprietors and entrepreneurs, who even didn’t exist 25 years ago, currently have become the dominant power of the economy.

“The Uzbek government does not make high-profile political statements and is not engaged in political aggression”, - says Viktor Matyashov, the editor-in-chief of the “The World says” newspaper.– It is undertaking concrete practical steps to regulate the economy and construct the state. Since the earliest days of independence, every effort made by Uzbekistan has been closely monitored by far and near neighbors. The enthusiasm for establishing contacts with the younger countries with favorable geographical conditions, natural resources and human resources has been intensifying year by year.

Implementing a reasonable and comprehensive policy on raising the living standards of low and middle income population based on the “Uzbek model” relevant measures to prevent the sharp decline in society have been taken. In 2015, the gap - so called “decel factor” - between 10 per cent of wealthy population and 10 per cent of insufficiently socially-secured population accounted for 7.7 per cent. The internationally recognized Jini Index, i.e.
the polarization indicator of the population, was 0.280, which was much lower than in many developed and developing countries.

In this regard, the following figures are noticeable: real incomes of the population increased by 11 per cent in 2016, salaries of budget organizations increased by 15 per cent, pensions and social benefits grew by 12.1 per cent. These figures indicate that our government cares about its citizens in conditions of declining social payments due to the ongoing global financial crisis.

Sustainability, the aforementioned factors, as well as the ever-improving transport industry, attractive investment climate, and high position in the international rankings - all attract new investors ready to cooperate with Uzbekistan. Investments into our economy, mainly for the implementation of projects for modernization, technical and technological renovation just in 2016 itself increased by 10 per cent and amounted to $ 16.6 billion. At present time in the territory of Uzbekistan which is integrating into the world economy, over five thousand enterprises with the participation of foreign capital operate on the basis of mutually beneficial cooperation. Reforms based on the “Uzbek model” have always been highly appreciated by experts. In particular, the World Economic Forum included Uzbekistan among the five rapidly growing countries.

According to the opinion of Iveta Grigule, the chairperson of the European Parliament’s delegation on cooperation with the Central Asian countries (worldnews.uz), “Uzbekistan has made unprecedented achievements during the years of independence in comparison with the situation which used to be 25 years ago. At present time Uzbekistan is demonstrating its dynamic development in all spheres. It has become the country that pays a particular attention to ensuring the safety of his citizens, improving their material welfare and social protection, and providing them with access to diverse services”, - said a member of the parliament.

As a result of large-scale comprehensive reforms, the economy of Uzbekistan has grown several times, and if its population has increased by one and a half times, the income per capita has risen significantly. The look of our cities, towns and villages has radically changed, and modern production and social infrastructure has been created. All this is a practical expression of the successful implementation of the “Uzbek model” of development, the policy of reforms being pursued for the prosperity of the country and every citizen.

A major conference on the study of the rich heritage of the great scholars living in the land of Temurids, was held recently at the Leiden University in the Netherlands. There is a great deal of positive feedback not only about our ancestors, our philosophers, but also about the modern development of Uzbekistan [7].

Japanese experts also published the article on the life and activities of the First President of Uzbekistan, Islam Karimov, in “The Japan Times”. The article notes that Karimov has developed a program of reforms based on five principles that are recognized as the Uzbek model of development all over the world. In addition, the article touches upon creation of completely new high-tech industries in the country, construction of world-class industrial facilities, building of modern road-transport and engineering-communication infrastructure. It should be noted, that thanks to the reforms made on the basis of the “Uzbek model” of development, Uzbekistan economy joined the list of five the most rapidly growing economies in the world.

The First President developed and implemented the Concept of foreign policy, based on Uzbekistan’s commitment to peace, non-interference in the internal affairs of other states and only peaceful, political resolution of disputes. It is well-known that the head of the state made a great contribution to the maintenance of peace and stability in the region and around the world. Islam Karimov has set up the foundation for a completely new system of education and upbringing of the younger generation, who is considered to be a decisive and powerful force of today and tomorrow. In fact, the First President of Uzbekistan has dedicated his boundless love to the people and his whole life to the devotion to the motherland [8].

The world-famous “FORBES” magazine on September 14, 2017 published the article on economic reforms of Uzbekistan and on the internal and foreign policy implemented by the President Shavkat Mirziyoyev. It should be noted that the President of the Republic of Uzbekistan, Shavkat Mirziyoyev, who was elected after Islam Karimov, is being recognized as a new Uzbek leader in the world.

Shavkat Mirziyoyev has proven to the Eurasia observers and international experts that the largest military base in the region has finally been modernizing its economy and establishing friendly relations with other countries in this process.

Uzbekistan is preparing for full currency convertibility by 2019 and is developing its free trade zones through the major regions of the country. Their external debt is less than 20 per cent of GDP. When Kazakhstan started its rapid growth, Uzbekistan was still behind in GDP. However, unlike Kazakhstan, Uzbekistan has never experienced a huge debt and at the time when a sharp decline for raw materials was observed, our country has successfully overcome this difficulty. It has been recognized that in 2016, the economy of Uzbekistan, like the Chinese economy, has grown by 7 per cent.

“World Giving Index 2017” has announced a new rating paying a particular attention to the people

<table>
<thead>
<tr>
<th>ISRA (India)</th>
<th>SIS (USA)</th>
<th>ICV (Poland)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.344</td>
<td>0.912</td>
<td>6.630</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>PHHII (Russia)</td>
<td>PIIF (India)</td>
</tr>
<tr>
<td>0.829</td>
<td>0.207</td>
<td>1.940</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>ESJI (KZ)</td>
<td>IBI (India)</td>
</tr>
<tr>
<td>0.564</td>
<td>4.102</td>
<td>4.260</td>
</tr>
<tr>
<td>JIF</td>
<td>SJIF (Morocco)</td>
<td></td>
</tr>
<tr>
<td>1.500</td>
<td>2.031</td>
<td></td>
</tr>
</tbody>
</table>
of Uzbekistan. According to this rating, among other
Central Asian countries, the most generous people
live in Uzbekistan. According to the organizers of
this rating, 40 per cent of population in Uzbekistan
deal with charity activities and in Kazakhstan this
indicator accounts for 30 per cent. Uzbekistan ranks
38th in the world rankings and neighboring
Tajikistan are on the 50th place and Turkmenistan is
on the 69th place, Kirgizstan is on the 85th place and
Kazakhstan occupies 87th place. The rating analysis
shows that in Central Asia Uzbekistan is recognized
by the world community because of its way of
development and a generous contribution of the
population to the charity.

It is a well-known fact that the concepts and
opinions expressed by Uzbekistan on the
international platforms aimed at solution of urgent
problems are justified. One of the most prestigious
organizations in the world is the United Nations
Organization in which session each speech of the
President of the Republic of Uzbekistan has always
been warmly welcomed by the people of the world.

Although the Republic of Uzbekistan became
the UNO member on March 2, 1992, Islam
Karimov made the first speech at the 48th session of
the UN General Assembly in New York in 1993
on the transformation of the Central Asian region
into a nuclear-weapon-free zone. As a result, the
Treaty “On the establishment of a nuclear-weapon-
free zone in Central Asia” came into power on March
20, 2009. This very initiative was later appreciated as
a timely and reasonable initiative by Tijey Bouz, an
expert at the Center for the Study of Nuclear
Weapons Prevention at the Monterey Institute for
International Studies.

The second participation of Islam Karimov
in the UN General Assembly devoted to the UNO
50th anniversary celebration was in 1995. In his
speech he promoted the idea of preventing the
problem of terrorism and the conflicts in neighbor
Afghanistan.

The third participation of Islam Karimov in
the “Millennium Summit” of the UN General
Assembly happened in 2000. In his speech he
offered solutions to the challenges of international
terrorism and drug trafficking; ensuring regional
security, including stability and security in the
Central Asian region; improving the global security
system, reforming the structure and functioning of
the United Nations Organization.

At his fourth participation in the plenary
session of the UN General Assembly on
Millennium Development Goals in 2010, Islam
Karimov emphasized that security, stability and
sustainable development in the region and
environmental protection are among the priorities.

Proposals and recommendations aimed at
solving urgent problems in the international arena
have always been reflected in the international arena.

This time this tradition was followed by Shavkat
Mirziyoyev at the UN summit. On September 19,
2017, at the 72nd session of the UN General
Assembly the President of the Republic of
Uzbekistan Shavkat Mirziyoyev has stated that it is
necessary to implement the principle “human
interests are superior to all”. In addition, he has made
proposals aimed at ensuring security of Central Asian
countries and strengthening regional cooperation,
solving the problems with the Aral Sea and regional
water areas, peace issues in Afghanistan. Moreover,
he has tackled such crucial issues as the formation of
youth policy and the development of the UN
Convention on the Rights of the youth, the role of
mass media as well as Islam as a holy religion and
tried to promote his ideas to the people all over the
world.

10. UZBEKISTAN IS A WORTHY FOLLOWER
OF DEVELOPMENT

Islam Abduganiyevich Karimov left his dear
people and his beloved motherland as well as respect
gained within many years to his follower who had
been proven on different positions under various
complicated circumstances, Shavkat Miromonovich
Mirziyoyev with the words “Good luck!”. On
September 2, 2016 people of Uzbekistan saw off the
head of the state with the greatest sorrow and grief in
his last way. The whole Uzbek nation expressed the
wish to continue their life and development with
Shavkat Miromonovich Mirziyoyev. Wherein
Shavkat Mirziyoyev started his activity on the
position of the President of our country with the
words: “Our dear and respected person, Islam
Abduganiyevich Karimov, is not with us today.
However, in our activity we will always rely on the
implementation of “Uzbek model” of the
development worked out by our First President as
well as on strategic principles of creating a modern
country”.

Shavkat Mirziyoyev, a devoted follower of
President Karimov, began his policy with
communication with the whole society. A particular
attention was paid to the welfare of the people of
Uzbekistan, national economy, relations of the rest
countries of the world for maintenance regional
peace and prosperity.

In order to achieve the goals set up by Islam
Karimov it is necessary to constantly and tirelessly
work on February 7, 2017 Shavkat Mirziyoyev
signed the Decree No-4947 “On Action Strategy for
the Further Development of the Republic of
Uzbekistan”.

Shavkat Mirziyoyev knew his preceptor Islam
Karimov and his position to sacrifice his life to the
beloved people and motherland from the first steps of
independence. Therefore, President Mirziyoyev
commented: “Islam Abduganiyevich Karimov was a
great and wise policy-maker, long-sighted and
Impact Factor:

<table>
<thead>
<tr>
<th>ISRA (India)</th>
<th>1.344</th>
<th>SIS (USA)</th>
<th>0.912</th>
<th>ICV (Poland)</th>
<th>6.630</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
<td>PIIH (Russia)</td>
<td>0.207</td>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
<td>ESJI (KZ)</td>
<td>4.102</td>
<td>IBI (India)</td>
<td>4.260</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
<td>SJIF (Morocco)</td>
<td>2.031</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

strategic thinker who had the ability to perceive the complicated events and situation ongoing in the world and different regions from the all point of views of the nationhood. Moreover, he was the leader with a strong feeling of responsibility for the country and people, as well as for each citizen. Islam Abduganiyevich was elected as the leader of the country in the most complicated and difficult period of our national history with severe interethnic clashes and other contradictions, while the risk of the civil war in our country was high, our economy experienced the deepening crisis, when past days had come to the and a new prospective era started. His mercy and blessings to the beloved people of the country was invaluable. The noblest qualities of Islam Abduganiyevich, such as strong will, dedication, courage and patriotism, humanity and justice, sincerity and kindness, are a vivid example for all of us"[9].

In accordance with on January 25, 2017 the President of the Republic of Uzbekistan issued the Decree № 2744 “On perpetuation of the memory of Islam Abduganiyevich Karimov, the First President of the Republic of Uzbekistan” [13]. According to this Decree, with the aim of perpetuation of the the First President, the Hero of Uzbekistan, bright memory of Islam Abduganiyevich Karimov the following measures have been undertaken: the Republican charity fund named after Islam Karimov has been established, the mosque located in Tashkent has been given the name “Mosque of Islam ota”, the scientific-cultural monumental complex named after Islam Karimov has been established in Oksaroy residence in Tashkent, museum of Islam Karimov has been founded in Samarkand, works on constructing the memorial devoted to the memory of Islam Karimov are being implemented in his motherland – Samarkand. Tashkent State Technical University, Automobile construction plant in Asaka, Museum of arts in Fergana, Tashkent International airport, avenues of cities and regions have been named after Islam Karimov. State scholarship has been introduced for the students of higher educational establishments. The 30th of January, the birthday of the First President, and the end of September, memory day are expected to be memorized.

In a short period of time, Shavkat Mirziyoyev justified the trust of the nation and his preceptor. First of all, Mirziyoyev went into the public and expressed his interest in issues of the nation and activity of entrepreneurs with sufficient government support.

In addition, he has also numerous deal and projects on innovation development of the national state building. During in this short period of time the President paid a particular attention to the foreign relations and cooperation which he could already made 25 state visits to 8 countries.

Experts in business circles and analysts say that the rational and far-sighted policy is currently being pursued by the President Shavkat Mirziyoyev, and reforms being implemented are not only effective, but also serve as a case-study for other countries on the achievements of Uzbekistan in the development of the market economy.

11. CONCLUSION

Grateful to the efficiency of the “Uzbek model” proven during past 26 year’s period of time Uzbekistan has gained a worthy place in the international cooperation and achieved significant accomplishments. Currently reputable organizations of the world confidently believe in the great future of the Republic of Uzbekistan created based on the “Uzbek model” and highly appreciated that present time independent Uzbekistan able to cooperate and negotiate with majority countries in East and West. Islam Karimov could not had been achieved these glorious accomplishments by himself for his presidency.

The reason for this is his contribution to the prevention of the interethnic bloody conflict in the 1990s and improvement and smoothening of the situation, bringing the country in the global partnership as an independent, liberal, democratic, secular, constitutional, sovereign state, avoiding complicated circumstances and ensuring a prosperous life for the Uzbek nation. He lead the youth as his “own children” on the way of progress and stability, implementation of all reforms for the development of the country, society, mahalla and family by only continuous hard work and prospective research.

In general, the dedication of Islam Karimov to the Uzbek nation and the Motherland was reflected in his great deeds. Therefore, a great contribution of our First President to the international relations development will be recorded as the history of our famous ancestor Amir Temur and will remain as an invaluable and precious inheritance to the Uzbek people.

The main development principles of the “Uzbek model” have turned into the nationwide slogans: “Uzbekistan is a state with a great future”, “Independence – is, the law, first of all”, “Don’t destroy the old house without constructing an old one”, “Reforms are not for reforms themselves but for the person”, “The Uzbek people will never depend on anyone", “Let us have a free and prosperous homeland” which constitute the modern theory of the socio-economic development and serve as a basis for the thousand years development of the Uzbek nation.

In addition, our people refer all the results and accomplishments achieved during a short period of time particularly to the name of the First President
**Impact Factor:**

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>RIINCS (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
</tbody>
</table>

Islam Karimov, and consider them to be unique merits of the great state leader.

The First President Islam Abduganiyevich Karimov will live forever in our memory and hearts as the founder of the independent state, the great statesman and policy-maker, patriot and devoted child for the Uzbek people.

**References:**

13. (2017) The Decree of the President of the Republic of Uzbekistan № 2744 “On perpetuation of the memory of Islam Abduganiyevich Karimov, the First President of the Republic of Uzbekistan”.

**ISPC Generalization of scientific results,**

Philadelphia, USA 39
SECTION 32. Jurisprudence.

PREVENTION OF MANIFESTATIONS OF EXTREMISM AND TERRORISM IN THE PENITENTIARY SYSTEM OF THE KYRGYZ REPUBLIC

Abstract: The article focuses on the activities of state bodies and public institutions in the search for effective ways to reform the system of criminal penalties in countering the manifestations of extremism and terrorism. 

Key words: extremism, terrorism, crime prevention in the penitentiary system, penitentiary system. 

Language: Russian English

Citation: Kenjebek kyzy M (2017) PREVENTION OF MANIFESTATIONS OF EXTREMISM AND TERRORISM IN THE PENITENTIARY SYSTEM OF THE KYRGYZ REPUBLIC. ISJ Theoretical & Applied Science, 12 (56): 40-44.

Профилактика проявлений экстремизма и терроризма в пенитенциарной системе Кыргызской Республики

Аннотация: В статье уделяется внимание деятельности государственных органов и общественных институтов в поиске эффективных путей реформирования системы уголовных наказаний в противодействии проявлениям экстремизма и терроризма.

Ключевые слова: экстремизм, терроризм, профилактика преступлений в уголовно-исполнительной системе, пенитенциарная система.

Materials and Methods

Внимание государственных структур и общественных институтов в последние два десятилетия обращено на поиск наиболее эффективных путей реформирования системы исполнения уголовных наказаний, приспособления ее к реалиям современного государства [5, с. 14].

В настоящее время реализуется комплекс правовых реформ, направленных на совершенствование и развитие национальной пенитенциарной системы [1, с. 34]. Профилактика проявлений экстремизма и терроризма в местах лишения свободы утверждают свою идеологическую систему взглядов. Попав в тюрьму, не считают осуждение наказанием. К внешним тяготам и лишениям относятся, как к «испытаниям Аллаха». Человеку же, не имеющему устойчивых взглядов, психологически трудно адаптироваться к изоляции.
представляет собой целый комплекс мер. Функции пенитенциарной системы постепенно разворачиваются от карательной направленности в сторону ресоциализации. Приоритеты отдаются трудозданности, психическому и физическому здоровью, как ключевым факторам адаптации в местах заключения и на воле. В тюрьме незанятый человек — легкая добыча для экстремистов. Занятые — напротив дисциплинированы, не совершают новых преступлений, легче адаптируются в обществе, имея навыки труда. Успех ресоциализации зависит от убежденности заключенных в том, что за стенами колонии они не будут изгоями. Предпосылками к радикализации заключенных являются религиозная безграмотность и низкий уровень образования. Поэтому на регулярной основе ведутся идеологические и пропагандистские мероприятия с привлечением психологов, теологов, религиоведов, представителей духовенства. Немаловажна постоянная связь осужденных с близкими родственниками. Важно менять отношение общества к лицам, освободившимся из мест лишения свободы. По-прежнему, недостаточно изучены сферы радикализации женщин и несоответственности в исправительных учреждениях. В этом ключ заложено внимание мнение экспертов о том, что последователей религиозного экстремизма и терроризма надо принимать, как пострадавших от внешнего воздействия. Ключевую роль в их реформации должна быть отведена психологам и психиатрам. Немаловажную роль играет отношение к осужденным администрацией мест заключения и условий, в которых они содержатся. Исследование статистических материалов в местах лишения свободы Кыргызстана содержит 185 человек, осужденных за преступления террористической или экстремистской направленности [12].

В 2009 году только 51 заключенный отбывал срок за экстремизм и терроризм. Сразу, по данным ГСИН при Правительстве Кыргызской Республики, это число превысило 185, включая 7 женщин. Среди этих осужденных: «84 человека, впервые совершенших преступление; 38 человек находятся в тюрьмах строгого режима». Среди задержанных экстремистов 22 человека обвинены в боевых действиях в Сирии. А также 97 членов «Хизб-ут-Тахрир» [13].

С этой категорий теологии и сотрудники тюрем постоянно проводят разъяснительную работу об опасности экстремистских идей. После бесед с теологами и психологами они начинают сомневаться в правильности экстремистских идей и отказываются от них. На разубеждение религиозного экстремиста уходит от нескольких месяцев до полутора лет.

