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PRACTICE OF FORMATION OF IDENTITY IN RUSSIA

Abstract: *The article analyzes the concept of "identity policy", reveals the opinion of experts about identity politics, discusses possible ways of forming Russian identity.*

Key words: *symbolic politics, public sphere, "crisis of identity", macro political identity, macro political community, idea of a nation.*

Language: *Russian*

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ПРАКТИКА ФОРМИРОВАНИЯ ИДЕНТИЧНОСТИ В РОССИИ

Аннотация: *в статье анализируется понятие «политика идентичности», раскрывается мнение экспертов о политике идентичности, обсуждаются возможные пути формирования российской идентичности.*

Ключевые слова: *символическая политика, публичная сфера, «кризис идентичности», макрополитическая идентичность, макрополитическое сообщество, идея нации.*

Introduction

Термин российская идентичность трактуется как включенность граждан РФ в политические, культурные, исторические традиции народа, осознанная связь с прошлым и будущим, готовность и способность служения интересам страны[1].

Принадлежность к идентичности определяется ценностным сознанием. Он основан на матрице важнейших ценностей российской цивилизации. В то же время именно ценности цивилизационной идентичности являются основополагающими для формирования других типов идентичности, в том числе гражданской идентичности.

Русские типы идентичности - квинтэссенция уникального социального опыта сотен поколений, сформировавшегося за многовековую историю российского государства и общества.

Это опыт, который не только выжил, но и объединился в единый народ, построил мощное и независимое государство, защитил его от внешних и внутренних угроз, выжил в самые трудные времена, создал образцы духовной и материальной культуры во всем мире.

Materials and Methods

Российская идентичность четко проявляется в условиях, когда широкомасштабные коллективные действия были жизненно важны, приводя к общественному благу. Участие в такой акции требовало солидарности (примирения), жертвенности, самоотверженности, служения высшей цели, господства над узкими личными интересами (Смутное время, Война 1812 года, Первая мировая война и Вторая мировая война, помощь братским народам, многочисленным масштабные строительные проекты в СССР, устранение последствий для Чернобыльской АЭС и др.).

Однако следует отметить, что приобретенный опыт, который во многом формирует личность людей, может быть в значительной степени утрачен в относительно

[1] Политическая идентичность и политика идентичности: В 2 т. Т. 1: Идентичность как категория политиче-ской науки: словарь терминов и понятий / отв. ред. И.С. Семененко. М.: РОССПЭН, 2011. 208 с.

короткие сроки по историческим меркам (в течение нескольких поколений). В результате возникает опасность того, что государство потеряет способность выполнять свои функции, включая потерю суверенитета, распад социальных институтов и деградацию общества.

Опасность потери идентичности обусловлена несколькими причинами.

Во-первых, сохранение и передача соответствующего опыта требует особых усилий и институтов. Это означает, что необходимо создать условия для функционирования этих учреждений, их защиты и определения ожиданий государства и общества относительно содержания и результатов их деятельности.

Этот аспект особенно важен для российского государства, которое за короткий исторический период прошло через глобальные преобразования государственных и общественных институтов.

В глобальном информационном обществе происходит дальнейшее ослабление традиционных институтов, которые транслируют культурные паттерны.

Во-вторых, идентичность формируется и сохраняется только тогда, когда базовая система ценностей, знаний и традиций воплощается в активном индивидуальном и социальном действии, которое создает передовой общественный продукт. Это означает, что создание условий для такой акции, привлечение больших слоев населения страны, постановка задач, которые органично отвечают идентичности российского общества и способны раскрыть его потенциал.

В-третьих, наиболее эффективные современные практики ослабления и разрушения государственных и общественных институтов основаны именно на предварительном уничтожении (искажении) естественной исходной идентичности и (или) ее замене искусственно созданной ложной идентичностью, что хорошо видно на примере Украины или исламское государство. Эту задачу значительно облегчают современные информационные технологии, которые, помимо прочего, позволяют практически мгновенно и массово распространять деструктивный контент. Наиболее уязвимыми для такого воздействия являются общества с ослабленной и непроявленной идентичностью, которые утратили историческую память, ценностные ориентации и чувство единства с Родиной.