Она дает свои плоды, имеют место случаи, когда осужденные экстремисты отрекаются от идей радикализма. О преступлениях экстремистской направленности позволяет сделать вывод о том, что они представляют реальную угрозу для безопасности страны.

Кыргызские тюрьмы переполнены, плохие условия содержания недостаточное финансирование. Заключенные, а также их вести с родственниками и друзьями и их входящие письма и пакеты, находятся под постоянным наблюдением, изучаются литература среди заключенных, так как имеются факты передачи запрещенной экстремистской литературы другим осужденным. В 2015 году был принят закон о внесение поправок в Уголовный Кодекс, в соответствии с которым осужденные экстремисты содержатся отдельно от остальных. Теперь экстремистов содержат в отдельных камерах. Не только Кыргызстан, но и пенитенциарные системы многих стран еще не разработали действенных мер по предупреждению распространения экстремистских идей в местах лишения свободы. Устаревшая инфраструктура, недостаточное финансирование, условия работы, дефицит квалифицированных кадров являются факторами, препятствующими эффективной реализации государственной политики по предупреждению экстремизма в пенитенциарных учреждениях.

Обстановка на Ближнем Востоке, вербовка граждан КР в зоны боевых действий, сложная обстановка в Афганистане, рост религиозного экстремизма. По мнению экспертов, все эти факторы влияют на проявление терроризма в республике.

Как показало исследование, в Кыргызстане 85 процентов членов и сторонников МТО попали под их влияние через идеологическую обработку. Основная причина религиозного экстремизма в стране — дефицит информации. Граждане не могут получить полноценные данные в конфессиональной сфере, поэтому начинают искать сами. Интуитивное, где натыкаются на экстремистские материалы, не осознавая этого [11].

Основные направления политики в сфере исполнения уголовных наказаний определяются комплексом факторов, среди которых наиболее значимыми можно назвать социально-политическое, экономическое, нравственное состояние общества в целом, так и отдельных гражданских институтов и граждан.

Так, результатом разработки ученых явилась научно-теоретическая модель законодательства уголовно-исполнительной системы, предлагающая в качестве основных принципов следующими пунктами:
– принцип учета достижений научной мысли, отраженных в концептуальных документах и нормах конституционного, уголовного, уголовно-исполнительного, уголовно-процессуального, административного и иного законодательства;
– принцип отражения реально применяемых наказаний и иных мер уголовно-правового характера;
– принцип учета результатов научных исследований отечественных и зарубежных ученых;
– принцип учета современного и исторического опыта исполнения уголовных наказаний и иных мер уголовно-исполнительного характера в зарубежных странах;
– принцип всестороннего и полного регулирования общественных отношений, входящих в предмет регулирования уголовно-исполнительного законодательства;
– принцип приоритета учета интересов гражданского общества;
– принцип учета решений Европейского Суда по правам человека, Верховного Суда и Конституционного Суда Кыргызской Республики;
– принцип учета рекомендаций (деклараций) международных организаций по вопросам исполнения уголовных наказаний и обращения с осужденными [5, с. 17–24].

Основными проблемами, требующими разрешения в рамках научно-теоретической модели законодательства УИС названы проработка предмета уголовно-исполнительного права; закрепление целей уголовно-исполнительного законодательства; отражение реально применяемых наказаний и иных мер уголовно-правового характера; отражение принципа всестороннего и полного регулирования общественных отношений, входящих в предмет уголовно-исполнительного права [5, с. 24-27].

Одной из современных негативных устойчивых тенденций в уголовно-исполнительной системе является проникновение в пенитенциарные учреждения экстремизма на фоне радикализации и роста преступной активности осужденных.

Проявления экстремизма в пенитенциарных учреждениях выражаются в широком распространении радикальных форм ислама; в вербовке осужденных в исправительных учреждениях и СИЗО с целью последующего их участия в террористической деятельности; распространении религиозных (а в сущности – псевдорелигиозных) материалов экстремистского содержания в СИЗО, колониях, тюрьмах; интеграции общегосударовой организованной преступности и преступности экстремистского и террористического характера[4, с. 47-50].

По имеющимся данным, действуют «тюрьменные джамааты» (официально существование «джамаатов» ГСИН отрицает) [4, с. 48]. Радикальные исламисты осуществляют вербовку не только «этических мусульман», но и других осужденных. При этом, как отмечает И.М. Усманов, особую активность при вербовке новых сторонников проявляют так называемые новообращенные мусульмане [10, с. 52–53].

Наиболее опасные вызывает тот факт, что места принудительного содержания входят в число прочих основных источников и каналов вербовки молодежи в запрещенные на территории страны экстремистские и террористические движения и организации [6].

На наш взгляд, противодействие преступления экстремистской направленности в этой области требует дальнейшего совершенствования методов подготовки работников уголовно-исполнительной системы по овладению новейшими психологическими и педагогическими методиками и технологиями воздействия на поведение осужденных за совершение преступлений экстремистской направленности (и/или входящих в группу «риска»), с учетом их уголовно-правовой, индивидуально-психологической характеристики; межличностных связей с другими заключенными – криминальными лидерами, активными участниками группировок осужденных отрицательной направленности, а также лицами, замеченными в распространении радикальных идей, литературы и предметов экстремистского характера.

Следует отметить, что указанная ситуация усугубляется ростом преступной активности в местах принудительного содержания, что обуславливается спецификой самого процесса исполнения уголовного наказания в виде лишения свободы, формирующего у осужденных чувство протеста и, как следствие, различные конфликты и связанные с ними криминальные деяния [2, с. 13]. Роль криминальных лидеров и активных участников группировок осужденных отрицательной направленности в создании (провокациях) конфликтов эксперты при этом оценивают в 3,2 балла, и 2,7 балла отводят деятельности криминальных группировок, которые привлекают к совершению преступлений экстремистской направленности [1, с. 17–24].

Наибольшую актуальность исследование пенитенциарных конфликтов, по мнению Н.С. Емельянова, приобретает в период активного реформирования уголовно-исполнительной системы [1, с. 4].

К основным криминогенным факторам протестной активности в местах принудительного содержания можно отнести:
– социально-психологическую направленность, вызванную неоднородным развитием сотрудников ГСИН (побои, побои, пытки, унижение, сексуальное насилие, нарушение права на отправление религиозных обрядов);
– социально-экономические индикаторы, отражающие общий уровень недобольства условиями содержания (нарушение порядка освобождения, материально-бытового и медико-санитарного обеспечения осужденных);
– отсутствие должной организации контроля со стороны администрации исправительных учреждений;
– недостатки внутренней регуляции поведения осужденных (агрессивность, недержанность, вспыльчивость, жестокость, низкий нравственный уровень личности, пониженная сопротивляемость негативным влияниям среды) и др. [14, с. 78; 8, с. 588].

С учетом сложившейся криминогенной ситуации в органах и учреждениях УИС считаем актуальным и своевременным предложение А.М. Калужиной о разработке концепции информационно-аналитического обеспечения оперативно-розыскной деятельности (ОРД) в УИС, направленной на совершенствование ОРД и системы информационного обеспечения оперативных подразделений УИС [3, т. 6, с. 22-23].

Однако Лещенко, процесс преобразования уголовно-исполнительной системы совпал с активной фазой процесса десекуляризации – постепенного возвращения религии в социально-культурную жизнь народа, существенного повышения значимости роли религиозной веры, что также требует внесения в действующее законодательство соответствующих изменений и дополнений в части проведения психологической работы с осужденными [7, с. 3].

Закрепление обязательного участия осужденных в различных формах психологической работы в случаях, предусмотренных законом или приговором суда, отражено в научно-теоретической модели законодательства УИС [5, с. 44].

**Conclusion**

Таким образом, к приоритетным направлениям дальнейшего совершенствования и развития уголовно-исполнительной политики в сфере противодействия преступлениям экстремистской направленности в условиях радикализации и роста протестной активности следует отнести:

1. Совершенствование методов подготовки работников уголовно-исполнительной системы, владеющих новейшими психологическими и педагогическими методиками и технологиями воздействия на поведение с учетом уголовно-правовой и индивидуально-психологической характеристики осужденных.

2. Дальнейшую разработку для лиц, осужденных за преступления экстремистской и террористической направленности, базовых (обязательных) программ психологической коррекции личности для формирования социальной направленности осужденных, профилактики деструктивных проявлений, повышения религиозной и правовой грамотности, исключающей «спекуляцию» и манипулирование религиозными канонами, формирование толерантного религиозного сознания среди осужденных; с разработкой механизмов проведения подобных обязательных мероприятий, проводимых на основании приговора суда, с последующим внесением соответствующих изменений в действующее законодательство Кыргызской Республики.

3. Создание системы противодействия распространению различных форм экстремистских проявлений среди осужденных на основе разработки концепции информационно-аналитического обеспечения ОРД в УИС.

4. Совершенствование уголовно-исполнительного законодательства.

**References:**

Impact Factor:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>PII (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>3.860</td>
</tr>
<tr>
<td>IB (India)</td>
<td>4.260</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>2.031</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>3.860</td>
</tr>
</tbody>
</table>


SECTION 32. Jurisprudence.

TOPICAL ISSUES OF COUNTERING RELIGIOUS EXTREMISM IN PRISONS

Abstract: In this article the author made an attempt to disclose the role of agitational activity of preachers of Islamists, directed not only to Muslim convicts or convicts of other religions, but also to search for, recruit and use for illegal purposes employees and employees of the penal system.

Key words: religious extremism, counteraction to religious extremism, propaganda of extremism and terrorism in places of imprisonment.

Language: Russian

Citation: Kenjebek kyzy M (2017) TOPICAL ISSUES OF COUNTERING RELIGIOUS EXTREMISM IN PRISONS. ISJ Theoretical & Applied Science, 12 (56): 45-49.

АКТУАЛЬНЫЕ ВОПРОСЫ ПРОТИВОДЕЙСТВИЯ РЕЛИГИОЗНОМУ ЭКСТРЕМИЗМУ В МЕСТАХ ЛИШЕНИЯ СВОБОДЫ

Аннотация: В данной статье автором сделана попытка раскрыть роль агитационной деятельности проповедников исламистов, направленной не только на осужденных-мусульман или осужденных других вероисповеданий, также и на поиск, вербовку и использование в противоправных целях сотрудников и работников уголовно-исполнительной системы.

Ключевые слова: религиозный экстремизм, противодействие религиозному экстремизму, пропаганда экстремизма и терроризма в местах лишения свободы.

Introduction
В последнее время возникают негативные ситуации, связанные с проявлением религиозной вражды, межконфессиональных конфликтов и проявлением религиозного экстремизма, несмотря на наличие правовых гарантий, призванных содействовать цивилизованному развитию отношений между религиозными организациями и государственными институтами [2, с. 3]. Религия, которая, вроде бы считалась архаической формой культуры, теперь оказалась в центре самых драматических событий современной истории, и ее идеи и сегодня органически вписываются в мироощущение человечества [1, с. 371].

Materials and Methods
Бурная миссионерская деятельность проповедников привела к популяризации идеологической доктрины исламистов в начале 90-х это способствовало также распространение и тиражирование соответствующей литературы иностранными центрами и фондами.

Позже опираясь на наиболее идеологически подготовленных и непримиримо настроенных вероисповеданий, также и на поиск, вербовку и использование в противоправных целях сотрудников и работников уголовно-исполнительной системы. Участники подпольных исламистских ячеек, находятся как на нелегальном так и на легальном положении активно работают над политизацией и социализацией своих учений. Данные лица, тесно взаимодействуют в решении своих политических задач, оказывая друг другу поддержку. Причем категория латентных исламистов представляет пожалуй даже большую проблему потому что таких сложнее выявить, классифицировать и привлечь к ответственности.

Ряд исследователей в том числе и зарубежных полагают, что существенную роль в радикализации ислама сыграли внешне
факторы, а именно вмешательство США в политику стран Ближнего Востока. На фоне агрессивной масштабы США и их сторонников в страны с традиционным многовековыми национально-культурными и религиозными ценностями совершенно очевиден был силовой ответ этим поползновениям. Совершенно очевидно, то в традиционном понимании этого слова воевать с США никто не будет. Поэтому вольно или невольно в последнее время широкое развитие получил религиозный терроризм [1, с. 374].

Еще в середине XX века Р. Шарль отмечал негативную роль США в данном регионе: «беззастенчивость американских лавочников, поощряющих туземцев бросить иго, – это все способствовало развитию националистических настроений, приводящих в некоторых мусульманских странах к взрывам» [4, с. 125].

Применительно к реалиям современности можно отметить, что Америка уже не ограничивает себя в «поощрении туземцев бросить иго» только лишь мусульманскими странами, а значительно расширили географию своей деятельности, включив в свой перечень и страны Европы. Не пренебрегая при этом попытками силового вмешательства в различные внутренние конфликты, ставшими для США обычным делом; «в сознании миллионов людей на планете Америка все чаще воспринимается не как образец демократии, а как игрок, который делает ставку исключительно на грубую силу, склоняя под конкретную ситуацию коалиции с лозунгом «кто не с нами – тот против нас» [8].

Религиозному экстремизму противостоит просвещенный традиционный ислам, для которого характерны умеренность, трезвость и толерантность. Ислам, являясь аврамической религией имеет множество схожих черт с христианством или иудаизмом среди которых поддержание и развитие общечеловеческих ценностей, пропаганда доброты толерантности и терпимости. Мусульманская община вносит весомый вклад в развитие межнационального и межрелигиозного диалога, активно взаимодействует с государственными и общественными организациями в делах благотворительности и просвещения, в воспитании подрастающего поколения. Такая плодотворная, многогранная деятельность получает поддержку всего общества, способствует сохранению гражданского мира и согласия в стране [7].

Казалось бы, что религиозная догматика не может пропагандировать насилие, но «объективная реальность говорит о том, что гуманизм реальность не является непременным атрибутом любой религии» [1, с. 377]. Это не означает что эти учения жестоки, необходимо учитывать историческую эпоху и социальную обстановку периода зарождения данных религий, реалии того мира.

В противодействии религиозному экстремизму в пенитенциарной системе современных государств можно наметить несколько основных направлений. В числе важнейших направлений, наряду с правовой, психолого-педагогической и богословско-философской подготовкой сотрудников УИС к ресоциализации лиц, осужденных за религиозный экстремизм и терроризм, а также профилактики религиозного экстремизма и терроризма в местах лишения свободы, можно назвать и условия содержания религиозных экстремистов и террористов [9, с. 17-19].

По данным не только европейских, но и исследователей США, а также нашей страны, именно тюрьмы являются одним из самых благоприятных мест для вербовки неофиитов. Отнюдь не случайно, по образцу выражению сотрудников УИС, в местах лишения свободы наряду с так называемыми «красными» и «черными» зонами появились и «зеленые» (по аналогии с зеленым цветом знамен «ислама») [12].

Как условия содержания, так и сама социальная среда в местах лишения свободы весьма благоприятны для вербовочной деятельности, прежде всего, благодаря контингенту, содержащемуся в нем. Ибо в местах лишения свободы немало людей, считающих себя незаслуженно осужденными и обиженными, униженными и оскорбленными обществом, волей и случайностью или социальной средой в местах лишения свободы, можно назвать и условия содержания религиозных экстремистов и террористов [9, с. 17-19]. Причем, справедливость не по человеческому разумению, а по Божественному закону, данному в Священных Писаниях.

Новообращенных (неофитов) не может не привлекать также то, что их не оставляют в беде, что им всегда и везде будет оказано покровительство со стороны сподвижников по вере, что им будет обеспечена моральная и материальная поддержка и защита организации. Причем, не только в местах лишения свободы, что важно само по себе, но и за ее пределами, где царит, как им показывают их «духовные учителя и наставники», бесперспективность и безнасходимость существования. Ибо люди (прежде всего, представители власти) отошли от исполнения Божьих заповедей, погрузив в
беззаконии, коррупции, лжи, предательстве, безнравственности, наркомании и во многих других грехах, о которых предрекали Священные Писания и с которыми призывали бороться, не щадя своих жизней.

В силу того, что именно в местах лишения свободы сосредоточиваются лица, осужденные за религиозный экстремизм и терроризм, при том, что в нашей стране все еще отсутствует научно-обоснованная идеологическая, мировоззренческая и психолого-педагогическая система противодействия религиозному экстремизму, то сегодня именно пенитенциарная система оказалась на переднем крае борьбы с религиозным экстремизмом и терроризмом [11]. Более того, поскольку агитационная и вербовочная деятельность религиозных экстремистов не прекращается и в местах лишения свободы, то именно пенитенциарная система сегодня вынуждена впервые в стране активно разрабатывать методы и способы противодействия деятельности религиозных экстремистов.

Для пенитенциарной системы эта проблема приобретает тем большую актуальность, что мнение о лицах, осужденных за экстремистскую деятельность в религиозной сфере, как об «обычных уголовных преступниках» с соответствующим отношением к ним со стороны сотрудников УИС, как показывает практика, себя не оправдывает. Поскольку пенитенциарная система имеет дело, во-первых, с идеологическими преступниками, готовыми за свои убеждения встать на путь вооруженной борьбы и отдать за них свои жизни; во-вторых, с людьми, имеющими четкие антиконституционные цели и продуманную систему идеологической работы с массами с помощью самых современных методов и средств; в-третьих, имеет дело не с одиночками экстремистами и террористами, а с лицами, входящими в хорошо структурированные и законспирированные организации со своими лидерами и идейными (духовными) наставниками, с солидным финансовым обеспечением и широкими международными связями.

Отсюда совершенно определенно следует, что лицо, осужденное за религиозный экстремизм и терроризм, должно быть изолировано от остального контингента, пребывающего в местах заключения.

Исламские экстремисты, стремятся подчинить своим идейм весь мусульманский мир и сделать всех мусульман покорными своей воле, ссылаясь на Коран, вернее, к догматическому, одностороннему толкованию этой главной для мусульман священной книги. Отдельные фразы, выхваченные из Корана, однако, вряд ли могут служить характеристикой всего религиозного направления.

Тем более что в Коране, наряду с изречениями, которые могут интерпретироваться как призывы к насилию, содержатся в обилии призывы к миру, терпению [1, с. 400–401].

Плюрализм взглядов есть реальный показатель характеризующий черты мусульманской догматики и неоднозначный подход ислама к этим проблемам.

Основные предпосылки, призванные их урегулировать, были сформулированы на основе и джихада, под которым исламская мысль понимает рациональный поиск решений по вопросам, точно неурегулированным в Коране и Сунне.

К этому надо добавить, что имеющиеся в этих основополагающих источниках правила ведения войны или отношения к иноверцам сложились еще в начальный период становления ислама, его острого соперничества с политическими и идейными противниками. Некоторые из этих положений, вырванные из основного исторического контекста, в наше время нередко используются для оправдания проявлений политического экстремизма [1, с. 395].

Факт благоприятствующий использованию религии в качестве прикрытия для осуществления экстремистской, в том числе и террористической деятельности, существование различных противоречий в рамках канонического содержания самих религий (внутренние противоречия). Кроме того, существует множество неточностей и неясностей в формулировании тех или иных религиозных требований, обязанностей, а также и наличие определенных противоречий между различными религиозными вероучениями и даже враждебных суждений в адрес других религий (внешние противоречия) [13].