Цепочка «цветных» революций на постсоветском пространстве, государственный переворот на Украине, война в Сирии приводят к формированию ряда ложных идентичностей и связанных с ними моделей политических действий, основанных на маргинальных радикальных формах национализма, религиозное самоопределение.

Такие виды самоопределения направлены на уничтожение многонациональной многоконфессиональной общности российской цивилизации, члены которой реализуют различные гражданские принципы.

Вышеуказанные обстоятельства не исчерпывают всех факторов, которые создают риск потери (искажения) идентичности. Тем не менее, они являются общими, наиболее важными и позволяют вам устанавливать руководящие принципы для разработки соответствующей системы мер, основанной на конкретных условиях. В свою очередь, одной из этих мер является более подробное изучение этих факторов.

Термин «формация» применительно к идентичности, используемый в данном документе, должен быть разъяснен. Ни в коем случае это не означает создание чего-то, что еще не существует, своего рода искусственный идеологический продукт, навязывающий состояние мысли, чувства и действия. В этом смысле рассматриваемый термин применим к искусственно созданным идентичностям.

Формирование идентичности в контексте этих предложений означает придание формы фактическому содержанию. Речь идет об особой деятельности по рефлексии (рефлексии), раскрытию, презентации ясных значений, культивировании и передаче поколений российской идентичности, ее проявлении (воплощении) в практике государственного и общественного строительства, деятельности местного самоуправления, методах управления, содержание общего и профессионального образования и другие области социальной практики.

В свою очередь, такая деятельность в многомиллионной, многоэтнической и многоконфессиональной стране, история которой насчитывает более тысячи лет, например, в России, невозможна вне рамок серьезной государственной политики.

Концептуальные подходы к государственной политике и система мер по формированию российской (в том числе гражданской) идентичности

Результатом формирования политики (идентификации, сохранения и передачи) идентичности является сознательная связь граждан Российской Федерации с историческим прошлым страны, ответственность за ее будущее, а также определенность мировоззрения в отношении наиболее важных проблем. внешней и внутренней политики. Эти отношения являются

основной основой для формирования здорового гражданского общества[2].

Государственная политика в формировании российской идентичности имеет ряд особенностей.

1.Само государство, а точнее его бюрократический аппарат, являются не только субъектами реализации, но и объектами соответствующей политики. Такая политика может быть реализована только как общенациональная акция, в которую вовлечены все члены российского общества.

2.Формирование российской идентичности не может быть результатом простого обращения, пропаганды и обучения, навязывания этой формы поведения, точки зрения и выражения чувств. Это подразумевает создание условий для свободного самоопределения и обсуждения, самовыражения и самовосприятия своего отношения к своей родине, и в то же время формирование готовности действовать в интересах страны и ее народа. Не противоречит, чтобы связать социальные и личные интересы. Основой формирования российской цивилизационной идентичности является свободное самоопределение.

3. Важной функцией российской идентичности является сохранение идентичности и достоинства русской цивилизации как уникального социально-исторического феномена, который позволяет противостоять любым ложным и неважным идентификациям и вмешательствам (этот тип идентичности можно назвать идентичностью сопротивления) ,

В условиях беспрецедентного давления Запада на Россию в последние годы российская самобытность сопротивления отчетливо проявилась в нежелании иностранного вмешательства во внутренние дела России, разделяемого большинством членов общества.

В условиях тотального развития информационных технологий социальных сетей любое отечественное событие превращается в мировое событие, становится предметом интерпретации международных информационных институтов с целью воздействия на всю мировую аудиторию. Эта интерпретация никогда не бывает нейтральной и всегда осуществляется в интересах доминирующих финансовых, экономических и политических институтов, национальных государств, военных альянсов и т. Д. Поэтому личная способность гражданина противостоять навязанным интерпретациям и вырабатывать собственную точку зрения , идеологическая конфронтация. Такие компетенции требуют специальных образовательных программ и информационной политики.

Другой формой идеологического противостояния и уничтожения идентичности является переосмысление и переписывание мировой истории, разрушение «политики памяти», в частности сознательное отождествление советского периода нашей истории и фашизма. Уничтожение и искажение «политики памяти» создает условия для появления новых форм социально-политической, национальной и религиозной исключительности, навязывая свое превосходство любой ценой. Способность защищать понимание исторических событий, не допускать искажения толкований, которые изменяют смысл исторического процесса, является важнейшей политической компетенцией каждого гражданина страны.

Поэтому формирование русской идентичности - это, помимо прочего, почитание исторических символов русской истории и русского государства, исторической памяти о подвигах отцов и дедов. Необходимо культивировать и формировать уважение к государственным символам: гимн, флаг, эмблема - атрибуты государственной власти, военные и трудовые награды. Искажение исторической памяти важнейших событий российской истории недопустимо.

Более того, лучшие качества носителя российской идентичности могут проявляться и поддерживаться только в том случае, если они участвуют в коллективной (соборной) деятельности по решению глобальных проблем, таких как преобразование и реорганизация своих территорий, создание производительной экономики, конкурентоспособной на мировом рынке, в поиске решения их проблем. человечество в целом. Только в рамках такой деятельности личный успех может быть признан значимым и заслуживающим уважения в контексте ценностей российской цивилизации.

Именно этот аспект российской идентичности (идентичность развития, идентичность проекта) является ядром и точкой роста внутри российской цивилизационной идентичности. Личность развития лежит в основе формирования нового мирового порядка с точки зрения России в сотрудничестве с другими странами и цивилизациями. Это связано с определением внутрироссийских прорывных зон, а также с определением наиболее перспективных практик и центров развития за рубежом. На основе определения этих многообещающих областей и областей развития должны быть

[2] Гриценко Г.Д. Политики идентичности как условие формирования российской идентичности // Universum: Общественные науки : электрон. научн. журн. 2016. № 12(30). URL: http://7universum.com/ru/social/archive/item/4020 (дата обращения: 27.12.2018).

определены самые передовые технологические и институциональные решения, должны быть определены условия для передачи этих самых передовых практик в Россию, должны быть сформированы международные команды, определяющие вклад Русские группы. для дальнейшего совершенствования этой практики (отличительное разделение "развивающего труда")[3].

В то же время, без идентичности сопротивления, идентичность развития становится поиском новизны ради новизны так называемого. «Творческий класс», копирование западного образа жизни.

5. Принадлежность к цивилизационной идентичности определяется ценностным сознанием. Он основан на матрице важнейших ценностей российской цивилизации.

Презентация и осведомленность о системе базовых ценностей должны осуществляться посредством целенаправленной деятельности учреждений культуры, учебных заведений и средств массовой информации. Задача состоит в том, чтобы выбрать и внедрить современные образовательные практики для принятия наиболее важных ценностей.

7. Русская идентичность - это не набор формальных правил и ограничений, а средство раскрытия возможностей русского человека для непрерывного самосовершенствования, роста профессионализма и осуществления планетарных трансформационных действий.

Conclusion

На данный момент период неопределенности закончился, когда не было публичного согласия по выбору основного вектора развития нашей страны. До недавнего времени доминирующее мнение заключалось в том, что включение властями в институты рыночной экономики делает невозможным создание основы для социального развития населения страны.

Продолжающийся мировой финансовый кризис потребовал от руководства и населения нашей страны осуществления социально-идеологического маневра: частичный выход из «долларовой системы» и доминирующих экономических и информационно-политических институтов и идеологий, связанных с этой системой.

Преодоление безусловного господства этих институтов «долларовой системы» требует укрепления институтов суверенной государственности, действующих от имени исконной российской цивилизации в диалоге с другими цивилизациями и государствами в утверждении истинной многополярности современного мира. Впервые необходимость такого маневра была выявлена В. Путиным в «мюнхенской речи», а затем указана в его программных статьях накануне президентских выборов.

Русская идентичность будущего - это идентичность развитой мировой цивилизации развития. Формирование (проявление) российской цивилизационной идентичности является ключом к решению проблемы формирования нового мирового порядка многополярного мира в результате творческой работы на дому при взаимодействии со всеми заинтересованными группами планеты, которые хотят преодолеть деградацию и кризис[4].