Особую проблему в этом аспекте представляет процесс распространения исламского экстремизма в местах лишения свободы. Причем как отмечал ряд исследователей с одной стороны религия становится одним из факторов создания у человека, отбывающего наказание, состояния душевного равновесия, спокойствия и доброжелательности, пробуждения положительных качеств характера и переориентации нравственных ценностей [2, с. 3]. С другой стороны, в силу режима содержания, подчинения определенному распорядку, находясь в изоляции от общества и семьи преступник испытывает психологическую подавленность, эмоционально-напряженное состояние, эти условия благоприятствуют деятельности проповедников радикального ислама.
используя их как фактор
благоприятствующий распространению своих
учений и набора новых адептов.
Показано также еще один
идеологический прием, с успехом используемый
в местах лишения свободы, а именно принятие
ислама радикального толка для получения
защиты и покровительства. Схожая ситуация
изначально сложилась в Индии когда ислам стали
применять: «большое число индусов из касты
неприкасаемых». Тем самым они уходят от
ограничений, реально существующих для самой
низшей индуистской касты» [1, с. 388]. В
исправительных учреждениях тюремная
субкультура также создала особую
иерархическую лестницу, многие лица стремятся
любой ценой не попасть в систему преступной
градации в положении бесправных парий.
Существующая мусульманская община в
исправительных учреждениях достаточно
влиятельна и способна обеспечить защиту своих
членов в том числе и для новообращенных,
 причем ислам признает всех мусульман
равноправными вне зависимости от положения
которое он занимал ранее.
Данный фактор вкупе с эмоциональной
подавленностью, упомянутой выше, с успехом
используют проповедники радикального ислама
tо есть факторы которые успешно можнo
использовать для ресоциализации осужденного,
его перевоспитания посредством позитивного
религиозного воздействия, с тем же успехом
можно использовать и для его радикализации.
Преступник неофит ищет защиты в религиозной
общине возможно изначально и не разделяет
степени, в которой они ищут смысл» [6]. Другими
словами, в гражданском обществе радикализация
идеологический процесс, направленный на
индивида с целью подготовки его к принятию
насилия в исправительных учреждениях в среде
лиц уже преступивших закон необходимо только
предоставить им идеологическую подоплеку
сверхения преступлений тем самым давать
возможность преступнику оправдать свои
противоправные действия, фактически
радикальный ислам заочно «отпускает грехи»
всем.
Агитационная деятельность проповедников
исламистов направлена не только на
осужденных-мусульман или осужденных других
вероисповеданий их цель также поиск, вербовка
и использование в противоправных целях
сотрудников и работников УИС. Данные лица
дестабилизируют деятельность всей
правоохранительной системы, и направлена на
подрыв сущности и устоев государства. Именно
этому приоритетным направлением
деятельности сотрудников УИС и
священослужителей работающих в местах
лишения свободы, должна стать профилактика
экстремизма и терроризма в исправительных
учреждениях.
Религиозная догматика обладает весьма
эффективными методами воздействия, что
успешно используют проповедники исламисты,
соответственно имеет смысл позитивному праву
взять на вооружение представленные религий
возможности воздействия в т.ч. и вопросах
исправления, воспитания и ресоциализации
осужденных. Предотвращение дальнейшего
распространения радикального ислама может
быть достигнуто только путем грамотной
организации духовно-нравственного воспитания
лиц отбывающих наказание [5, с. 12]. Но эта
работа должна реализовываться органами
государственной власти и проводится под
стрелом контроля норм позитивного светского
законодательства.
Передача функций контроля религиозным
организациям недопустима, т.к. может привести к
трудо прогнозируемым последствиям.
Авторитетный исследователь
муслиманского права профессор
Л.Р. Люкштейн применительно к догмам ислама
полагает, «чтобы владеть всеми возможными
способами реализации шариата в российской
правовой жизни, в том числе и в области
действия диспозитивных норм, требуются знание
права и умение использовать предписания
законодательства. Для этого в правовом
отношении значительно продуктивнее работать
над повышением уровня правовой культуры
мусульман и их организаций, нежели добиваться
законодательного признания норм шариата. Без
грамотного в юридическом отношении
обращения с позитивным правом закрепление в
законе в прямой или косвенной форме указанных
норм останется пустой буквой» [3, с. 25]. Эта
концепция применима ко всей религиозной
религии.
догматике – без грамотного взаимоотношения с позитивным правом, канонические нормы останутся пустой буквой.

**Conclusion**

По результатам исследования можно сделать следующие выводы:

– необходимо посредством проведения оперативно-розыскных мероприятий выявлять лиц проповедующих радикальный ислам и изолировать их от основной среды осужденных, причем сотрудники должны обладать необходимым уровнем профессиональной подготовки для выявления именно радикального ислама.

– в штатно-должностной список необходимо введение аттестованной должности помощника по религии. Данный сотрудник должен обладать умением нейтрального идеологического убеждения и феноменальной подготовки, чтобы противостоять проповедникам радикального ислама. Более того в нем должно сочетаться: «знание вероучения, светских дисциплин и российский патриотизм» [1, с. 387].

– особую острую приобретает наличие иерархии устоявшейся в преступной среде, однако вопрос о ее роли в данном аспекте это тема отдельного исследования.

**References:**


Meteorology.

CLASSIFICATION OF THE TURKESTAN ASSR DOCUMENTATION IN THE CENTRAL STATE ARCHIVE OF THE REPUBLIC OF UZBEKISTAN

Abstract: This article highlights the theoretical issues of the source study classification of archival documents of the Turkestan ASSR, kept in the Central State Archives of the Republic of Uzbekistan.

Key words: National Archival Fund, Classification, Turkestan Autonomous Soviet Socialist Republic (TASSR), the Economic Council of Turkistan, Counsel of People’s Commissars (CPC), Forest Management Fund, Water management, Management horse breeding, Turkistan Committee of cotton, Peoples Komissar of Finance.

Language: English


Soi: http://s-o-i.org/1.1/TAS-12-56-10  Doi: https://dx.doi.org/10.15863/TAS.2017.12.56.10

Introduction

The National Archival Fund of the Republic for more than 8 million documents, 1.5 million of which are stored in the Central State Archive of the Republic of Uzbekistan (CSA RUz) [1].

CSA RUz is considered the largest and richest archives in Central Asia, it stores the archives of the Kokand and Khiva Khanate, archive of Bukhara Emirate’s kushbegi, archives the Turkistan governor-generalship, his departmental structures, as well as archives of Turkistan and Uzbekistan, Soviet and independence period and archival materials of the Republic of Uzbekistan.

Current documentation on the activities of the official government and administrative bodies of the Turkestan governor-general before the October 1917 coup year was kept in the agencies and organizations.

In 1918, by decree of the Russian Soviet Federative Socialist Republic (RSFSR) “On the revision and centralized archival work”) [2, P. 21.] October 30, 1919 the Government of Turkistan take a decision on the establishment of the Central State Archive republic [3, P. 29], management (in 1920 renamed the “Central Office for Archival Affairs”), in 1941 it adopted a resolution on the establishment of the regional archives. However, political instability, military and ideological struggle in 1918 – 1924 years, the most documents have been lost or removed for an abroad [4, P. 52.]. By 1924, it had ordered only one-third of all the archival material in public stored.

Materials and methods

In studying the history of Turkistan (1917 – 1924) – the most difficult period of transition and the struggle of the Soviet era in Uzbekistan – are important sources of documents stored in CSA RUz. The archive has accumulated 90 funds on the history of the Turkestan Autonomous Soviet Socialist Republic (TASSR), as part of which more than 37,000 cases.

In these collections gathered important information about political, economic, and cultural processes that took place in Turkistan in 1917 – 1924, respectively, which are the frequency can be divided into two groups:

1) The documents of the Board of the Turkestan institutions of the Provisional Government, acting in the period February – October 1917.
2) The documents of the Board from October 1917 to 1924.

The first group – it documents the Turkestan Committee of the Provisional Government (1044 collection) and the Council of the workers, soldiers and members of the Turkestan region (1613). The second group of documents of the Central Executive Committee (CEC) of the TASSR (collection 17), People’s Commissars Council (collection 25),
representative from the Turkestan Autonomous Soviet Socialist Republic at the All-Union Central Committee in Moscow (collection 13), the Economic Turkistan Council (collection 18), officials of the commission Gosplan (State Planning) Turkistan (collection 20), all of the TASSR commissioners and their managements.

On the content of document collections can be divided into series:
1) Collections of state controls and enforcement.
2) Collections, covering the state of the economy.
3) Compilations depicting cultural, spiritual, social life.
4) Collection of human rights protection bodies.
5) Collections with information on various issues.

In turn, the collections, covering the economy, divided into three groups:
a) Collections, covering agriculture.
b) Collections, covering the national economy.
c) Collections, covering finance, trade and industry.

As noted in the study of political processes in Turkestan are of particular importance Documents CEC Turkistan in MGA (collection 17), People's Commissars Council (collection 25), representative from the TASSR at the All-Union CEC in Moscow (Fund 13), the Economic Council of Turkistan (fund 18), the State Planning Commission officials Turkistan (collection 20).

Structural analysis of these sources shows the fund in 1044 the Turkestan Committee, acting in the April – November 1917, collected 46 cases in 1613 to fund the workers and soldiers deputies of the Turkestan region – 6 cases [5, P. 3.].

Among the funds, materials containing the period from October 1917 to 1924 years are important CEC the TASSR documents.

It is known, formed April 20, 1918 the Central Executive Committee of the Turkistan was a permanent supreme legislative body, performs a task the supreme authority of the region in the period between congresses [6, P.79.].

First, this institution fund totaled 1886 cases on 50 spiskam2 (surrendered to state custody in 1925). This document's 1918 – 1924 funds, now it is stored at 2 archivalists 2958 cases [7].

Another significant public body acted in the Turkestan region between the Soviets – a Council of People's Commissars of the Turkestan Region (Fund 25), which was entrusted with executive functions and area management tasks. Board of Commissioners has dealt with the constitutional laws of a general nature and related to the administrative and organizational issues and the state budget, the establishment of relations and agreements between different commissariats.

The fund Counsel of People’s Commissars (CPC) three lists in total 2154 cases. In cases collected reports of People’s Commissars, mutual correspondence, minutes of meetings, correspondence with the CPC of the RSFSR on military policy, the economic situation in the Turkestan region (1918), reports, orders for the development of various spheres of the national economy. In the same fund are stored telegrams of protests against Soviet rule in Turkestan in 1917 and the domestic and international situation in the RSFSR, as well as important documents on national territorial borders of Central Asia [8, P. 9].

Another fund CSA RUz – a fund number 13, containing 184 cases [9, fund 13] on the activities of Turkistan representative offices established under the Council of People’s Commissars of the RSFSR on national affairs. The collection of materials stored representation of a decree on the appointment of the Plenipotentiary Representative of Turkistan in Moscow (March 1923), valuable documents about the state of the labor market and economic activity of Turkistan.

After the abolition of the CPC of Turkistan ASSR in 1918, in order to monitor the economic policies of the country and control the activities of the national construction agencies October 8, 1919 it was established the Economic Council. The foundation of the organization, which in 1921 became known as the “Economic Council Turkistan 267 cases stored at 2 archive lists [10, fund-18]. It orders and instructions CPC RSFSR on defense and work, protocols, orders the Economic Turkistan Council meetings, materials on economic unification of Turkistan, the Bukhara People's Soviet Republic and Khorezm People’s Soviet Republic, foreign trade in Central Asia, information on the conditions of mining enterprises Turkistan, participation of Turkistan in the Nizhny Novgorod fair (1922).

Another point, which is important in fund CSA RUz – a fund 20 State Planning Commission Turkistan formed with the Economic Council of Turkistan in 1921, it contained 577 archive case [11, 6-15.]. It reports on the division of Central Asia to the districts, reports on the activities of the State Planning Commission of Turkistan, the materials on the general state of the national economy, the upcoming plans.

However, in CSA RUz there are other funds covering the agricultural sphere Turkestan Republic:
1) The Agrarian Fund (dekhhana, peasant, farmers) the People's Commissariat (Fund 29)
2) Forest Management Fund
3) The fund water management
4) The Fund Management horse breeding

In particular, the fund of archival documents Agrarian Commissioner (Fund 29) are well represented documents on nationalization in the TASSR after the October Revolution, that is,
measures on the transfer of private property to the state, the activities, the personnel of this Commissariat, the original applications of citizens for land and water relations, government documents TASSR as agriculture, finance and economics.

The collection of 182 documents stored CSA RUz Forest management – work plans of farms, reports the creation of new forestry, harvesting wood fuel.

Water management Documents stored in the fund of Turkistan 215, they are considered an important source of water in the coverage of issues of reform in Turkestan. This fund has the following documents: laws and regulations relating to the irrigation areas of the material expansion of irrigation systems, water rights, reports on the activities of the regional and district offices of the water management Turkistan.

In horse-breeding fund 184 State Management of the Agrarian People’s Commissariat Turkistan keep the following documents - a management activity reports, reports, work plans, information about the system and the situation in the sphere of horse breeding edge.

In total, the funds Commissioner for Agriculture and its field offices by 9 lists stored about five thousand cases, which can be used for lighting carried out in the period in Turkestan in the field of agriculture, horse breeding, forestry and undertaken reforms in these areas.

In 1918 it was created the Regional Economic Council and in the same year was adopted a decree on establishment of the Central Council of National Economy under the Council of People’s Commissars (CCNECPC) of the TASSR.

The CSA RUz documents the Food Commissariat of the TASSR collected in the fund 31 are: reports of regional, district food committees Turkistan, the order of distribution of ration cards, bulletins, market prices for food products in 1921 – 1922, documentary sources on the implementation of the food tax [11, P.3-15].

The fund 149 fishing industry and fisheries management orders kept the fishing industry of the main management of the Aral Sea region, information about the visit of the expedition management of food commissariat in Bukhara People’s Republic (1918), correspondence documents on the exploitation of fishery enterprises.

Fund 27 CSA RUz contains lists of 1, 2, 3, 5, 6, which collected documentation on the activities of the Central Council of the National Economy of Turkistan. This fund CCNE kept records on the nationalization of private enterprises in various industrial sectors, reports, reviews of National Economy, projects and drawings of chemical, cotton, paper mills, drawing documentation enterprises. However, there are 2 list under the “classified”. They collected 21 documents – secret correspondence, orders, decisions of private meetings, the materials of the meetings of chief accountants of trusts [12, fund 27].

The fund 167 of the State Construction Committee collected the CEC orders CCNE, Turkistan, travel relations agencies the Turkestan district on industry, railways, construction of housing for the population, reports the regional departments of the State Committee on Construction on the construction of postal roads, schools, irrigation facilities and bridges.

In the fund of 130 of Turkestan Manufacture collected orders and directives of the Economic Council of Turkistan and the CPC on the construction of a textile factory outside the territory of Tashkent, Fergana mechanical-textile factory, reports on the organization of the textile industry in Turkestan.

State unified management for metal processing to control the activities of all factories and enterprises of the region involved in the processing of metals. The fund collected 125 orders CCNE Union of the RSFSR on the processing of metals, information on the implementation of production plans plants Turkistan.

There are 128 fund of main textile industry controls, which collect the information of the cotton industry of the Office of the textile industry offices in Andijan and Samarkand regions with raw materials (wool, silk) in the CSA RUz.

By order of the Presidium of CCNE on April 22, 1922 the General Directorate of control over trade and supply, and on August 1 of the same year - of all the industrial and commercial enterprises has been entrusted to the State management of industrial and commercial enterprises. In the fund industry and 43 state trading enterprises the following documents collected: the situation on the construction of textile mills the Turkestan branch of industry and supply, providing enterprises CCNE rent, registration of private enterprises, trade and industry unity, correspondence CCNE offices.

In 1921, the Industrial Trust hang flour, and since 1923 – Flour and Weighing units Turkistan have been introduced in the food department was established and CCNE National Trust Central Council of the National Economy flour. Trust documents are stored in the archive fund 142, it reports on the nationalization of mills, repair cooperative mills, orders to factories and rice mills, the documents on market prices for flour and cereal products.

The collection contains 663 documents trust the Turkestan mountain fuel – annual reports, correspondence, reports of oil companies and mines coal mining, meeting decisions, orders CCNE RSFSR and Central Council of the National Economy of Turkistan for the mining industry and a reserve of fuel, as well as other archival documents.

<table>
<thead>
<tr>
<th>ISRA (India)</th>
<th>SIS (USA)</th>
<th>ICV (Poland)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.344</td>
<td>0.912</td>
<td>6.630</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>PHHII (Russia)</td>
<td>PIF (India)</td>
</tr>
<tr>
<td>0.829</td>
<td>0.207</td>
<td>1.940</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>ESJI (KZ)</td>
<td>IBI (India)</td>
</tr>
<tr>
<td>0.564</td>
<td>3.860</td>
<td>4.260</td>
</tr>
<tr>
<td>JIF</td>
<td>SJIF (Morocco)</td>
<td></td>
</tr>
<tr>
<td>1.500</td>
<td>2.031</td>
<td></td>
</tr>
</tbody>
</table>

ISPC Generalization of scientific results,
Philadelphia, USA

52
The fund 101 public trusts coal and oil reports on coal mining are stored, oil, nitrate, salt, documents, correspondence on the work on exploring and mining.

In 1918, ordering to the decree of CPC of the Turkestan edge of the cotton industry was largely nationalized in the same year was established cotton of the economy department of the Council of the Turkestan region and its members all the plants were introduced. Subsequently, the scope of the national economy was transferred to the Central Council.

In 1922, when CPC Turkistan was formed the Turkestan Committee of cotton. The Committee’s tasks include: improving the quality of cotton, the expansion of sown areas, to ensure the country's raw cotton. Documents the Turkestan economic reforms reflected in the archival documents of the State Administration of construction, the Turkestan Manufactory, the tobacco industry, metal processing, textile industry, the Main Administration of Industry and trade organizations, flour trust, trust fuel, coal and oil on Committee.

Archival sources on finance and banks of the republic are stored in the funds of 37 337 and CSA. The collection contains 37 budget estimates of the TASSR Peoples Komissar of Finance for the Turkestan Republic, the People’s Commissariat and other central agencies, financial and economic reports and reports on the various agricultural sectors, documents on taxes and tax collection, market prices (1922 – 1924), and others.

**Conclusion**

In conclusion, there are more than 37000 cases in the Central State Archive of Uzbekistan which belong to Turkestan ASSR period.

The funds Turkestan ASSR Central Executive Committee, Council of the People's Committee, Turkestan Economic Council are given general historical data about history of Turkestan ASSR.

The funds of administrations under the Commissariats did not have more cases, however they play role as taken additional information concerning to economical history of Turkestan ASSR.

**References:**

8. (2017) CSA RUz., Fund R-17, the information at the end of 1, 2 archival list.
10. (2017) CSA RUz, Revolution period fund- 13, the archive information at the end of archivalist
11. (2017) CSA RUz Revolution period fund-18 Turkestan Economic Council, the information at the end of 1, 2 archive lists.
## Impact Factor:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>HHII (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>3.860</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>IBI (India)</td>
<td>4.260</td>
</tr>
</tbody>
</table>

12. (2017) CSA RUz, Revolution period Fund -13, the archive information at the end of archivelist p.3-15.

13. (2017) CSA RUz, Revolution period Fund -27 archivist reports of 1, 2, 3, 5, 6 archive lists reports

14. (2017) CSA RUz, Revolution period Fund -111 archivist reports of 1, 4, 5 archive 1
DAILY ACTIVITIES OF THE YOUTH OF UZBEKISTAN: THEIR TRADITIONS AND TRANSFORMATIONAL PROCESSES

Abstract: This article is dedicated to the daily lifestyle of the youth. There are also some information about lifestyle of the youth and factors which influence to them. Besides that, the author presents several issues on researching traditions and transformational processes belong to the daily lifestyle of the youth, for instance the youth and education, the youth and sport, how to spend free time and etc. In addition significant importance of self-governed organizations in the life of the youth in the last recent years are shown in detail.

Key words: the youth, modern youth, lifestyle, daily life, leisure, makhalla, religious customs, traditions, fashion, social friends, transformation.

Language: English


Introduction
To the issue of youth is paid respective attention in Uzbekistan and it is highly considered as a state policy. The laws, proclamations and decrees being established in the government require getting concentrated on this case. As the President of the Republic of Uzbekistan Shavkat Mirziyoyev states “It is necessary to develop multilateral cooperation on encouraging the youth socially, defend their rights and interests” [4].

Recently attempts being done on the accomplishment of the state policy concerning to the youth has risen to its new shift. Nowadays 32% of the total populations of the country, in other words, 10 million people are youth under 30 [3, 145]. Socio-economic, political and judicial guarantees presented to youth are stated in the new edition of “The law of the republic of Uzbekistan about the state policy on the youth” accepted on September 14, 2016 [2, 80]. This document indicates not only the main branches of the policy relating to the youth but also it clearly defines the responsibilities of organs which execute them. Today this law functions as a primary source which deals with daily problems and difficulties of youth.

Materials and Methods

Furthermore youth are main social demographic layer of the state population and they include themselves a group of people mainly from 16 to 30. This period is considered as a shift of human life which is characterized with the ending of education and the beginning of career, having a family and being independent both materially and spiritually [7, 7].

Together with the increase of the attention to the youth policy there are being investigated scientifically and practically the essential features connected with the life of youth such as their upbringing and educations, lifelong ambitions of the youth, their dreams and objectives, the samples of the attention in the degree of state policy and their results, problems of youth and their avoidance and others. Learning daily activities of the youth is also vital in this matter. The issue of daily activities and daily life has started to be studied as a crucial factor of historical investigations almost recently. Whereas day-to-day activities, work, leisure activities, to participate in different customs and traditions and efficient free time use used to be examined separately before, now it is required to research them together with daily life system. Thus the histories of daily life, culture and other related issues have become a critical exploration objective. The information and studies on daily life are not considered crucially important for the history but
they serve as an additional material for the science. Moreover daily or real life activities are accounted as a way of attracting a person to the life of a society and it is required by objective circumstances and subjective factors which include themselves the rules of human life activities, their results and meaning [6, 72].

The inheritance and the acquisition of the features of daily life activities by the youth, their capability to multiply them and readiness for it, is socially and historically important phenomenon as past is crucial for us as an active, dialectic and initial stimuli which teaches us to avoid and turn a matter to an incredible way [8, 252-261].

Daily culture is mainly focuses on people’s daily activities, social status, their thoughts and ambitions. Daily culture includes itself the studies of behavior, daily and casual customs and traditions, their beliefs, communicative culture, outlook and together with them distinctive features of formation as one group, clan, people and nation throughout history. Three main branches: labour or preparation to labour activity (study or working time), household-the time spend on doing housework, looking after oneself, shopping and other related things (off time), the proportion of definite duties and free of responsibilities is the vital basis of youth life [13, 1-2].

There are the imperative issues which should be taken into deeper consideration in exploring youth life:

**Youth and education**

Youth are active social layer of the society who generate in the secondary, secondary-special and higher educational institutions. In Uzbekistan, as it was in all fields, there have been accomplished significant innovations in the field of education lately. As youth spend most of their time in educational institutions, in these socializing circumstances they not only get some knowledge there but also they get spiritual and moral instructions.

As it is stated in the Strategy of actions in 2017-2021 to develop the Republic of Uzbekistan the following are currently the most vital tasks to put forward: to enforce the role of “mahalla” in educating and upbringing of young generation, to create them new employment options, to help the employment of women, to support new established families, to raise patriotic youth, to increase their social activeness in deepening the democratic reforms and developing the civil society, to promote healthy lifestyle in the life of youth, to attract their attention to sport and physical training, to organize effective cooperation of state authority and other government organizations, educational institutions and youth union and other establishments in fulfilling the state policy on the youth [1,112].

As the education system of the country is progressing youth are being encouraged to be active in all the stages of the education including higher and post-graduate study. To analyze the social activity of youth in education gives the opportunity of identification of self-evaluation of the youth to their own level of education, the most attractive specialties, their attempts to choose the suitable professions and their readiness to the language and information. Uzbekistan supports the young generation to continue their study after compulsory education. In response to this youth also feel confident about the guarantee of higher education to qualified specialty. In the experiment first of all the tendency of rise of aspiration of youth to enlarge their knowledge was studied. In the end Uzbekistan people showed their need to raise their knowledge in the future. (table 1)

### Table 1

The distribution of the answers to the question “Do you want to raise your education in the future?” in %.

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, I want</td>
<td>56.5</td>
<td>57.3</td>
<td>57.8</td>
<td>62.7</td>
</tr>
<tr>
<td>Now, I don’t want</td>
<td>28.9</td>
<td>29.6</td>
<td>30.8</td>
<td>26.6</td>
</tr>
<tr>
<td>It is difficult for me to answer</td>
<td>14.6</td>
<td>14.1</td>
<td>11.7</td>
<td>10.6</td>
</tr>
</tbody>
</table>

In this matter the indications of the desire of higher education among urban youth has risen (66.9%, 54.5% in 2016) whereas the clue indicated fall in rural area (59.1% in 2016; 58.8% in 2017).

To be a higher educated specialist is considered to be daily life and future ambition of youth. The results of the survey held on identifying the social importance of higher education among the youth of the country affirm the tendency of rise. For instance, in the toll 2010 and 2011 only a third of the youth, in 2013 every other young citizen- 57.2%, in 2015 73%, in 2016 74.7% of respondents expressed the desire of having higher education. The questionnaire of 2017 coincide to the results of precious research-76.5% (56.3% bachelor’s degree, 20.2% master’s degree are desired to acquire) [14].

To the question “What is the attraction of higher education for you?” 69.2% of Uzbekistan youth stated that it gives them opportunity to possess the necessary specialty for life (69.1% in 2016, 71.9% in 2015, 67.3% 2014). Every five of the respondents (19.8%) assess the social status of the higher education as a motivation to study it (20% in 2016, 22.6% in 2015, 21.5% in 2014). 5.6% of the...
Youth questioned wants a well-paid job (8.7% in 2016, 4.7% in 2015, 8.8% in 2014), 1.5% of them are attracted by the chance of employment (1.5% in 2016, 0.8% in 2015, 2.4% in 2014) [14].

Youth and labour
One of the most important daily activities of youth is considered to be their career and business. In this occasion youth should be directed to the proper labour activity and they also should be supported to deal with the job connected to their own specialty. According to the results of the survey carried by the centre of studying common sense of the society “Ijtimoiy fikr” the number of the youth working on their own specialty is rising (it was estimated 59.8% in 2013 and 62% in 2014) [14].

Today a third (34.2%) of the youth of Uzbekistan work, another 14 % are studying in Higher education, the rest 34.4% are the students of schools, lyceum and colleges. According to the toll results the employment degree is directly connected to the level of education. For example, 71.7% of the questioned youth were employed higher educated people whereas 20.8% and 40% of the respondents graduated secondary school or vocational colleges [14].

Youth and daily affairs
One of the primary objectives of social policy of the country is to support the youth, care about their health, to provide education, to raise their talent and to create opportunities for housing. As it is reported in the research, after the independence of the country there have been large opportunities to be active in social and political life (28.9%), to choose a profession (22.5%), to learn foreign languages (18.8%) and to study abroad (7.5%). The study shows that nowadays the youth are not inattentive to the negative situations in society. The youth are more worried about religious extremism (52.1%), criminality (47.5%) and drug addiction (36.7%) [14].

Youth and mahalla (county)
Major part of the social life of the youth is connected with mahalla- an important social institution. From the past mahalla is considered to be the centre of up-bringing, customs and traditions and nowadays its power is broadening. In solving the problems about all the aspects of the life of youth-education, sport, leisure activities, participating in different cycles and other issues mahalla is accounted to be close cooperator of a family as a self-operating branch of the government. Currently mahallas are fulfilling 30 socio-economic tasks which were previously the prerogative of local authoritative organs of the government [11. 170-171]. In this term mahallas should function in the following ways to support young generation and to raise their role in society:

To promote the idea of up-bringing of an ideal person among parents, educational institutions, family and wider society;
To find the talented youth and to work with their spirituality separately;
To direct the youth to a profession according to their interests;
To organize various clubs and cycles (science, professional, amateur, sport and etc) to have the youth spend their leisure time fruitfully;
To prepare the young generation to future parenthood;
To fulfill the systematic events to rise legal and social activeness of the youth;
To support young families, to incentive active youth in front of mahalla and bigger society and other important functions.

All in all mahallas are nowadays doing the 30 or more activities which used to be under control of local authorities previously.

The rules of using leisure time
One more important daily activity of the youth is spending leisure time. According to the survey 46.1 per cent of the younger generation spend their time reading books, 33.3 per cent doing some sports, 17.2 per cent doing household, 15.3 percent going in for various clubs, 9.6 % go to libraries, 8.6% going to the cinemas and theatres, 6.9 % reading newspaper and watching television, 5.5 % have a rest with friends, 4 percent prefer to spend their free time going to cafes, disco bars and restaurants [10, 351]. Some of the above given numbers are changing somehow these days. There have been appearing new activities while some of the existing getting out of use slowly. Half of the youth (50.1%) stated their satisfaction from their leisure time activities, a third of them (31.7%) expressed slight satisfaction, every third of them (10.7%) claimed absolute dissatisfaction. Visiting libraries also have become inseparable activities of some of young people. For instance, according to the report of the modernized National Library of Uzbekistan named after Alisher Navoiy in the first half of 2017 checked in 170060 users most of whom were youth [15].

Youth and spirituality
The study of spiritual and moral outlook of the youth is considered as necessary task to realize the program of additional activities to accomplish the state policy on youth of Uzbekistan as well as it is an indicator of the system of socio-cultural branch among values of society (table 2).

<table>
<thead>
<tr>
<th>ISRA (India)</th>
<th>SIS (USA)</th>
<th>ICV (Poland)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.344</td>
<td>0.912</td>
<td>6.630</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>PHHIII (Russia)</td>
<td>PIF (India)</td>
</tr>
<tr>
<td>0.829</td>
<td>0.207</td>
<td>1.940</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>ESJJ (KZ)</td>
<td>IBI (India)</td>
</tr>
<tr>
<td>0.564</td>
<td>4.102</td>
<td>4.260</td>
</tr>
<tr>
<td>JIF</td>
<td>SJIF (Morocco)</td>
<td></td>
</tr>
<tr>
<td>1.500</td>
<td>2.031</td>
<td></td>
</tr>
</tbody>
</table>

**Table 2**

The youth opinion about the qualities identifying a person’s spirituality.
Youth and the internet
The development of information technologies is one of the important indicators of the modern world. Information technologies creates the bases of information for education and science, eases the spread of knowledge and news to every member of the community, in general meets the economic and social requirements of society.

The target of the social survey was to identify the young respondents’ evaluation of their own computer literacy and their use of World Wide Web taking into account the vital role of the computer, the culture of the use of information in their life and the role of the IT for them in their professional development.

According to the survey their own evaluation of their computer literacy is constantly rising (42.3% in 2014, 45.7% in 2015, 49.8% in 2019 and 52.5% in 2017) (table 3).

<table>
<thead>
<tr>
<th>Variants</th>
<th>2017</th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowing the country’s history</td>
<td>68.2</td>
<td>63.2</td>
<td>66.5</td>
<td>62.3</td>
</tr>
<tr>
<td>Respecting the national traditions</td>
<td>65.1</td>
<td>62.3</td>
<td>65.5</td>
<td>56.3</td>
</tr>
<tr>
<td>Honesty and hardworking</td>
<td>66.0</td>
<td>52.4</td>
<td>49.6</td>
<td>43.5</td>
</tr>
<tr>
<td>Forming the feeling of national pride</td>
<td>49.9</td>
<td>46.5</td>
<td>47.9</td>
<td>40.2</td>
</tr>
<tr>
<td>Purity of soul (Innocence)</td>
<td>41.6</td>
<td>34.9</td>
<td>31.7</td>
<td>28.9</td>
</tr>
<tr>
<td>National and religious tolerance</td>
<td>32.3</td>
<td>33.3</td>
<td>35.2</td>
<td>27.8</td>
</tr>
<tr>
<td>Modesty</td>
<td>37.0</td>
<td>30.5</td>
<td>26.7</td>
<td>27.0</td>
</tr>
</tbody>
</table>

Table 3

“How is your computer literacy?”

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can freely use from computer</td>
<td>52.5</td>
<td>49.8</td>
<td>45.4</td>
<td>42.3</td>
</tr>
<tr>
<td>I can use some of the programs of computer as a user</td>
<td>32.0</td>
<td>30.0</td>
<td>26.6</td>
<td>25.7</td>
</tr>
<tr>
<td>I can use computer for typing some text</td>
<td>7.5</td>
<td>10.4</td>
<td>16.4</td>
<td>20.3</td>
</tr>
<tr>
<td>I can’t use computer</td>
<td>8.0</td>
<td>9.8</td>
<td>11.6</td>
<td>11.7</td>
</tr>
</tbody>
</table>

According to the questionnaire 8.5% (12.5% in 2016) of the youth use the Internet all the time, 20.5% sometimes (30.7% in 2016), 33.1% don’t use the Internet (56.8% in 2016) [14]. In the regional division the young people of Tashkent city 17.7%, Bukhara 14.5% and 11.8% Tashkent regions are the most active users. Th youth of urban area are significantly active in comparison to rural area (11% and 6%).

The respondents claim that their parents control their time in front of the Internet to some extent. So the participants responded to the time management by their parents as 35.4 % are permanently controlled, 28.8% from time to time, 34.5% youth are never disciplined by their parents in the Internet use. 74.3% of 16-17-year olds, 68.2% 14-15-year olds claim that they are always controlled by their parents in terms of their Internet usage (in comparison with 27.9% of 20-24-year olds, 13.5% of 25-29-year olds). The percentage 63.8 was verified by the replies of the students of school, lyceum and vocational college [14].

Youth and healthy lifestyle
Healthcare of the population is one of the most essential sectors of the social policy of Uzbekistan. It expresses itself a social custom too.

The following indicators were used to study for the ideology of the youth on healthy lifestyle:
To evaluate self health condition;
The attempts to save or destroy health in lifestyle;
To evaluate the facilities to go in for sports.
The research gave the opportunity to learn that youth behave subjectively in the issue of their own health. In other words, the acquired information was not a real condition of health but personal opinion. The tendencies absolutely healthy 66.4% and overall healthy 26.2% were dominant in young Uzbeks. If compare with the survey of 2016 there was a decrease in number of young people considering themselves absolutely healthy (74.5% in 2016, 66.4 % in 2017).

Conclusion
Apparently, living conditions of youth: family, mahalla, colleagues, social life, leisure time and others indicate their interests, outlook and, there are more of these kinds of bases of daily life of young generation. There can be more information presented about them. But if the talk is about the main activities of daily life the above mentioned criteria are the most appropriate ones.

All in all modern youth of the country should always study in order to achieve high goals in life by
using the facilities created by the government and should work hard to be real owner of their future profession as it is practically identifies the future wellbeing of the state.

References:


Meteorology.

PROCESSES OF USING HISTORICAL AND CULTURAL HERITAGE OBJECTS IN TOURIST ROUTES IN UZBEKISTAN (HALF OF THE 20TH CENTURY)

Abstract: This article explores the stages of development of touristic routes in Uzbekistan on the principles of research and propagation of historical and cultural heritage sites in Uzbekistan. The process of museums and adaptation of historical monuments to tourist routes is provided. Half of the 20th Century Uzbekistan has outlined the route plans based on historical and artistic values of cultural heritage sites in Uzbekistan.

Key words: Historical and cultural heritage sites, museums, architectural sites, monuments, tourist routes, restoration, conservation, excursion, open-air museums, propagation, research, tourism.

Language: English


Introduction

Establishing routing guidelines as a working program for tourism is one of the most important tools for their effective implementation, as one of the most important tourist destinations in history. For sure, in the course of these works, the study of the cities' location and the development of historical governance were examined. In the tourist centers of Uzbekistan in the 60-90s of the twentieth century, it was noted that the creation of routes included constructing of buildings, building relationships with visible buildings, adaptation of buildings to local, natural conditions and appearance, placement of points and directions the harmony of urban buildings, the observation of the ensembles, the role of the historical shape and general appearance of evolution in the evolution, street and The analysis of the characteristics of the buildings' harmony ensembles is analyzed.

Materials and Methods

In the historical cities such as Samarkand, Bukhara, Khiva, the creation of tourist routes did not cover all the monuments of this region. Particularly, the development of religious tourism was considered from the point of view of the Soviet ideology and tourist routes were not developed in this direction.

In fact, arcs, bush, rastas, chorsu, makhalla and guzar have formed the integrity of the historical city structure. This is why the damage to the integrity of these elements is so great that the city's artistry is lost. As such, in order to preserve the art of historic cities, it was necessary to abandon the existing urban planning methods existing in urban planning and to find ways of contemporary development of traditionalism. For this purpose, it was necessary to identify the architectural elements that form the chorsu, guzar and other ensembles in the structure of tourist centers, to repair them as a monument and to ensure the harmonization of the new city. Due to the climatic conditions, location of underground waters, presence of railway and motorway trunk lines, location of engineering networks, naturally occurring landscape and functional orientation as the basis of urban planning in the development and change of master plans of historical monuments was important [2]. The collapse of the traditional architectural plastics of the Chorsu part of Samarkand, Shahrisabz, Andijan, and Tashkent with the annoying architectural constructions of the 20th century can be considered as the result of the fact that the issue was not sufficiently raised in the 20th century. Only the ancient cities would be able to preserve their unique environment, only by identifying the traditional
Establishment of technical and economic projects on tourist complexes and households in Uzbekistan has developed well in the 80s of the XX century. Because of these projects in the republic, foreign tourists have been trained, monitored and developed in various service formats. Tourists can be acquainted with historical and cultural heritage of ancient Uzbekistan and modern processes through special tour routes [3]. In the course of the work, the Research and Research Institute of Art and Archeology have studied the main plans of the city, region, and district. Interesting routes for historical cities such as Tashkent, Samarkand, Bukhara and Khiva have begun. Each of these cities had special features as a unique tourist destination. Another aspect of the tourists, in addition to the European "cold" color system, was the combination of the "hot" invoice system in the form of monumental monuments in Central Asia.

The main resource of tourism was the objects of exhibition - material culture, history, architecture, monuments of applied art, objects of landscape architecture, nature reserves. When designing the route, these indicators were shown: the topic of the excursion, its targeted appearance, a brief explanation. With the combination of these factors, it was possible to conduct excursion on routes.

The three existing museums in Uzbekistan, located in the ancient cities of Central Asia, could provide for the closure of key tourist destinations. These are the Samarkand and Bukhara Khiva museums, and the main routes were formed on these reserves. The tour guides provided the author and his approved date for the development of guidelines for each route. Methodological manuals were approved by the Council of Museums and considered as official documents. The exposition reflecting the architectural history of these cities is based on a brief overview of the history of the building, the state protection and museumization. Visitors could familiarize themselves with the monumental data - the author, the date of construction, and the significant aspects of the building [3].