Меры по формированию российской идентичности в конкретных областях.

В каждом из регионов система мер, как правило, организована по четырем направлениям:

1.Создание банка современных технологий и методов формирования российской идентичности.

2.Создание финансового и организационного механизма, обеспечивающего внедрение этих технологий.

3. Информационная поддержка.

4.Определение тем дополнительного практико-ориентированного исследования, которое позволит повысить эффективность формирования российской идентичности.

[3] Резчиков А. Путин поддержал идею «закона о российской нации» // Взгляд: деловая газета. 2016. 31 октяб-ря. / [Электронный ресурс]. - Режим доступа: URL: http://www.vz.ru/politics/2018/11/30/841161.html

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PSYCHOLOGICAL DIAGNOSTICS OF ANXIETY AND DEPRESSION LEVEL OF WOMEN OF OLDER REPRODUCTIVE AGE IN THE IN VITRO FERTILIZATION PROGRAM

Abstract: *Psychological diagnostics of 75 women of older reproductive age was carried out. Its aim was to determine the level of anxiety and depression as well as to assess the personal profile of patients and their quality of life.*

It is noted that the level of anxiety and depression of women of the older reproductive age in the in vitro fertilization program is higher than of healthy women.

Taking into account the level of depression and anxiety could help doctors and psychologists to promptly provide women undergoing IVF treatment with psychocorrection aid.

Key words: *women, older reproductive age, anxiety, depression, infertility, in vitro fertilization, psychodiagnostics.*

Language: *Russian*

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ПСИХОЛОГИЧЕСКАЯ ДИАГНОСТИКА ТРЕВОЖНО-ДЕПРЕССИВНЫХ СОСТОЯНИЙ ЖЕНЩИН СТАРШЕГО РЕПРОДУКТИВНОГО ВОЗРАСТА В ПРОГРАММЕ ЭКСТРАКОРПОРАЛЬНОГО ОПЛОДОТВОРЕНИЯ

Аннотация: *Проведена психологическая диагностика у 75 женщин старшего репродуктивного возраста, направленная на исследование уровня тревоги и депрессии, оценку личностного профиля пациенток и качества жизни.*

Отмечено, что у женщин старшей репродуктивной группы в программе экстракорпорального оплодотворения уровень депрессии и тревоги выше, чем у здоровых женщин.

Учет уровня тревожности и депрессии могут помочь врачам и психологам своевременно оказать психокоррекционную помощь женщинам, проходящим лечение по программе ЭКО.

***Ключевые слова**: женщины, старший репродуктивный возраст, тревога, депрессия, бесплодие, искусственное оплодотворение, психодиагностика.*

Введение.

Бесплодие женщин существенно влияет на психоэмоциональный статус, вызывая состояние хронического стресса и разнообразные расстройства эмоциональной сферы.

В настоящее время численность населения Российской Федерации вновь начала снижаться, остро обнажив проблему демографического кризиса.

В этой связи лечение бесплодия имеет особую актуальность в ряду мер, направленных на повышение рождаемости. Перспективным способом лечения бесплодия является метод экстракорпорального оплодотворения (ЭКО). Специалистами выявлена тенденция к увеличению числа женщин, прибегающих к программе ЭКО в старшем детородном возрасте [7; 10, с.48-53].

В категории женщин старшей возрастной группы накоплен опыт переживаний и комплексов по поводу собственного бесплодия, обрастающий разочарованиями, неверием, отчаянием на фоне менее гибкой личностной структуры [8]. .

Подобные состояния мало изучены у женщин старшего фертильного возраста.

Поэтому актуальным является оценка особенностей личностного реагирования женщин на собственное бесплодие, которое можно получить с помощью психодиагностики.

Это дает возможность ввести в терапию помимо общего бережного и деликатного подхода к переживаниям пациенток еще и специфические личностно-ориентированные тактики, позволяющие повысить эффективность проводимой терапии.

Цель исследования: выявить и определить уровень тревожных расстройств у женщин старшего репродуктивного возраста в программе ЭКО.