In the 1970s Tashkent city plan included new projects in the development of tourist complexes, in addition to hotels, Chorsu and Uzbekistan hotels were built with the increased interest of tourists to Uzbekistan [3]. After Tashkent, the route passed to Samarkand. The most important of Samarkand's world-famous monuments is the Registan Square, Gur Amir Mausoleum, Bibixonim Mosque, Shohizinda Mausoleum, Ulugbek Observatory and architectural monuments of Timurid era, giving detailed information about the medieval capital of Central Asia (XIV-XVII centuries). Afrosiyob excavations introduced the city's historical culture to the Arab invaders. The State Museum of History of Uzbek Culture in Samarkand was one of the oldest museums in Central Asia. It was officially opened on June 21, 1896 [7]. In 1977, the International Museum Council (IKOM), a member of the International Museum Council, began active international activities. The Museum staff members participated in the International Council of Museums Program conferences held in France, Germany, the Netherlands, Peru, Russia, Ukraine, Latvia and Kazakhstan. In its turn, in 1981, Samarkand hosted the regional conference of the International Council of Museums [7]. In 1978, the museum moved to a special building dedicated to the historical part of Samarkand - the Registan Square. In 1982, the Samarkand United Historical-Architectural and Art Museum-Reserve was established on the basis of the State Museum of History of Uzbekistan, the Museum of History of Samarkand, the Museum of Mirzo Ulugbek and Sadreddin Ayniy, the Kattakurgan City Historical-Land Study, Ishtikhun and Pakhtachi districts, Mirzo Ulugbek and Sadreddin Ayniy memorial museums, Amir Temur mausoleum and Bibixonim complex, Hazrati Khizir mosque, The Nadir Devonbegi madrassa and mausoleums of Hogi Daniel were included [5]. In Samarkand, the focus of the touristic center on the development and location of routes was focused on the problem of combining touristic complex function with the function of the city in modern life. In addition, the Registan, Gur Emir and Bibi Khanim complexes were the task of creating optimal conditions for the perception of the main exhibit objects. The historical-territorial significance of the purposeful tourist routes in the organization of tourist objects was based. The protection of historical monuments of architecture allowed the city to collect and spend the necessary funds for Samarkand and Bukhara in solving the problems of conservation. The perspective development of the city was based on current urban planning and project development. At the same time, it should be noted that the historic part of Samarkand, where the medieval architectural monuments were united, had almost no integral appearance. The architecture of the four or six-store houses, public buildings, and even industrial buildings, along with the rare architectural monuments along the highway, distorted the city's architectural image.

In this connection, special attention was paid to the work of collecting tourist routes in Samarkand to minimize the influence of the state and public buildings that violated the architectural-historical image of the buildings surrounding Registan Square. In addition, attention was given to the change of the Registan square, which unites the ancient architectural monuments with modern architecture, and the surrounding architectural-artistic composition site [5].

<table>
<thead>
<tr>
<th>Impact Factor</th>
<th>ISRA (India)</th>
<th>SIS (USA)</th>
<th>ICV (Poland)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JIF (Australia)</td>
<td>1.500</td>
<td>0.564</td>
<td>6.630</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
<td>0.912</td>
<td>1.940</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
<td>0.207</td>
<td>4.260</td>
</tr>
<tr>
<td>PHHII (Russia)</td>
<td>0.207</td>
<td>4.102</td>
<td></td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Analysis of urbanism, social and economic factors has shown that it is desirable to place the main tourist complex in the square of Registan Square (150 m from it). Here are some ancient ornamental buildings, several two-three-store buildings, a post office and four or five-store houses. The total area of the complex is approximately 59 hectares [5]. There are 600 rooms with conference rooms, symposiums, conference halls, exhibition galleries, cinema and administrative information centers, restaurants, cafes, bars, swimming pools, souvenir shops, households and more. Moreover, it could provide a complete backbone route.

All the facilities in Samarkand are equipped with closed galleries and corridors, and the main façade of the tourist center for the separation of passengers and traffic in the Registan Square is the city gardens located opposite the street and Registan Memorial Complex. Pedestrian routes on the passenger platform linking the tourist center system. To see the ruins of the ancient monuments in the routes, the way to the central part of the avenue was shown, and the staircase leading to Registan was a unique amphitheater. This amphitheater created theatrical and musical performances on the background of monuments in the Registan square, allowing visitors to enjoy the excursion and location of the monuments.

The Registan Complex in Samarkand and its central location were characterized by a favorable advantage. The immediate proximity of the complex provides pedestrian excursions to all main monuments of Bibi Khanim, Gori Amir and Rukhobod, and in accordance with the traffic movement in that area. In addition, access to pedestrians for all the monuments provided a great opportunity for tourists to visit excursions [5]. At the same time, the excursion touristic flow was independently collected in two main directions: from Registan to Bibi Khanim along the Alley passage along the Tashkent Street and from Registan to the mausoleum of Gur Amir, Ruhhabad and Oksaroy. In the past, Allied Street was a shopping street, but there was no trace of trafficking, and the ability to restore this lost function in recent years was crucial to the development of touristic routes.

Conclusion
In summary, the true view of historical cities within the routes attracted not only the local population, but also foreign tourists. In the late 80's, architectural monuments were reconstructed in Uzbekistan to revive the historic cities and expand public access to the public. Many urban planning and social surveys have been undertaken. Since 1990, a new scientific structure has been established in the city of Uzbekistan. At the same time, new projects were implemented to harmonize the "historic" and "modern" historical cities and develop tourist industry. Historic neighborhoods, traditional style houses, national craft workshops were the breath of the past. As a result, tourist attraction to tourists has become more popular in historic cities. Hundreds of sites of historical and cultural heritage have been under state protection through expeditions to create new routes in historical cities such as Bukhara, Samarkand, Tashkent, Khiva, Shakhrisabz and Termez. This expedition was established in 1959 by the Research Institute of Art, and by 1980, cooperation with the excursion bureaus was developing in the creation of tourist routes. True, although there are historical monuments, unique architectural monuments, favorable climatic conditions, but only through these resources, tourists there was limited capacity to attract. In addition, the level of hotel service should also be increased. It is also important that tourists notice that they have come to Uzbekistan when visiting a hotel, restaurant, or other service point. This approach could provide the uniqueness and uniqueness of national tourism. It was crucial for tourists to be acquainted with historical monuments and museums in the course of routes and learn something of Uzbek culture.

References:

5. (1979) Archives of the General Directorate of Scientific Production Development and Use of
<table>
<thead>
<tr>
<th>Impact Factor:</th>
<th>ISRA (India) = 1.344</th>
<th>SIS (USA) = 0.912</th>
<th>ICV (Poland) = 6.630</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISI (Dubai, UAE) = 0.829</td>
<td>PIIH (Russia) = 0.207</td>
<td>PIF (India) = 1.940</td>
<td></td>
</tr>
<tr>
<td>GIF (Australia) = 0.564</td>
<td>ESJI (KZ) = 3.860</td>
<td>IBJ (India) = 4.260</td>
<td></td>
</tr>
<tr>
<td>JIF</td>
<td>= 1.500</td>
<td>SJF (Morocco) = 2.031</td>
<td></td>
</tr>
</tbody>
</table>


SECTION 31. Economic research, finance, innovation, risk management.

BASIC SOCIAL-ECONOMIC FACTORS OF FAR EASTERN DISTRICT DEVELOPMENT

Abstract: In the implementation of the projects of the territories of priority development (TPD), the factors of social-economic development have great importance. The article is based on a set of statistical data analysis of the social-economic factors in the regions of Far Eastern Federal District, the subjects of the federation, included in it, and in Russia as a whole. We analyzed the statistical data (pensions, benefits, levels of wages,) and the number of employees as one of the basic factor of production. On the basis of analyzed data were drawn conclusions on the insufficient provision of TPDs with a potential labor force, a negative migration balance, the need and at the same time, the undesirability of attracting foreign labor, as well as the factors of the rootedness of the workforce in the Far Eastern Federal District of Russian Federation.

Key words: territory of priority development, social-economic factors, employment, wages, pensions, Far Eastern Federal District.

Language: English

Citation: Osipov VS (2017) BASIC SOCIAL-ECONOMIC FACTORS OF FAR EASTERN DISTRICT DEVELOPMENT. ISJ Theoretical & Applied Science, 12 (56): 64-71.

DOI: https://dx.doi.org/10.15863/TAS.2017.12.56.13

The reported study was funded by RFBR according to the research project № 16-02-00141

Introduction

When the Federal Law of December 29, 2014 No. 473-FZ “On the Territories of Priority Social and Economic Development in the Russian Federation” was adopted, it was already known that, although its effect was extended to the entire territory of the Russian Federation, all its focus was shifted to the subjects of the Far Eastern Federal District (FEFD) [5,6,7]. In accordance with the law, the Territory of Priority Development (TPD) is a part of the territory of a subject of the Russian Federation, including a closed administrative territorial entity, in which, in accordance with the decision of the Government of the Russian Federation, a special legal regime for the implementation of entrepreneurial and other activities is established with a view to creating favorable conditions for attracting investments, ensuring accelerated socio-economic development and creating comfortable conditions for ensuring the livelihoods of people.

Materials and Methods

It should be noted that one of the main goals of creating TPDs is to provide for accelerated socio-economic development and create comfortable conditions for ensuring the vital activity of the population. To determine the directions for ensuring accelerated socio-economic development, it is necessary to consider the starting conditions of the social-economic situation in the Far Eastern Federal District [2,3]. As noted Charkina [10], the location of the region, its resource and industrial potential, highly skilled labor offer opportunities for the implementation of several TPD models reflecting the best world experience and current and prospective competitive advantages of the region. She and Skryl agree [9], while noting that in the implementation of the mechanism of territories of priority development, the labor factor plays the most important role.

The analysis of trends in the average monthly nominal payroll of employees for a full range of organizations in the economy as a whole in the Far Eastern Federal District and in the Russian
Federation for the period 2000-2016 (Figure 1) allows us to conclude that for the whole analyzed period, wages in the Far Eastern Federal District grew faster than the average for Russia, and from year to year, the rate of growth in the Far Eastern Federal District is also higher than in Russia.

<table>
<thead>
<tr>
<th>Impact Factor</th>
<th>ISRA (India)</th>
<th>SIS (USA)</th>
<th>ICV (Poland)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.344</td>
<td>0.912</td>
<td>6.630</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
<td>0.207</td>
<td>1.940</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
<td>4.102</td>
<td>4.260</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
<td>2.031</td>
<td>0.564</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>0.912</td>
<td>4.102</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
<td>6.630</td>
<td>0.912</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
<td>4.102</td>
<td>0.912</td>
</tr>
</tbody>
</table>

Figure 1 - The analysis of trends in the average monthly nominal payroll of employees for a full range of organizations in the economy as a whole in the Far Eastern Federal District and in the Russian Federation for the period 2000-2016

This situation can be explained by several reasons, among which there is a significant differentiation by types of economic activity (Figure 2). Thus, almost a twofold excess over the average value (36745.7 rubles.) Is observed by types of economic activity “Mining” (69688 rubles) and “Financial activities” (78311 rubles). Given the high importance of financial services and mining for the economy of the country (service and raw materials economy), it is obvious that such levels of wages are to some extent justified. Nonetheless, a multiple excess significantly affects the average level of wages; without taking into account the sectors of mining and financial activities, the average value of wages would be significantly lower, especially taking into account the number of workers in the low-paid social sphere.
The average monthly nominal accrued wages of employees for a full range of organizations by types of economic activity in the Russian Federation for 2016

Figure 2 - The average monthly nominal accrued wages of employees for a full range of organizations by types of economic activity in the Russian Federation for 2016

An important factor in assessing the quality of the social sphere in the Far Eastern Federal District is the differentiation of salaries for the subjects of the federation that are members of the Far Eastern Federal District (Figure 3).
Impact Factor:

<table>
<thead>
<tr>
<th>Source</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>PPIH (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>IBI (India)</td>
<td>4.260</td>
</tr>
</tbody>
</table>

The average monthly nominal accrued wages of employees for a full range of organizations in the economy as a whole in the subjects of the Russian Federation of the Far Eastern Federal District for 2000-2016.

As we can estimate, the Chukotskiy autonomous okrug, Magadanskaya and Sakhalinskaya oblast have a significant excess over other subjects of the Federation of the Far Eastern Federal District, where salaries were multiples higher than those of neighbors. The worst in this respect are the Evreyskaya autonomous oblast, the Amurskaya oblast and the Primorskiy Kray.

Let us now turn to the number of people working in the subjects of the Federation of the Far Eastern Federal District (Figure 4).

Number of employees in the subjects of the federation in the Far Eastern Federal District, people.

Figure 3 - The average monthly nominal accrued wages of employees for a full range of organizations in the economy as a whole in the subjects of the Russian Federation of the Far Eastern Federal District for 2000-2016.

Figure 4 - Number of employees in the subjects of the federation in the Far Eastern Federal District, people.
Impact Factor:

<table>
<thead>
<tr>
<th>Country</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>РИНЦ (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>IBI (India)</td>
<td>4.260</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
</tbody>
</table>

The minimal volume of population was in the Chukotskiy autonomous okrug and the Magadanskaya oblast, with the highest average monthly salary there. In the Primorsky Kray, the opposite situation is the highest supply of labor and one of the lowest average monthly accrued salaries.

Figure 5 - Number of employees in the Far Eastern Federal District and Russian Federation, people

It is important to note that the number of employees in the Russian Federation and the Far Eastern Federal District have different trends. In the Far Eastern Federal District, the number of employed is declining, while in the Russian Federation it is increasing. One can explain this situation by the fact that the working population is trying to leave the FEFD. If our assumption is correct, then the negative trend will continue, and the smoothing function (Figure 6) with a high level of the value of the reliability of the approximation ($R^2 = 0.8909$) shows a further decrease in the number of employees for the next three years.

Figure 6 - The number of employees in the Far Eastern Federal District, the smoothing function and the value of the reliability of the approximation

$y = -5.2766x^2 + 23.161x + 3183.1$

$R^2 = 0.8909$
The pension provision is of great importance for the entrenchment of working citizens in the Far Eastern Federal District. Quite expected (Figure 7), but the size of pensions was in the Far Eastern Federal District as well as wages higher than the average for Russia.

**Figure 7 - The average size of designated pensions in the Russian Federation and in the Far Eastern Federal District**

Inside the FEFD, the average size of designated pensions differs from subject to subject somewhat differently from average wages (Figure 8).

**Figure 8 - The average size of designated pensions in the subjects of the Russian Federation of the Far Eastern Federal District**

The highest amount of pensions assigned was in the Chukotskiy autonomous okrug, Magadanskaya oblast, Kamchatskiy Krai, the Republic of Sakha (Yakutia) and the Sakhalinskaya oblast, and the lowest in the Evreyskaya autonomous oblast and Amurskaya oblast and Primorskiy Kray. Low levels of pensions in the Evreyskaya autonomous oblast are explained by the lowest number of employees; and
Impact Factor:

<table>
<thead>
<tr>
<th></th>
<th>ISRA (India)</th>
<th>ISI (Dubai, UAE)</th>
<th>GIF (Australia)</th>
<th>JIF (KZ)</th>
<th>SIS (USA)</th>
<th>ICV (Poland)</th>
<th>PIF (India)</th>
<th>ESJI (KZ)</th>
<th>SJIF (Morocco)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.344</td>
<td>0.829</td>
<td>0.564</td>
<td>1.500</td>
<td>0.912</td>
<td>6.630</td>
<td>1.940</td>
<td>3.860</td>
<td>2.031</td>
</tr>
</tbody>
</table>

high levels of pensions in the Chukotskiy autonomous okrug, Kamchatskiy Krai and Sakhalinskaya oblast - a high average monthly nominal wage.

Comparison of data on average monthly wages, the number of employees and the level of pensions provide a conclusion that the lowest rootedness of the population is observed in the Evreyskaya autonomous oblast, and potentially high in the Primorskiy Krai.

As noted by Motrich [4] "... in the subjects of the Far East Federal District, the social welfare index is significantly inferior to the maximum value fixed for Moscow. In all regions of the region, the index of social welfare is decreasing".

Another, this time encouraging phenomenon is that the FEFD is one of four districts where there is a natural increase in the population. The program "Far Eastern hectare" could also help to rectify the situation, however, since allocation of land is carried out in hard-to-reach areas, in the absence of communications, we do not believe that this project will seriously change the demographic situation in the region [1]. As Ryazantseva notes [8] At the same time, among the nine constituent entities of the Russian Federation that form the Far Eastern Federal District, only four values of per capita GRP exceed the average for this district, while in the remaining five subjects (the Evreyskaya autonomous oblast, the Amurskaya oblast, the Primorskiy Krai, the Khabarovskiy Kray, Chukotskiy autonomous okrug) - GRP per capita below the average on the Far Eastern Federal District.

Conclusion

The deterioration of the social and transport infrastructure does not contribute to the growth of the region's attractiveness for living and employment. Considering the fact that the urban population exceeds the rural population by three times the average for Russia, the concentration of the population in the large cities of the Far Eastern Federal District and the outflow from the rural areas will continue.

The provision of labor resources can be the most serious test for the organization of the territories of advanced development, since their absence will force the owners of enterprises residents of the TPD to attract migrants, which calls into question the fulfillment of one of the main goals of creating TPD - ensuring accelerated socio-economic development and creating comfortable conditions for maintenance of ability to live of the population.

---

1 It is calculated by dividing the relative per capita income in the region by the Gini coefficient; it is higher the higher the real incomes of the population and the lower the degree of stratification of society in comparison with the situation in the whole country.
### Impact Factor:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>3.860</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>RIHCI (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
</tbody>
</table>

### References:

В данной статье даётся научное обоснование вопросу о том, что в период раннего средневековья город Суирилитепа являлся столицей государства Илак Ахангаранского оазиса.

Ключевые слова: топография, стольный город, памятник, дворец, храм, мастерская, руда, ремесленники, земледелие, глиняный, металлургия.

**Introduction**

Ахангаранская долина Ташкентского оазиса начиная с V века в исторических источниках упоминается в качестве независимого государства Илак. Правители этого государства, имевшие большое экономическое и политическое влияние, именовались “дехканами Илака”. С VI века Илак находился под влиянием княжества Имлака, а с конца Х века Илак входит в состав Караханидского государства. После завоевания монголов на территории Илака которых чеканились 17 городских монетных дворов: Харашкат (Канка), Тункат (Имлак), Туккат (Кутлут), Кухисим (Курганлепа), Абрык (Аблик), Дехкат (Дукентепа), Намудл, Банокат, Халайкат (Аккурган) и другие [11]. В жизни населения Илака значительные позиции занимал также земледелие и скотоводство, способное полностью обеспечить сельскохозяйственной продукцией городское население.

В исторических источниках встречаются сведения об образовании в VIII веке монетного двора “Мяндан аш-Шаш” в крупном металлургическом городе Илак – Тункате. Динары и дирхемы из чистого золота и серебра, которые чеканились в этом городе, в качестве товаров в IX-X веках были завезены в страны Среднего и Ближнего Востока, а также в страны Запада. В этих странах были найдены сокровища серебряных монет Илака. В X веке в Мавераннахр государственные монетные дворы функционировали только в Самарканде и городе Тункат Илака. Согласно историческим и археологическим источникам, Илак являлся историко-культурным краем, располагавшимся
на Великом Шелковом пути. В античный период головная трасса Великого Шелкового пути пролегла из древней Ферганы в Чеч через перевал Кендар, а торговые караваны останавливались в вышенназванных городах и шли дальше через Хасав, Заамин, Джизак к Самарканду [10].

С целью ознакомления с археологическими памятниками, связанными с историей государства Илак, в 2010-2012 годах под руководством академика А.Аскарова была организована научная экспедиция в Ахангаранскую долину. В период работы экспедиции особое внимание было удалено ознакомлению с исторической топографией древнего города, расположенного на возвышенностях кишлака Обиз. В работе М.Е.Массона об Ахангаране развалины этого древнего города были локализованы со столицей Илака городом Тункатом [9]. Такое мнение в научных кругах сформировали М.Е.Массон и его последователи.