Характеристика выборки и методы исследования:

Всего в исследовании приняли участие 75 женщин старшего репродуктивного возраста (44.5 ± 7.5 года) проходящие лечение в Национальном медицинском исследовательском центре акушерства, гинекологии и перинатологии Министерства здравоохранения РФ:

- 25 женщин составили контрольную группу (группа 2), в нее вошли женщины с благоприятной беременностью
- 25 женщин с бесплодием вошли в экспериментальную группу (группа 1)
- 25 женщин с бесплодием и донорской клеткой вошли в еще одну экспериментальную группу (группа 3).

Был использован набор психологических тестов: Шкала депрессии Бека; Шкала оценки уровня реактивной и личностной тревожности Спилбергера – Ханина; Личностный опросник Шмишека; Неспецифический опросник для изучения качества жизни; Торонтская шкала алексетимии; Копинг-тест Лазаруса.

Результаты исследования и их обсуждение.

В результате нашего исследования были изучены различные аспекты психоэмоционального состояния у группы женщин старшего репродуктивного возраста в программе ЭКО (группа 1), контрольной группы здоровых женщин (группа 2) и группы женщин старшего репродуктивного возраста с бесплодием, в программе которых используется донорская клетка (группа 3).

По данным Торонтской шкалы алекситимии установлено, что женщины обеих экспериментальных групп (группы 1, а также группы 3) чаще оказываются в группе риска алекситимии, в отличие от женщин контрольной группы.

Вероятно, это связано с тем, что женщины старшего репродуктивного возраста в программе ЭКО испытывают сильный стресс, так как находятся в непривычных условиях зависимости от препаратов, процедур под постоянным контролем врачей [9]. Можно констатировать тот факт, что на основе вышеперечисленного, они попадают в группу риска алекситимии.

Различие между группой 1 и группой 3 не имеет статистической значимости.

Средние показатели данных по опроснику Шмишека показывают, что женщинам с бесплодием (группа 1) свойственно иметь взрывной экзальтированный характер, женщинам с бесплодием и донорской клеткой характерна тревожность (группа 3), а женщинам контрольной группы присуща гипертимность(группа 2) [2, с.429].

На основе полученных результатов шкалы депрессии Бека выявлено, что женщины с бесплодием без донорской клетки в программе ЭКО (группа 1) имеют легкие и средние депрессивные состояния, в отличие от женщин контрольной группы [11; 16, с.27-34].

У женщин с бесплодием и донорской клеткой в программе ЭКО (группа 3) чаще встречаются средние и выраженные депрессивные состояния, и лишь в единичных случаях депрессия [11; 16, с.27-34]. Различие между 1 и 3 группами женщин с бесплодием статистически значимое.

Показатели шкал депрессии Бека по трем группам приведены на Рис.1

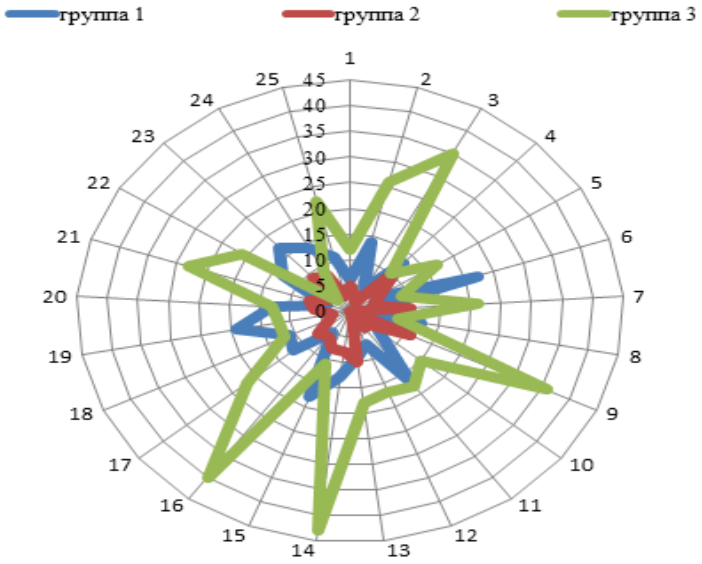

Рис.1 Показатели шкалы депрессии Бека у женщин 1, 2 и 3 группы.

Помимо этого, испытуемым был предложен опросник «Способы совладающего поведения» по Лазарусу.

В группе женщин старшего репродуктивного возраста в программе ЭКО (группа 1) было выявлено, что копинг- стратегии по типу самоконтроля находятся в области высокой напряженности. Стратегия самоконтроля предполагает варианты преодоления негативных переживаний путем сдерживания эмоций, минимизации их влияния на оценку ситуации. У личности может наблюдаться стремление скрывать от окружающих свои переживания и побуждения в связи с проблемной ситуацией. Выбор стратегии поведения будет склоняться к сверхконтролю и стремлению к самообладанию. Часто такое поведение свидетельствует о боязни самораскрытия, чрезмерной требовательности к себе.

В группе женщин с бесплодием и донорской клеткой в программе ЭКО (группа 3) отмечена копинг-стратегия по типу поиска социальной поддержки, находящаяся в зоне риска дезадаптации. Женщины, оказавшись в сложной тревожной ситуации, стремятся разделить свои переживания, хотят быть выслушанными. В данном случае возникает риск формирования зависимого поведения или чрезмерного ожидания от врачей и процедур.

Исследование качества жизни беременных женщин по опроснику SF-36 не показало статистически значимых различий.

Между тем, такие показатели здоровья, как физическое функционирование, ролевая деятельность, телесная боль, общее здоровье, жизнеспособность, социальное функционирование, эмоциональное состояние и психическое здоровье у женщин контрольной группы выше, чем у женщин с бесплодием в программе ЭКО с донорской клеткой и без [14; 15, с.876-886].

Возможно, отсутствие статистически значимых отличий связано с высокими достижениями в сфере карьерного роста, так как большинство испытуемых женщин добились успехов в собственной профессиональной области.

При изучении уровня личностной тревожности с помощью теста Спилбергера-Ханина не выявлено статистически значимых различий при сравнении показателей группы женщин с бесплодием (группа 1) и женщин контрольной группы (группа 2).

В единичных случаях у женщин старшего репродуктивного возраста с донорской клеткой в программе ЭКО (группа 3) была отмечена высокая личностная тревожность [4, с.85-92].

Показатели личностной тревожности по тесту Спилбергера-Ханина приведены на Рис.2:

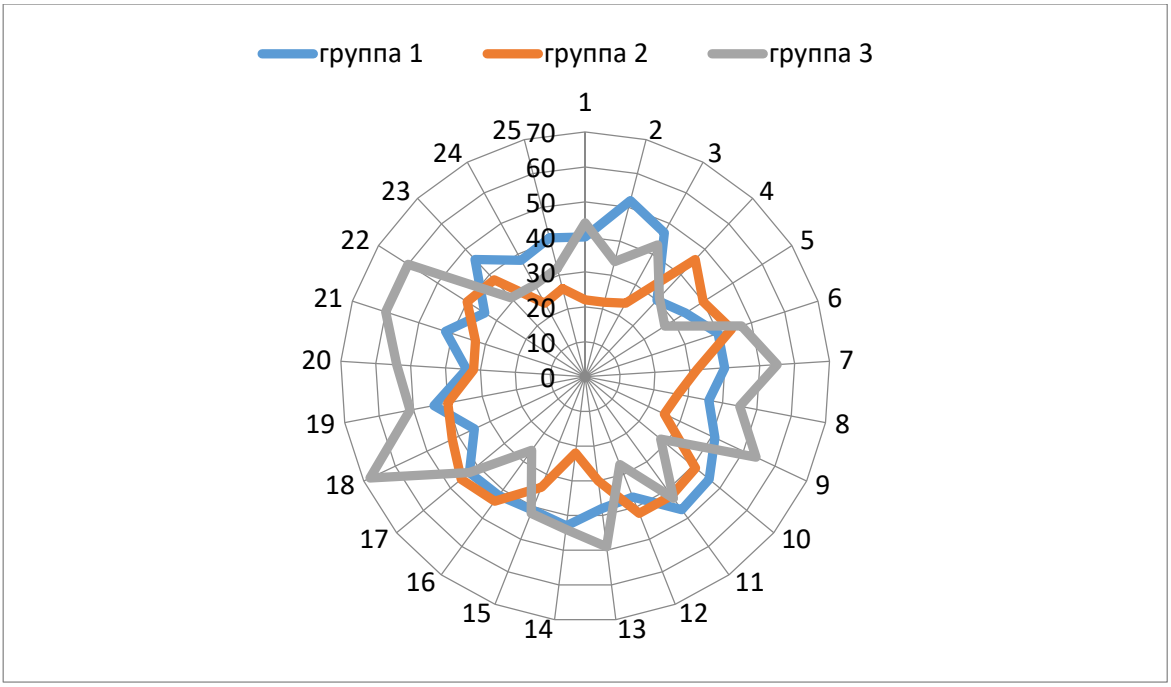

Рис. 2. Показатели личностной тревожности по тесту Спилбергера-Ханина у женщин 1, 2 и 3 группы.

При исследовании тревожности с помощью теста Спилбергера-Ханина ситуационная тревожность у женщин с бесплодием (группа1) статистически значительно выше, чем у женщин контрольной группы(группа 2). Женщины с бесплодием и донорской клеткой (группа 3) также значительно тревожнее женщин контрольной группы (группа 2). Это можно объяснить реакцией на сложившуюся ситуацию бесплодия, беспокойством перед проведением процедур, страхом за плод и собственное здоровье [12]. Различия между группой 1 и группой 3 находятся в зоне незначимости.

Показатели ситуационной тревожности по тесту Спилбергера-Ханина приведены в Рис.3.

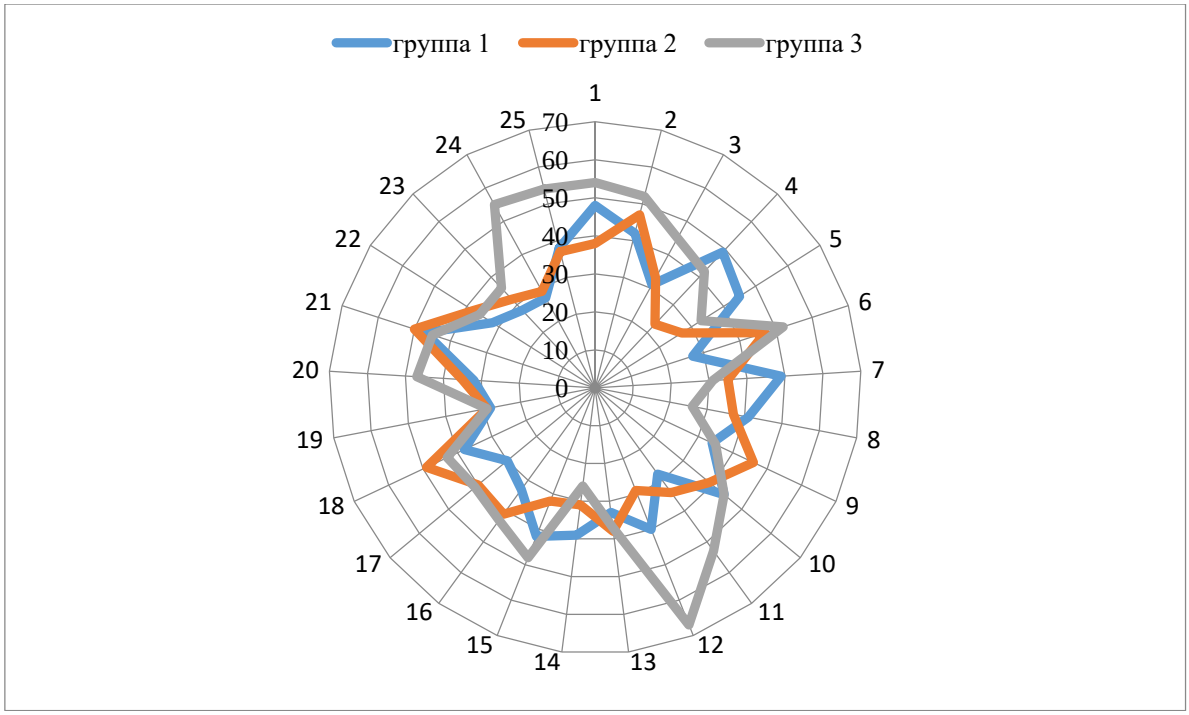

Рис. 3. Показатели ситуационной тревожности по тесту Спилбергера-Ханина у женщин 1, 2 и 3 группы.