Древний Тункат расположен между горными речками: с восточной стороны – Отчопарсаем и с западной – Совукбулаксаем, надтепарской высокого оврага у реки Ахангаран. По сведениям Ю.Ф.Бурякова этот кишлак возник в IV-V веках, а к середине тысячелетия становится городом металлургов. Также встречаются сведения о том, что “в VI-VII веках на 17,5 гектарах расположены кишлаки, юрты, кухандис и монастырские комплексы” [6,35]. В начале 1970-х годов Ю.Ф.Буряков навсегда посещает Тункат и приводит взаимоисключающие друг друга сведения о том, что его площадь равна примерно 50 га., на северо-западном углу памятника, в форме треугольника на 5-5 гектарах расположены кишлаки. К востоку от кухандиза на площади 12,5 га располагался шахристан, который с трех сторон (за исключением северной стороны) был окружен рвом [5, 93].

Однако, в процессе ознакомления с памятником представление об исторической топографии древнего Тунката стало меняться, потому что в топографии Тунката не наблюдается явное наличие присущих столице государства кухандиза и шахристана. Также нет присущих ей оборонительных стен, второй оборонительной линии за пределами стен – хандака, дороги, ведущей к кухандизу через пандус. Внутри кухандиза не наблюдается дворец правителя, храм, жилища и хозяйственные объекты, здания административно-управленческой системы и другие постройки.

Как правило, в археологических памятниках Средней Азии шахристан бывает в несколько раз больше и шире кухандиза, а различного рода ремесленные структуры и специализированные производственные кварталы, жилищные кварталы ремесленных общин, главный городской храм и внутренний рынок, квартальные перекрестки и площади, улицы и торговые лавки, системы каналов и арыков, а также другие постройки располагались в определенном порядке. Шахристан мог быть один, или несколько в зависимости от роста города. Такая структура, присущая не только столичному городу, но и всем древним городам, не нашла отражения в топографии Тунката. Приведенное выше описание развалин Тунката не является основанием для утверждения, что этот город являлся столицей государства Илак. Топографическая картина Тунката на возвышенностях Обиз свидетельствует о том, что он является формируемшимися на протяжении веков владением сотен металлургов-дехкан, то есть феодальными курганами, сконцентрированными в пределах одного города. Действительно, развалины этого города в Обизе являются останками города металлургов в государстве Илак, производивших продукцию из цветного металла и железа. Ознакомившись с развалинами древнего города Тунката, расположенного над современным кишлаком Обиз, мы не встретили достаточных сведений, подтверждающих выводы Массона М.Е. и Бурякова Ю.Ф. об этом городе, как о столичном. Напротив, в этом огромном городе можно видеть печи для выплавки металла, кучи шлака, имущества сотен металлургов-дехкан, специализировавшихся на производстве металлического сырья, которые относятся к V-XII векам.

Внимательно приглядевшись к топографии Тунката можно увидеть следующую яркую картину: владения каждого металлург-дехканы представляют собой курган, окруженный оборонительными стенами, который однообразным расположением холмиков-возвышенностей разных размеров. Предположительно они могут быть мастерскими по производству и вторичной обработке металла, остатки жилищ, склады сырья, а самая большая возвышенность может быть дворцом металлурга-дехканы. Входные ворота в курган-сарая пересекают восточные или южные ворота оборонительной линии. Часть ровной площадки внутри курган-сарая предназначалась для складирования кусков горных пород, которые добывались в горах и для размещения гужевого транспорта, о чем свидетельствуют обнаруженные материалы. На остальной части площадки образовывались небольшие холмики – остатки каких-то построек. Такая топографическая картина характерна для всех металлургических курганов, которые мы
обследовали. Об этом говорят и итоги раскопок кухандиза Тунката, которые проводил Ю.Ф. Буряков в 1959-1961 годах [4, 76-123].

По предположению М.Е.Массонача в восточной части площади, называемого кухандизом Тунката (раскоп 3), располагался дворец правителя. По описанию Ю.Ф.Бурякова на площади размером 9,8х9,9 м. Была платаформа, сложенная из сырцового кирпича, толщиной 1,5 м., на южной части площади открыта площадка, сложенная из каменных плит. На восточной части платформы обнаружена стена шириной в 1 м. из тонкого обожженного кирпича. Эта стена была расчищена в длину на 4,8 м. Такая же стена, располагавшаяся от северо-восточного угла платформы к северу, была открыта на 7,7 м. в длину. В стене находится дверной проем шириной 1,5 м. Стена из обожженного кирпича, построенная по направлению к востоку, исчезает через 2 м. [4, 88-89]. На площадке платформы встречаются осколки обожженного кирпича, обугленные остатки, вбитые в них железные гвозди, а также осколки стенок и керамики периода саманидов. Среди обломков керамики и кирпича, обожженных остатков, встречаются осколки с узорами черного цвета, вбитые в них железные гвозди, а также осколки стенок и керамики периода саманидов. Среди обломков керамики и кирпича, обожженных остатков, встречаются осколки с узорами черного цвета, вбитые в них железные гвозди, а также осколки стенок и керамики периода саманидов.

Тщательный анализ приведенных выше сведений указывает на то, что на этом месте нет никаких признаков кухандиза или дворца правителя Илака. Напротив, более близка к истине мысль о том, что этот объект, под которым примыкал труба, на этом месте располагался какое-то здание из богатых металлургов аристократического рода, названием кухандиз, являлось местом производства металла. В этом городе не только плавили металл из руды, но и хорошо освоили производству металла. В этом городе не только плавили металл из руды, но и хорошо освоили производству металла.

Верхняя часть печи не сохранилась. На дне печи обнаружены осколки кирпича, медные монеты, железные гвозди, хум (большой глинолитный сосуд) и кувшин, кувшинчик для хранения ртути и остатки керамической скатерти. Средняя часть всей комнаты покрыта обожженным кирпичом (28×14х4 см). Под трубой, пролегающей от первой комнаты к коридору, обнаружено углубление конусоидной формы. Стени углубления бурого цвета, обожжены, на дно которого уложен под углом керамическая труба. Видимо, на этом месте находилась разрушенная печь для выплавки руды [7].

У входа в коридор, под 1-комнатой (размером 4,6х5,7 см), на глубине 0,80 см. обнаружены несколько каменных плит, к которым примыкала труба. На северной части комнаты № 1 открыта еще одна комната (размером 5х6 см.). Центр этой комнаты уложен обожженным кирпичем, площадью 1х1м. На нем найдены осколки керамических плит и плита, изготовленная из песчаника. На поверхности плиты есть желобок, глубиной 1 – 1,5 см. Осколки такой плиты с желобками встречаются до пола комнаты [4, 92-93]. Найденные рядом с этим местом и в комнатах камерный молот и каменные топоры, плиты с желобками, нагромождения шлака недалеко от объекта, обнаруженные на куче пепла керамические целик из шахматообразными отверстиями, осколки хумов (больших сосудов) и кувшинов свидетельствуют о том, что город Тунката был крупным центром ремесленничества по производству металла. В этом городе не только плавили металл из руды, но и хорошо освоили изготовление различного оружия, хозяйственных предметов из чистого металла.

На нижнем уровне среза стратиграфического шурфа (2х0,8 м.), проложенного на восточном склоне каменной насыпи, обнаружены груды шлакотолщицей 30 см. над материком, богатых крупниками меди зеленоватого цвета. На южной стороне шурфа была обнаружена бурая от земля. Именно на этом месте располагалась печь для выплавки руды. Стени печи покрыты шлаком толщиной до 2 см. Углубление печи имеет расширение конусообразной формы до 23 см. [4, 94]. Верхняя часть печи не сохранилась. На дне печи обнаружены металлический шлак и незаметилые, изготовленные на гончарном круге осколки керамики, а также толстый слой золы. Среди обломков керамики встречаются осколки с углами чернов-пепельного цвета, нанесенные на эмалированный белый фон.

На другом стратиграфическом шурфе (№6) была открыта еще одна печь для выплавки руды. Печь имела форму углубления круглой формы с оштукатуренными стенками. В трещинах штукатурки встречаются крупники меди. Однако, сохранилось только дно печи. На этом месте

| ISRA (India) | 1.344 |
| ISI (Dubai, UAE) | 0.829 |
| GIF (Australia) | 0.564 |
| JIF | 1.500 |
| SIS (USA) | 0.912 |
| РННЦ (Russia) | 0.207 |
| ESJI (KZ) | 4.102 |
| SJIF (Morocco) | 2.031 |
| ICV (Poland) | 6.630 |
| PIF (India) | 1.940 |
| IBI (India) | 4.260 |
найдены непригодные осколки стекла и зола. Толщина шлака, разбросанная вокруг печи, составляет 2, 20 м. Под ним был открыт чистый культурный слой (толщиной 30-33 см.). В этом культурном слое находились остатки сгоревшего угля, костей животных и керамических материалов, среди которых выделялись осколки керамики, покрытых белой эмалью. Когда шурф достиг 2,5 м., стала выходить добротная желтая земля [4, 94-95].

В процессе изучения исторической топографии Тунката стало известно, что в северо- западной его части в пределах владений металлургов-дехкан (правителей) кроме мастерских для плавки руды располагались мастерские по производству различных орудий труда, предметов повседневного использования и оружия. Руду, привезенную из рудников Ташкентского кишлака, в основном доставляли по магистральному каналу на западе до города Тунката через арыки и каналы. Такая картина наблюдается вдоль арыка, вдоль арыков и каналов были построены печи для плавки руды. Отработанный шлак был разбросан вокруг каждой печи. Такая картина отчетливо наблюдается во всех частях Тунката.

Как известно, плавка руды, развитие металлургической промышленности в целом связано с водой. Руду, привезенную из рудников был с посредством различных каналов в одном северо-западной его части подводилась к замковым дверям через водяные ворота. По магистральной линии в каждой усадьбе феодала имела отдельные входные ворота. По нашему предположению, с внешней стороны к кирпичной магистральной линии, проложенной вдоль арыка, была прорыта труба для кузнечного молота, то вторая труба была вырыта в сторону металлургов.

Осколки шлака и строительных отходов на которую древней города Тунката. Обнаруженные в Тункате археологические материалы, среди которых выделялись осколки керамики, покрытых белой эмалью. Когда шурф достиг 2,5 м., стала выходить добротная желтая земля [4, 94-95].

В процессе изучения исторической топографии Тунката стало известно, что в северо- западной его части в пределах владений металлургов-дехкан (правителей) кроме мастерских для плавки руды располагались мастерские по производству различных орудий труда, предметов повседневного использования и оружия. Руду, привезенную из рудников Ташкентского кишлака, в основном доставляли по магистральному каналу на западе до города Тунката через арыки и каналы. Такая картина наблюдается вдоль арыка, вдоль арыков и каналов были построены печи для плавки руды. Отработанный шлак был разбросан вокруг каждой печи. Такая картина отчетливо наблюдается во всех частях Тунката.

Северо-восточная часть Тунката до Отчопарсая была богата рудными шлаками. На южной части этого пункта, по обеим сторонам магистрального канала, проложенного с запада на восток (от Совукбулакская до Отчопарсая), занимает усадьбы аристократов-металлургов. Такая картина наблюдается вдоль магистрального канала на западе до Совукбулакская [4, 95]. Усадьбы этих местных правителей – дехкан-фоеладов были окружены оборонительными стенами. Каждая усадьба феодала имела отдельные ворота. По нашему предположению, с внешней стороны к кирпичной магистральной линии, проложенной вдоль арыка, была прорыта труба для кузнечного молота через водяные ворота. По нашему предположению, с внешней стороны к кирпичной магистральной линии, проложенной вдоль арыка, была прорыта труба для кузнечного молота, то вторая труба была вырыта в сторону металлургов.
протяжении нескольких веков сложившийся из
владений сотен металлургов-дехкан в пределах
tерритории одного города и состоявший из
усадеб владельцев производства продукции
цветной и черной металлургии.

Итак, где же находится стольный город
государства Илак? В процессе непосредственного
ознакомления за последние 2-3 года с
археологическими объектами на территории
Ахангаранской долины мы пришли к выводу, что
столицей государства Илак, возможно, является
расположенная приблизительно в 17 км. к
востоку от Тунката, на левом берегу реки
Ахангаран – Суйирлитепа [3].

В качестве столицы Илака, Суйирлитепа
отличается наличием своей оригинальной
исторической топографии, оборонительных
сооружений и Арком монументального
характера, окружавшим его шахристаном и
центральным религиозно-идеологическим
объектом. В первую очередь Суйирлитепа
является первым городом на пути Великого
Шелкового пути из древней Ферганы к Чачу
через перевал Кендирсай. Он образовался на
месте древнего родника у кишлака Карабулак,
восточной стороне протекает глубокий и
приток Обджазсая на западной стороне протекает правый
стороне площади города протекает правый
квадратной формой (125x125 м.) отлучается от Тунката. На западной и северной
стороне оборонительных стен шахтители
расположены по три башни округлой формы. На
восточной и южной сторон оборонительной
линии шахтители имеются только угловые башни,
на этой стороне нет срединных башен.

Входные ворота арка расположены
посредине южной оборонительной линии. На
месте разреза ворот было обнаружено, что
ширина стен составляет не более 5 м.
Основание стен выложено из огромных блоков
сыроцового кирпича. На разрезе хорошо видно
дополнительное покрытие стены и следы
ремонтных работ.

Юго-восточная и северо-западная стороны
кухандиза состоят из высоких и широких
возвышенностей. Возможно, они являются
основаниями монументальных сооружений.
Северо-восточная площадь кухандиза относительно
ровная. В центральной части кухандиза находится широкий (диаметр 24 м.)
и глубокий (глубина 2,5 м.) бассейн. Как правило,
за оборонительными стенами кухандиза в
качестве второй оборонительной линии
существует ров, заполненный водой. Однако, в
топографии города Суйирлитепа такое
положение не наблюдается. По всей видимости,
судя по состоянию естественного городского
рельефа в этом не было необходимости.

По нашим наблюдениям, кухандиз со всех
сторон был окружен шахристаном (внешним
городом). По своему географическому
расположению они называются южным
шахристаном, северным шахристаном, западным
шахристаном и восточным шахристаном. На всех
этих шахристанах не наблюдается
оборонительные стены. Возможно, что такое
положение связано с расположением города.
Присущее городской топографии такое
положение не наблюдается в расположении
отдельно религиозно-духовном центре.

Религиозно-духовный центр в Суйирлитепа
возник в период раннего средневековья в
качестве собственности вагнзе на северо-
западной части города. Он имеет квадратную
форму (100х100 м.), его входные ворота
расположены на западной части южной
оборонительной линии. Территория вагнзе со
всех сторон окружена оборонительными стенами,
укрепленными башнями. Вдоль западной
оборонительной стены по пандусу можно
подняться на самую высокую точку города,
расположенную на его северо-западном углу.
Именно на этом месте расположен главный
общегородской храм огнепоклонничества.
На сегодняшний день полностью открыт верхний
горизонт храма на глубине 1,5-2 м. Было
выведено, что на его площади располагались 2
<table>
<thead>
<tr>
<th>Impact Factor:</th>
<th>ISRA (India) = 1.344</th>
<th>SIS (USA) = 0.912</th>
<th>ICV (Poland) = 6.630</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISI (Dubai, UAE) = 0.829</td>
<td></td>
<td></td>
<td>PIF (India) = 1.940</td>
</tr>
<tr>
<td>GIF (Australia) = 0.564</td>
<td></td>
<td></td>
<td>ICV (Poland) = 6.630</td>
</tr>
<tr>
<td>JIF = 1.500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESJI (KZ) = 4.102</td>
<td>SJIF (Morocco) = 2.031</td>
<td></td>
<td></td>
</tr>
<tr>
<td>РИНЦ (Russia) = 0.207</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICV (Poland) = 6.630</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The document is a list of impact factors for various indexing services. The list includes ISRA (India), ISI (Dubai, UAE), GIF (Australia), JIF, ESJI (KZ), SJIF (Morocco), РИНЦ (Russia), ICV (Poland), PIF (India), and ICV (Poland). The values range from 0.564 to 6.630.

Impact Factors:
- ISRA (India) = 1.344
- ISI (Dubai, UAE) = 0.829
- GIF (Australia) = 0.564
- JIF = 1.500
- ESJI (KZ) = 4.102
- SJIF (Morocco) = 2.031
- РИНЦ (Russia) = 0.207
- ICV (Poland) = 6.630
- PIF (India) = 1.940
- ICV (Poland) = 6.630

### Conclusion

The document concludes with a discussion on the historical and topographical aspects of the area. It mentions the importance of further research to understand the historical significance of the site. The conclusion stresses the need for additional archaeological studies and the examination of written sources to complement the findings from on-site investigations.
### Impact Factor:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>РИНЦ (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>3.860</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>IBI (India)</td>
<td>4.260</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>3.860</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
</tbody>
</table>

Рисунок 2 - Обломки обожженного кирпича, керамических труб, сломанных каменных плиток и рудного шлака.

Рисунок 3 - Обломки полуошлакованной, полуоплавленной рудной плиты.

Рисунок 4 - Труба для кузнецкого молота длиной 80 см.
Impact Factor:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PIIH (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>3.860</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>IB (India)</td>
<td>4.260</td>
</tr>
</tbody>
</table>

References:


UZBEKISTAN-CHINA IS ON THE WAY OF STRENGTHENING BILATERAL RELATIONS

Abstract: The history of the formation and development of small and medium-sized business in China, since the 70s of the XX century, which contributed to the development of the country are examined in this article. Also, the history of formation and development of Uzbek-Chinese relations in the economic sphere, and especially, in the direction of small business and private entrepreneurship in the years of independence is being investigated.

Key words: small business, private enterprise, state support of small and medium business, strategic partnership, legal regulation of interstate relations, small enterprises, investment policy.

Language: English

Introduction
The relevance of the study is due to the fact that small and medium-sized enterprises are very important for the normal functioning of the economy. Small business and private entrepreneurship have a significant impact on the development of the national economy, solving social problems, increasing the number of employed workers. High rates of innovations, inventions, rapid growth in the sphere of services and employment, healthy competition, which are leading, from one side, to lower prices, and from other side - to the fact that the consumer receives products and services in high quality. They provide an opportunity for the state to receive large funds in the form of tax revenues - all this is the contribution of small enterprises to the economy of the country.

Among the numerous countries, the PRC was able to show it as an economically fast developing entity in which small and medium-sized business plays a significant role. Small and medium-sized enterprises are the backbone of China's economy and the driving force behind its economic development. In many industries, they occupy leading positions. Small and medium-sized enterprises have become an important source of China's economic growth and their number is growing regularly. Introducing foreign investments into domestic markets, China in its turn tries to strengthen its influence in foreign markets. This is connected with the investment policy, in which the Republic of Uzbekistan also actively participates.

The friendly ties between the Uzbek and Chinese people have historically been rooted in the centuries. It should be noted that China is today an important strategic partner for the Republic of Uzbekistan, especially, in the economic sphere. Although each of these countries has its own development path, but they still have much to learn from each other.

History of the development of small business and private entrepreneurship in China: Of all the countries of the former socialist camp that have launched political and economic reforms, China is the country that has made particularly tangible progress as a result of the transition from the previous centrally planned economy to a market system (Dodoboey, 2016).

Reformation actions began in the late seventies of the last century and went down in history under the name of "Politics of Reform and Openness", which focused on the world economy, on the external environment, which was fundamentally different from the situation that had developed during this period of the country's development.

A feature of China's small and medium-sized business is the emergence and development of this sector of the economy, not in the city but in the village, where a family contract was encouraged.
Later small business began to spread and in the city, which contributed to the reduction of unemployment (Shun Chjan, 2008). Although, according to experts, in the initial period of reforms there was no coherent strategic concept of development, and all economic work was aimed at eliminating the disastrous consequences of the economic reform of the past period. The effectiveness of this process was reduced by the reduction of the influence of the central government on business and the increase of the value of private capital (Motovits, 2005).

A great role in the development of private entrepreneurship was played by the fact that a large number of wealthy Chinese entrepreneurs who had previously emigrated abroad (rich huaqiao) wanted to invest their money in the development of their homeland.

For its part, the Chinese government has undertaken many activities aimed at supporting small and medium-sized business. As it was pointed out, already in the nineties a transition was made from a centralized system of a planned economy to a market, therefore, it was necessary to reform the financial system. After Deng Xiaoping's trip to the south of the country in early 1992, many political leaders and ordinary people began to accept the concept of a "socialist market economy". The speech of the country's leader seriously changed public opinion and dipped China in the golden time for the development of the private sector, especially, private enterprises. The number of such enterprises is rapidly increasing. So, by the end of 1992 the number of registered private enterprises reached 139600 - 29.5% more than in the previous year, and the number of employees reached more than 2 million people, or 26.1% more than in 1991. Moreover, over 220,000 former civil servants left their posts, plunged into the world of business (Rogatov, 2005).

State support and legal regulation of small and private entrepreneurship in China: It should be noted that in September 1997, the 15th Congress of the CPC recognized that the non-public sector is an important component of the Chinese socialist market economy, and the existence of various forms of ownership is a key factor in the country's economic growth. The CCP and the Chinese government began to take measures to protect the legally obtained incomes of various enterprises, to encourage the development of all factors of production, to protect the property rights of all types of enterprises and to provide conditions for free competition between enterprises. In addition, amendments to the Constitution in 1999 argue that individual business and private enterprises are an important component of the Socialist market economy. This vivid confirmation of the active role of the private sector in the Chinese national economy has served to further remove obstacles to the development of this sector (Rogatov, 2005).

For these purposes, the Chinese Government creates a "Department of Small and Medium Enterprises", which was led by the National Commission for Development and Reform and the Chinese Center for Business Coordination and Cooperation. Studying the state and needs of small and medium-sized business, they helped businessmen in various activities, such as training personnel, informing about holding negotiation processes, monitoring activities, providing assistance in organizing trade issues, etc.

The central government assisted the business sector in the issues of developing foreign world space. Thus, with the assistance of the "Chinese Center for the Coordination and Cooperation of Business", from 1990 to 2001, more than 950 international projects for the development of small and medium-sized business were formed and are functioning, the implementation of which brought the country more than 7.1 billion dollars in profits (Motovits, 2005). In addition, the National Commission for Development and Reform (NDRC) serves small business and facilitates cooperation with domestic and foreign partners.

In turn, the Government of China supports the business through the "Credit Guarantee Fund", which works on the developed system. The Foundation supports the idea of creating techno parks and innovations. The PRC implemented the policy of a developed techno park, SEZ, and this contributed to attracting foreign investment, creating opportunities for innovation, development of education. Also, another important body contributing to the development of the country's economy is the state information service CSMEO, which was established in 2001. This service is engaged in the provision of information counseling services for the population and entrepreneurs in the activities of small and medium-sized business through its Internet site. The CSMEO network covers all regions of China, which makes it possible to timely inform the population about the state of the labor market, changes in the current legislation, recent advances in science and technological inventions, development and status of small and medium-sized business.

In order to further expand the information network and coordinate the activities of CSMEO with regard to the creation of a high-quality three-level nationwide system of information services for small business, the main information agency "Beijing SME online company" was established in 2003. At the first level is the main website in Beijing, which has second-level support sites in each region, and the third level includes information networks in all cities, economic zones and municipalities (Pogarskaya, 2005). It can be said with certainty that to date there are no problems in the area of finding premises for

<table>
<thead>
<tr>
<th>Impact Factor:</th>
<th>ISRA (India)</th>
<th>SIS (USA)</th>
<th>ICV (Poland)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.344</td>
<td>0.912</td>
<td>6.630</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
<td></td>
<td>1.940</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
<td></td>
<td>4.260</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
</tbody>
</table>
work, because it is being intensively built, and rental payments are insignificant (Kozlov A, www.kommersant.ru).

"The State Fund for the Development of Small and Medium-sized Enterprises” is financially supported by state structures, protects the level of profitability of the small business sector from the actions of any structures. Back in 2002, the Chinese authorities adopted the law "On stimulating the development of small and medium-sized enterprises." The law gave these enterprises equal rights with large companies, including access to modern technology, market information and financing. The state declared the protection of the legitimate income of small enterprises and their investors against the encroachments of any persons and organizations. Serious tax benefits were granted to enterprises willing to employ a significant number of unemployed and disabled people. As stated in the law, such enterprises "... receive a tax discount from the state or are exempt from taxes, and enjoy tax benefits" ("On the stimulation of small and medium-sized enterprises", 29.06.2009). Small and medium-sized business were allowed in industries previously completely controlled by the state, it retained its influence only in some key sectors of the economy.

The Chinese government began to place state orders at small and medium-sized enterprises. Since 1 January 2003, the "Law on the Promotion of SMEs" came into force. In February 2005, the State Council issued a decree on the promotion and support of organized personal farms and small enterprises of all sectors of the economy. This was stated in the decisions of the Communist Party of the PRC in the "outline of the 12th Five-Year Plan" (Kulik, 2004). All these measures led to the rapid development of this sector, the growth of its profitability. By 2005, China had 4.3 million small and medium-sized enterprises, as well as more than 28 million individual entrepreneurs. Small and medium business gave the country more than 80% of jobs. It accounted for 55% of GDP and 60% of industrial output. In addition, the SME sector gave 65% of patents, 75% of technical innovations and more than 80% of China's innovative products. And it provided 46.2% of the country's tax revenues and 62.3% of the total volume of exports. It should be noted that almost 99% of all enterprises of the People's Republic of China belong to small enterprises (with a staff of up to 100 people). And only 0.6% - to the average (with the number of employed from 101 to 999).

In 2007, China adopted a law on proprietary rights, which granted private parties equal ownership with the state and collective. This significantly strengthened the position of representatives of small and medium-sized business. As sources indicate, in 2007 the total volume of goods and services reached 2.3 trillion. This brought the PRC to the fourth place in the world after the US, Germany, Japan, ahead of France, Italy and Canada. In the same year, China's GDP reached 2.7 billion dollars, or more than 2 thousand dollars per inhabitant. This means that the third doubling of the key indicator of economic power occurred not in ten, but in just six years (Batova, http://jurnal.org/articles/2010). According to 2011, over 6 million small enterprises operated in the country during this period, which became the driving force of China's economic development.

In August 2013, the Chinese leadership announced innovations in the tax system of small enterprises in the country. According to the proposed amendments, representatives of small business whose monthly income does not exceed 20,000 yuan, or 3226 dollars, are completely exempt from value added tax and profit tax (Batova, http://jurnal.org/articles/2010).

According to Chinese leaders, the radical modernization of the country's economy should be completed in 2050, which should lead it to the number of leaders in terms of economic development. But the result of the work of small business can already be observed at the present time - the shelves of many shops are packed with cheap goods that are produced in small enterprises of the country.

To date, the development of this sector of the economy in the country is taking place in several directions: the government of the country stimulates, first of all, the development of private enterprises that work in the field of electronics production and software development.

Types of small and medium-sized enterprises in China: History tells: in the 80s of the last century the State Council of China adopted the "Provisional Regulations on Private Enterprises of the People's Republic of China" (Rogatov, 2005). This document contained a set of legal norms specifying the legalization of the social status of medium and large business and regulating the most important aspects of its economic activities and relations with the state.

In the "Provisional Regulations", an official definition of a 'private' enterprise as an individual (or group of persons) of a profitable economic unit with 8 or more employees is given.

According to the organizational and legal form private enterprises are divided into three types:
1. A private sole proprietorship, acting on the funds of one person. His investor bears unlimited liability for the company's debt obligations;
2. A private enterprise on shares (partnership), when at least 2 people on the basis of an agreement invest their capital and conduct joint management, jointly bear full responsibility for profits and losses;
3. A private limited company (LLC) is an enterprise with at least two and not more than 50 investors who are liable in proportion to the amount

<table>
<thead>
<tr>
<th>Impact Factor:</th>
<th>ISRA (India) = 1.344</th>
<th>SIS (USA) = 0.912</th>
<th>ICV (Poland) = 6.630</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISI (Dubai, UAE) = 0.829</td>
<td>PHHH (Russia) = 0.207</td>
<td>PIF (India) = 1.940</td>
<td></td>
</tr>
<tr>
<td>GIF (Australia) = 0.564</td>
<td>ESJI (KZ) = 4.102</td>
<td>IBI (India) = 4.260</td>
<td></td>
</tr>
<tr>
<td>JIF = 1.500</td>
<td>SJIF (Morocco) = 2.031</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
of capital invested by them. According to the "Companies Law of the People's Republic of China", the registered capital of the CCW must be no less than the statutory minimum amount (100-500 yuan depending on the type of activity).

The CCT is granted the status of a legal entity, but it is prohibited to issue shares in order to replenish funds. Private enterprises, as a rule, arise on the basis of successfully developing family-owned individual enterprises; a significant part of them are former collective, mainly, township and rural enterprises as they have changed their form of ownership. They are also created on the basis of small enterprises of state and collective ownership by transfer to a lease, contract or shareholding.

When hiring a labor force, an employment contract is also drawn up. The legal status of wage workers is equated with the status of state workers and employees.

At the initial stage of development, private enterprises based on individual ownership prevailed, but in the 1990s the number of private CCAs increased more rapidly.

The sphere of activity of private enterprises covers mainly industry, construction, transport and communications. In general, these are small enterprises with an average size of production assets of 50,000 yuan and an average number of employed 16 people. Since the early 1990s the introduction of entrepreneurship in the sphere of services, high technologies, electronics, automation, production of export products have been accelerated.

Today, the development of the business sector in the PRC is very large and is proceeding at a fast pace, because the state is focused on transferring the country from resource-intensive industries and enterprises to small business. This characteristic feature also attracts Uzbek businessmen, because the "Chinese model" of development could justify itself. Secondly, friendly relations between our countries have not ceased with the blessing of the centuries, which have now become even stronger.

The first steps for establishment of diplomatic relationship between the Republic of Uzbekistan and the PRC: The basis for the development of bilateral relations between states was laid on December 27, 1991, when the People's Republic of China recognized Uzbekistan as a sovereign state. Diplomatic relations were established on January 2, 1992. Over the years, the Uzbek-Chinese partnership has been characterized by increasing dynamics in the political, trade-economic, credit, financial and cultural-humanitarian spheres.

Uzbek-Chinese cooperation is multifaceted; the level of strategic partnership is constantly increasing. These relations, serving national interests, socio-economic development, increasing prestige in the world arena of our countries, are consistently developing on the basis of cooperation in the spirit of the principles of friendship and mutual trust, the firm foundation laid by the First President of Uzbekistan Islam Karimov (Urozov, №95).

At the present stage, the Uzbek-Chinese cooperation, covering the whole range of relations, is friendly and mutually beneficial. It is based on confidential personal contacts between the heads of state. Regular exchanges of visits and summits are held, including within the framework of summits of international and regional structures.

Strong evidence of this can serve as an established regular exchange of visits by delegations of all levels, and, first of all, at the level of heads of state. In particular, the First President of the Republic of Uzbekistan Islam Karimov made six state and official visits to the PRC, which became important events in the history of bilateral relations and contributed to the further expansion and deepening of the multi-faceted Uzbek-Chinese relations. In turn, the chairmen of the PRC Jiang Zemin in 1996 and Hu Jintao visited Uzbekistan in 2004 and 2010 (Dodboev, 2016).

Legal regulation of Uzbek-Chinese relationship: 170 international legal documents covering various spheres of bilateral relations Between Uzbekistan and China have been signed. For example, during the state visit of the President of the People's Republic of China Hu Jintao to Uzbekistan in June 2010, the Joint Declaration on the comprehensive development and expansion of friendship, cooperation and partnership relations was adopted. Along with this, a number of documents on cooperation in the technical and economic, non-oil, oil and gas spheres and in the field of high technologies were signed.

In addition, an important event in bilateral relations was the official visit of the First President of our state to China in June 2012, which not only strengthened all the significant achievements in Uzbek-Chinese relations achieved over the past years, but also brought them to the level of strategic interaction. During this visit, 45 trades, economic, investment and financial agreements and contracts were signed for 5.3 billion dollars. An important outcome of the visit was the signing by the heads of state of the Joint Declaration on the Establishment of a Strategic Partnership, which defined new directions for the development of mutually beneficial cooperation (Dodboev, 2016).

The state visit of the Chairman of the People's Republic of China Xi Jinping to Uzbekistan in September 2013 helped consolidate the fundamental foundations of cooperation between Uzbekistan and China. During the visit, the Treaty on Friendship and Cooperation was signed, as well as the Joint Declaration on the Further Development and Deepening of the Strategic Partnership's Bilateral
Impact Factor:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GJIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>PHHII (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>IBF (Indonesia)</td>
<td>1.940</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
</tbody>
</table>

Relations. The Strategic Partnership Development Program for 2014-2018 (2013) and the Joint Statement signed in 2016 also constitute the legal basis for cooperation between our countries.

An important component of the systemic development of relations between the two countries is the Uzbek-Chinese intergovernmental committee on cooperation, the second meeting of which was held in October 2013 in Tashkent. Within the framework of this committee, meetings of the relevant subcommittees are held in such areas as trade and economic, cultural and humanitarian ties, security, energy, transport, science and technology, and agriculture.

The exchange of visits at the level of government delegations is expanding. In 2007-2013, Uzbekistan visited the premiers of the State Council of the People's Republic of China Wen Jiabao and Li Keqiang, deputy premier of the State Council Hui Liangyu, the ministers of public security Meng Jianzhu, foreign affairs - Yang Jiechi and Wang Yi, finance - Xie Xuzhen and others.

Uzbek-Chinese relationship in the sphere of small business and private entrepreneurship: Currently, both states provide each other with mutual political support in the international arena, including within the framework of the UN, the SCO and other authoritative international structures. China has always supported Uzbekistan's chosen path of development. In Uzbekistan, in turn, firmly and unswervingly support the deeply thought-out and balanced political course of the Chinese leadership, its principled policy on the issues of one China, an uncompromising struggle against a common enemy, such as terrorism, extremism and separatism.

A significant component of bilateral relations is cooperation within the framework of the Shanghai Cooperation Organization. Our countries attach special importance to the successful development of the SCO and to active participation in its activities. Cooperation with this Organization is today becoming a serious factor in strengthening stability and security in the region and in the world as a whole.

Also, Uzbekistan and China attach priority to the further strengthening of the strategic partnership, the expansion of multifaceted trade, economic, investment and financial cooperation based on the principles of mutual benefit, consideration of interests and equality.

Touching upon the Uzbek-Chinese relations, it is appropriate to note the consistent development of trade, economic and investment cooperation. This is confirmed by the fact that China ranks first among countries investing in Uzbekistan, second among trade partners. According to sources, the volume of mutual trade is growing between the two countries. For example, in 2010 this figure was $ 2.85 billion.

During this period, Uzbekistan operated 347 enterprises with the participation of China's investments. In the Ministry of Foreign Economic Relations, Investments and Trade of Uzbekistan, 64 representative offices of Chinese companies were registered. These are enterprises operating in the sphere of export-import operations, textile industry, processing of agricultural products, information technologies.

In accordance with the loan agreement signed between the National Bank for Foreign Economic Activity of Uzbekistan and the State Development Bank of China in June 2010, the Bank of China allocated $ 75 million to finance projects of small business and private entrepreneurship, investment projects in our country. To note, these banks of Uzbekistan and China have been effectively cooperating since 2005. During this period, the National Bank for Foreign Economic Activity of Uzbekistan presented two credit lines in the amount of $ 80 million to finance the projects of the economy we are studying. Businessmen of Uzbekistan were provided with financial assistance for 120 projects.

In the conditions of the global financial and economic crisis, the issue of overcoming its consequences has become an important link in interstate cooperation. In order to solve this problem, Uzbekistan and China pay special attention to the expansion of trade, economic, investment and financial cooperation.

Investment cooperation is actively developing in the spheres of oil and gas, mining. For example, the Chinese National Oil and Gas Corporation (CNPC) conducts geological exploration work in the Aral Sea, investment blocks of Ustyurt, Bukhara-Khiva and Fergana. The commissioning of the Central Asia - China gas pipeline provided new opportunities for the development of cooperation in the energy sector.

At the same time, there is a wide field of activity for effective cooperation of Uzbekistan in many branches, including in the field of transport, logistics, construction, telecommunications, high technologies. In particular, during this period, Uzbekistan and China contributed huge resources to the free industrial and economic zones of “Navoi” and “Djizak”.

Representatives of the Chinese business sphere regularly take part in exhibitions, fairs, business forums and conferences held in Uzbekistan, and entrepreneurs and farmers of our country take part in events in China. In China, cotton is cultivated, but in this country there is a great demand for Uzbek cotton. In this regard, representatives of China regularly participate in the traditionally held International Cotton Fair in Uzbekistan. At the exhibition “Expo 2010” held in Shanghai in 2010, one of the most visited was the pavilion of
Uzbekistan. This also shows China's great interest in Uzbekistan. The entrepreneurs and farmers of our country are studying China's experience in developing small business and private entrepreneurship, creating new enterprises on Chinese technologies. The potential and opportunities of Uzbekistan in various fields are widely demonstrated in China. Travel companies and firms of Uzbekistan widely promote the opportunities of our country in this direction at the tourism exhibitions and fairs held in China (“Uzbekistan-China: Cooperation is dynamically developing on the basis of strategic partnership”, 2017).

There is the most-favored-nation regime between the two countries, which along with active contacts and signed documents contributes to the steady growth of mutual trade turnover, which already reached $ 5.2 billion in 2013. In the first half of the next year alone, this indicator exceeded $ 2.6 billion, but overall for the year 2014 the trade turnover between our countries amounted to 4.7 billion US dollars, that is, slightly less than the previous year. If in the first half of 2015 the growth of bilateral trade reached 11.7%, then by the end of 2016 the volume of mutual trade amounted to 4.2 billion US dollars (“Narodnoye slovo”, №92).

Every year, investment cooperation is expanding, the number of Chinese companies in Uzbekistan is steadily growing, and cooperation in implementing joint projects in the sphere of high technologies is actively growing. Every year, the number of Chinese investors has increased, which have invested in the development of small business and private entrepreneurship. If we turn to sources, more than 300 enterprises of Chinese investors actively participated in the Uzbek market by 2013. In 2014, their number grew and from that period 482 enterprises have been operated in our republic with the participation of investors from the PRC, including 78 enterprises with 100% Chinese capital. In addition, by that time, 74 companies of this country were accredited.

If in 2015 there were 582 joint Sino-Uzbek enterprises operating in Uzbekistan (Information at MFER), then by 2016 their number was increased to 700 (Shukurov, №94). Of these, more than 80 were created entirely through investments from China.

During the period 1991-2013, the Government of the People's Republic of China granted Uzbekistan a significant amount of grant funds for the implementation of priority socially significant projects in various fields.

The memorandum signed in September 2013 between the Ministry of Foreign Economic Relations, Investments and Trade of Uzbekistan and the Ministry of Commerce of China on bilateral cooperation in the implementation of technical assistance projects in excess of $ 271 million in 2013-2017 made it possible to make the work in this direction systemic. The agreement on cooperation between the Fund for Reconstruction and Development of Uzbekistan and the Bank for the financing of investment projects for more than $ 8 billion opens up ample opportunities for implementing priority projects for the creation of modern high-tech industries in various sectors of the economy (Shukurov, №94).

In general, over the past years, Chinese investors have invested almost $ 7.8 billion in the economy of our country. These investments are introduced to the creation of techno parks, free economic zones and other enterprises. They include CNPC in the oil and gas sector, CITIC in the chemical industry, XCMG in the production of excavators and etc.

Also, the leadership of our country created free economic zones in order to create the most favorable conditions for the further development of the economy. Within a short period of time, free economic zones by attracting direct foreign investments are developing even more. So, in October 2016, by the decree of the President of the country Shavkat Mirziyoyev, the special industrial zone was renamed the free economic zone (JEZ), and its participants were granted additional privileges and preferences. Currently, Chinese companies such as Wenzhou Jinsheng Trade, ZTE, Huawei, ZTT, Juita Sewing Machine, Fuan Huari Brake Materials, Xijiang Nixian International and others are operating here. 10 investment projects worth $ 30 million in the areas of telecommunications, engineering, energy and building materials. In general, we can say with confidence that further bilateral relations will develop more intensively, as both sides support each other.

**Conclusion**

Due to the purposeful work on the establishment of mutually beneficial trade and economic relations, Uzbekistan has established friendly ties with more than 180 countries over the years of independence. The People's Republic of China is one of the key partners of our country. The joint cooperation of our states is reflected in numerous legal documents. In general, over the past years between Uzbekistan and the PRC signed 231 documents of a different nature. A high level of political dialogue has created a stable foundation for the development of trade and economic ties. The fast-growing economy of Uzbekistan, its favorable geographical location in the heart of the region, modern transport communications, a reliable investment attraction strategy increase the interest in cooperation among China's business circles.

Undoubtedly, annually growing trade turnover, attraction of new technologies to the economy of our country have a beneficial effect on the development
and prosperity of the state, as the economies of the two countries do not compete, but, on the contrary, complement each other. And this causes the need to build up trade and economic ties, especially, the intensive development of small business and private entrepreneurship.

References:


SIMULATION MODELS OF CHAOTIC FLOW

Abstract: This paper discusses options of modelling the dynamic characteristics of the process of the aerodynamic flow around the bed of the channel, in a flat non-steady model of turbulent flow. The obtained data about the pressure and speed of flow at various speeds and when the wind gusts up to 40 m/s.

Key words: wind, channel, flow, turbulence
Language: English
Soi: http://s-o-i.org/1.1/TAS-12-56-16 Doi: https://dx.doi.org/10.15863/TAS.2017.12.56.16

Introduction
Most of the territory of Kazakhstan is exposed to high winds that cause snow and sand drifts. Water conveyance channels, operated in these conditions, reduce bandwidth up to a full stop. The reason for the drift are turbulent air streams arise in the mainstream channel. Consider a mathematical model simulating the flow of air, full of snow or sand particles impinging on the bed of the canal [1].

Materials and Methods
For the simulation of laminar and turbulent air flows with a mixture of different complexes is used: Comsol, Flowvision and others. For modeling laminar and turbulent flows of air mixed with particles of snow or sand using various complexes: Comsol, Flowvision and others.

Picture 1 – Geometry.
Impact Factor:

<table>
<thead>
<tr>
<th></th>
<th>ISRA (India)</th>
<th>SIS (USA)</th>
<th>ICV (Poland)</th>
<th>PIF (India)</th>
<th>IBI (India)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>1.344</td>
<td>0.912</td>
<td>1.500</td>
<td>0.829</td>
<td>0.912</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
<td>4.102</td>
<td>6.630</td>
<td>0.207</td>
<td>4.260</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
<td>0.564</td>
<td>4.102</td>
<td>4.260</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Picture 2 – Grid of model.

In this model we consider the simulation of the flow in a narrow two-dimensional channel with using the model of the gap.

The gap model is used in conjunction with a given model of the flow and is designed to account for resistance created by a narrow channel. The gap model allows to avoid the resolution of narrow channel grid. The gap model is only used in cells of the gap. The cell gap of the cell, between the 2 the gap-forming surfaces. Surfaces are the gap-forming, if the distance between them does not exceed a predetermined maximum value gap. The cell gap is determined FlowVision automatically.

Picture 3 – The flow in the channel using a model of the gap.
<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>ISS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>GIF</td>
<td>0.564</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>IB (India)</td>
<td>4.260</td>
</tr>
</tbody>
</table>

**Impact Factor:**

![Velocity distribution](image1.png)

**Picture 4 - Velocity distribution.**

![Velocity and pressure distribution](image2.png)

**Picture 5 - The distribution of velocity and pressure in the wind to 10 m/s.**
### Impact Factor:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>РННЦ (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>IB (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PI (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>IB (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
</tbody>
</table>

**Picture 6** – The distribution of velocity and pressure in the wind to 20 m/s.

**Picture 7** – The distribution of velocity and pressure in the wind to 30 m/s.
Impact Factor:

- ISRA (India) = 1.344
- ISI (Dubai, UAE) = 0.829
- GIF (Australia) = 0.564
- JIF = 1.500
- SIS (USA) = 0.912
- ICV (Poland) = 6.630
- PIIH (Russia) = 0.207
- ESJI (KZ) = 4.102
- SIF (Morocco) = 2.031
- РИНЦ (Russia) = 0.207
- ESJI (KZ) = 4.102
- ICV (Poland) = 6.630
- РИНЦ (Russia) = 0.207
- ESJI (KZ) = 4.102
- ICV (Poland) = 6.630
- РИНЦ (Russia) = 0.207
- ESJI (KZ) = 4.102
- ICV (Poland) = 6.630
- РИНЦ (Russia) = 0.207
- ESJI (KZ) = 4.102
- ICV (Poland) = 6.630
- РИНЦ (Russia) = 0.207
- ESJI (KZ) = 4.102
- ICV (Poland) = 6.630
- РИНЦ (Russia) = 0.207
- ESJI (KZ) = 4.102
- ICV (Poland) = 6.630

Picture 8 – The distribution of velocity and pressure in the wind to 40 m/s.

**Conclusion**

A mathematical model of the flow around an empty channel. The obtained aerodynamic characteristics of modeling process air flow with uniform wind and wind gusts from 10 to 40 m/s. The data obtained can be used in the analysis and modeling of snow-sensimet and deflation of soils.

**References:**

3. (2015) Vyazkost'. Available: [https://ru.wikipedia.org/wiki/%C2%FF%E7%EAE%E1%E2%FC](https://ru.wikipedia.org/wiki/%C2%FF%E7%EAE%E1%E2%FC)
8. Shevtsov AN, Alimbaev BA, Manapbaev BZ (2013) COMPUTER MODEL OF THE INFLUENCE OF MAGNETIC FIELDS OF THE DOMAINS IN THE FORM OF MICRO-CRACKS AT FRACTURE OF METALS. ISI Theoretical & Applied Science 06 (2): 51-64. doi: [http://dx.doi.org/10.15863/TAS.2013.06.2.6](http://dx.doi.org/10.15863/TAS.2013.06.2.6)
9. Shevtsov AN (2014) SOME QUESTIONS SIMULATION OF INTERACTIVE DYNAMIC SYSTEMS. ISI Theoretical &
### Impact Factor:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>PIIHII (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>4.260</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>SIF (Morocco)</td>
<td>2.031</td>
</tr>
<tr>
<td>РИНЦ (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
</tbody>
</table>


Impact Factor:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>PHHI (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
<tr>
<td>IBI (India)</td>
<td>4.260</td>
</tr>
<tr>
<td>PI F (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>РИНЦ (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
</tbody>
</table>

Contents

1. Chemezov D
   REQUIREMENTS FOR MANUFACTURING OF A SPEEDOMETER SCALE OF A CAR. … 1-4

2. Zelenova JI, Belgorodskiy VS
   TRADITIONAL PROTOTYPES TECHNOLOGY LACE. .................................................. 5-9

3. Gahramanova ZN
   ABOUT RESEARCH OF SOME MAIN EARLY MIDDLE AGES CHRISTIAN MONUMENTS OF AZERBAIJAN (BASED ON MATERIALS OF GARABAKH TERRITORY). .................................................. 10-12

   BOTANICAL STUDY AND EVALUATION OF THE IN VITRO ANTIBACTERIAL ACTIVITY OF 70% ETHANOLIC EXTRACT OF PIPTADENIASTRUM AFRICANUM HOOK (FABACEAE) ON STAPHYLOCOCCUS AUREUS ISOLATED FROM URINE. …… 13-18

5. Chemezov D
   CALCULATION OF PRESSURE LOSSES OF LIQUID AT A CYLINDRICAL STRAIGHT PIPELINE SECTION. .................................................. 19-22

6. Pasechkina TN
   THE PROBLEM OF FORMATION OF STUDENTS COMMUNICATIVE SELF-EFFICACY AT THE STAGE OF THEIR PROFESSIONAL TRAINING AT THE HIGHER EDUCATIONAL ESTABLISHMENT. .................................................. 23-27

7. Kakhkharov AJ
   “UZBEK MODEL” OF DEVELOPMENT FAMOUS FOR THE NAME OF ISLAM ABDUGANIYEVIICH KARIMOV CURRENTLY APPRECIATED BY THE WORLD COMMUNITY. .................................................. 28-39

8. Kenjebek kyzy M
   PREVENTION OF MANIFESTATIONS OF EXTREMISM AND TERRORISM IN THE PENITENTIARY SYSTEM OF THE KYRGYZ REPUBLIC. .................................................. 40-44

9. Kenjebek kyzy M
   TOPICAL ISSUES OF COUNTERING RELIGIOUS EXTREMISM IN PRISONS. …… 45-49

10. Choriev SS
    CLASSIFICATION OF THE TURKESTAN ASSR DOCUMENTATION IN THE CENTRAL STATE ARCHIVE OF THE REPUBLIC OF UZBEKISTAN. .................................................. 50-54

11. Khaknazarov KD
    DAILY ACTIVITIES OF THE YOUTH OF UZBEKISTAN: THEIR TRADITIONS AND TRANSFORMATIONAL PROCESSES. .................................................. 55-59

12. Muxamedova M
    PROCESSES OF USING HISTORICAL AND CULTURAL HERITAGE OBJECTS IN TOURIST ROUTES IN UZBEKISTAN (HALF OF THE 20TH CENTURY). .................................................. 60-63

13. Osipov VS
    BASIC SOCIAL-ECONOMIC FACTORS OF FAR EASTERN DISTRICT DEVELOPMENT. …… 64-71
### Impact Factor:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>PHHII (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
<tr>
<td>ICBF (India)</td>
<td>4.260</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>RIIN (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
</tbody>
</table>

14. **Isabekov BI**  
SU/YURLITEPA-THE CAPITAL CITY OF ILOQ.  
72-79

15. **Rashidova F**  
UZBEKISTAN-CHINA IS ON THE WAY OF STRENGTHENING BILATERAL RELATIONS.  
80-86

16. **Koybakov S, Maliktayuly M, Shevtsov A**  
SIMULATION MODELS OF CHAOTIC FLOW.  
87-92
Impact Factor:

<table>
<thead>
<tr>
<th>Source</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>РИНЦ (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>IBI (India)</td>
<td>4.260</td>
</tr>
</tbody>
</table>

ISPC Generalization of scientific results,
Philadelphia, USA

Theoretical & Applied Science
www.T-Science.org

Scientific publication

«Theoretical & Applied Science» - Международный научный журнал зарегистрированный во Франции, и выходящий в электронном и печатном формате. Препринт журнала публикуется на сайте по мере поступления статей.
Все поданные авторами статьи в течение 1-го дня размещаются на сайте http://T-Science.org.
Печатный экземпляр рассылается авторам в течение 2-4 дней после 30 числа каждого месяца.

Импакт фактор журнала

<table>
<thead>
<tr>
<th>Impact Factor</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Factor JIF</td>
<td>1.500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact Factor ISRA (India)</td>
<td>1.344</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact Factor ISI (Dubai, UAE)</td>
<td>0.307</td>
<td>0.829</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact Factor GIF (Australia)</td>
<td>0.356</td>
<td>0.453</td>
<td>0.564</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact Factor SIS (USA)</td>
<td>0.438</td>
<td>0.912</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact Factor РИНЦ (Russia)</td>
<td>0.179</td>
<td>0.224</td>
<td>0.207</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact Factor ESJI (KZ)</td>
<td>1.042</td>
<td>1.950</td>
<td>3.860</td>
<td>4.102</td>
<td></td>
</tr>
<tr>
<td>Impact Factor SJIF (Morocco)</td>
<td>2.031</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact Factor ICV (Poland)</td>
<td>6.630</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact Factor PIF (India)</td>
<td>1.619</td>
<td>1.940</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact Factor IBI (India)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.260</td>
</tr>
</tbody>
</table>
Impact Factor:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>РИНИЦ (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
<tr>
<td>ИСИ (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>B1I (India)</td>
<td>4.260</td>
</tr>
</tbody>
</table>

THE SCIENTIFIC JOURNAL IS INDEXED IN SCIENTOMETRIC BASES:

**International Scientific Indexing ISI (Dubai, UAE)**
http://isindexing.com/isi/journaldetails.php?id=327

**THOMSON REUTERS, EndNote (USA)**
https://www.myendnoteweb.com/EndNoteWeb.html

**Research Bible (Japan)**

**ПИНИЦ (Russia)**

**Turk Egitim Indeksi (Turkey)**

**Advanced Sciences Index (Germany)**
http://journal-index.org/

**Global Impact Factor (Australia)**
http://globalimpactfactor.com/?type=issn&s=23084944&submit=Submit

**AcademicKeys (Connecticut, USA)**
http://sciences.academickeys.com/jour_main.php

**SCIENTIFIC INDEXING SERVICE (USA)**

**International Society for Research Activity (India)**

**Sherpa Romeo (United Kingdom)**
http://www.sherpa.ac.uk/romeo/search.php?source=journal&sourceid=28772

ISPC Generalization of scientific results, Philadelphia, USA
<table>
<thead>
<tr>
<th>JIF</th>
<th>Impact Factor:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>SIS (USA)</td>
<td>0.912</td>
</tr>
<tr>
<td>PMHI (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJI (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>IF (India)</td>
<td>1.940</td>
</tr>
<tr>
<td>IBI (India)</td>
<td>4.260</td>
</tr>
</tbody>
</table>

CiteFactor (USA) Directory Indexing of International Research Journals
http://www.citefactor.org/journal/index/11362/theoretical-applied-science

DOI (USA)
http://www.doi.org

JIFACTOR

Directory of abstract indexing for Journals

Kudos Innovations, Ltd. (USA)
https://www.growkudos.com

Japan Link Center (Japan)
https://japanlinkcenter.org

Eurasian Scientific Journal Index (Kazakhstan)
http://esjindex.org/search.php?id=1

Korean Federation of Science and Technology Societies (Korea)
http://www.kofst.or.kr

Open Academic Journals Index (Russia)
http://oaji.net/journal-detail.html?number=679

Collective IP (USA)
https://www.collectiveip.com/
<table>
<thead>
<tr>
<th></th>
<th>ISRA (India)</th>
<th>SIS (USA)</th>
<th>ICV (Poland)</th>
<th>PIF (India)</th>
<th>IBI (India)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Factor</td>
<td>1.344</td>
<td>0.912</td>
<td>6.630</td>
<td>1.940</td>
<td>4.260</td>
</tr>
<tr>
<td>THOMSON REUTERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indexed in Thomson Reuters</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ResearcherID (USA)</td>
<td><a href="http://www.researcherid.com/rid/N-7988-2013">http://www.researcherid.com/rid/N-7988-2013</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stratified Medical Ltd. (London, United Kingdom)</td>
<td><a href="http://www.stratifiedmedical.com/">http://www.stratifiedmedical.com/</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SJIF Impact Factor (Morocco)</td>
<td><a href="http://sjifactor.inno-space.net/passport.php?id=18062">http://sjifactor.inno-space.net/passport.php?id=18062</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>InfoBase Index (India)</td>
<td><a href="http://infobaseindex.com">http://infobaseindex.com</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index Copernicus International (Warsaw, Poland)</td>
<td><a href="http://journals.indexcopernicus.com/masterlist.php?q=2308-4944">http://journals.indexcopernicus.com/masterlist.php?q=2308-4944</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RedLink (Canada)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="http://www.redlink.com/">http://www.redlink.com/</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDNet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library &amp; Information Center Solutions (USA)</td>
<td><a href="http://www.tdnet.io/">http://www.tdnet.io/</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORCID</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="http://orcid.org/0000-0002-7689-4157">http://orcid.org/0000-0002-7689-4157</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yewno</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(USA &amp; UK)</td>
<td><a href="http://yewno.com">http://yewno.com</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THOMSON REUTERS, ORCID (USA)</td>
<td><a href="http://orcid.org/0000-0002-7689-4157">http://orcid.org/0000-0002-7689-4157</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
International Academy of Theoretical & Applied Sciences - member of Publishers International Linking Association (USA) - international Association of leading active scientists from different countries. The main objective of the Academy is to organize and conduct research aimed at obtaining new knowledge contribute to technological, economic, social and cultural development.

Academy announces acceptance of documents for election as a member:

Correspondents and Academicians

Reception of documents is carried out till January 25, 2018.
Documents you can send to the address T-Science@mail.ru marked "Election to the Academy members".

The list of documents provided for the election:

1. Curriculum vitae (passport details, education, career, scientific and research activities, achievements)
2. Photo (jpg)
3. List of publications
4. The list of articles published in the scientific journal ISJ Theoretical & Applied Science on the requested section:
   * to correspondents is not less than 7 articles
   * academics (degree required) - at least 25 articles.

Detailed information on the website http://www.t-science.org/Academ.html

The Presidium Of The Academy
Impact Factor:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRA (India)</td>
<td>1.344</td>
</tr>
<tr>
<td>ISI (Dubai, UAE)</td>
<td>0.829</td>
</tr>
<tr>
<td>GIF (Australia)</td>
<td>0.564</td>
</tr>
<tr>
<td>JIF</td>
<td>1.500</td>
</tr>
<tr>
<td>PIF (India)</td>
<td>0.912</td>
</tr>
<tr>
<td>РИНЦ (Russia)</td>
<td>0.207</td>
</tr>
<tr>
<td>ESJ1 (KZ)</td>
<td>4.102</td>
</tr>
<tr>
<td>SJIF (Morocco)</td>
<td>2.031</td>
</tr>
<tr>
<td>ICV (Poland)</td>
<td>6.630</td>
</tr>
<tr>
<td>IBI (India)</td>
<td>4.260</td>
</tr>
</tbody>
</table>

International Academy of Theoretical & Applied Sciences - member of Publishers International Linking Association (USA) - международное объединение ведущих активных ученых с разных стран. Основной целью деятельности Академии является организация и проведение научных исследований, направленных на получение новых знаний способствующих технологическому, экономическому, социальному и культурному развитию.

Академия объявляет прием документов на избрание в свой состав:

Член-корреспондентов и Академиков

Прием документов осуществляется до 25.01.2018.
Документы высылаются по адресу T-Science@mail.ru с пометкой "Избрание в состав Академии".

Список документов предоставляемых для избрания:

1. Автобиография (паспортные данные, обучение, карьера, научная и исследовательская деятельность, достижения)
2. Фото (jpg)
3. Список научных трудов
4. Список статей опубликованных в научном журнале ISJ Theoretical & Applied Science по запрашиваемой секции:
   * для член-корреспондентов - не менее 7 статей,
   * для академиков (необходима ученая степень) - не менее 25 статей.

Подробная информация на сайте http://www.t-science.org/Academ.html

______________________________
The Presidium Of The Academy

Signed in print: 30.12.2017. Size 60x84 I/8
«Theoretical & Applied Science» (USA, Sweden, KZ)
http://T-Science.org E-mail: T-Science@mail.ru

Printed «Theoretical & Applied Science»