Резюмируя полученные результаты, можно сделать следующие выводы:

1) Большинство женщин старшего репродуктивного возраста в программе ЭКО (с донорской клеткой и без) попадают в группу риска алекситимии.

2) Женщины с бесплодием в программе ЭКО имеют легкие и средние депрессивные состояния, в отличие от женщин контрольной группы.

У женщин с бесплодием и донорской клеткой в программе ЭКО чаще встречаются средние и выраженные депрессивные состояния.

3) Ситуационная тревожность у женщин с бесплодием в программе ЭКО (с донорской клеткой и без) находится на высоком уровне.

4) Уровень качества жизни во всех группах не имеет статистических различий.

5) Большинство женщин старшего репродуктивного возраста в программе ЭКО с донорской клеткой имеют тревожный характер, большинство женщин с бесплодием и без донорской клетки в программе ЭКО имеют взрывной экзальтированный тип характера.

6) Женщины с бесплодием и донорской клеткой в программе ЭКО находятся в зоне риска дезадаптации, используя копинг-стратегию по типу поиска социальной поддержки. Женщины с бесплодием и без донорской клетки в программе ЭКО склонны к дезадаптивному самоконтролю.

Заключение.

При исследовании психоэмоциональных расстройств женщин старшей репродуктивной группы в программе ЭКО выявлено, что большинство женщин старшего детородного о возраста в программе ЭКО (с донорской клеткой и без) попадают в группу риска алекситимии. Значимых различий между группой женщин с донорской клеткой и группой женщин с бесплодием в программе ЭКО без донорской клетки нет.

Обследованные женщины с бесплодием в программе ЭКО имели легкие и средние депрессивные состояния, в отличие от женщин контрольной группы. Ситуационная тревожность у женщин с бесплодием в программе ЭКО (с донорской клеткой и без) находится на высоком уровне.

Женщины с бесплодием и донорской клеткой в программе ЭКО находятся в зоне риска дезадаптации, используя копинг-стратегию по типу поиска социальной поддержки, тогда, как женщины с бесплодием и без донорской клетки в программе ЭКО склонны к дезадаптивному самоконтролю.

Четкая диагностика психоэмоционального состояния позволяет использовать дифференцированный подход к ведению этой группы пациенток.

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SECTION 13. Geography. History. Oceanology. Meteorology.

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COMPARATIVE ANALYSIS OF SLOPE LANDS USED FOR CULTIVATION OF VARIOUS CROPS IN THE COASTAL PART OF THE PROVINCE OF ESMERALDAS, ECUADOR

Abstract: *This work investigates the erosion-prone lands in the coastal part of Ecuador. Sights with various agricultural crops located on slopes with the same steepness of 8° are compared. The sectors under study are used for the cultivation of African palm, cocoa and banana crops and pastures. It is established that the highest content of organic matter is contained in the soils on the fields occupied by the African palm - 10.5%. Also this site has been found to have the highest nitrogen content. Pastures also have a high content of organic matter in the soil - 9.37%. The lowest percentage of organic matter is found in the soils used for the cultivation of cocoa crops - 3.26%. The lands of all sectors have a low phosphorus content, and a high concentration of iron and manganese.*

Key words: *soil, slope, erosion-prone land, crops.*

Language: *Russian*

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СРАВНИТЕЛЬНЫЙ АНАЛИЗ СКЛОНОВЫХ ЗЕМЕЛЬ ИСПОЛЬЗУЕМЫХ ДЛЯ ВОЗДЕЛЫВАНИЯ РАЗЛИЧНЫХ СЕЛЬСКОХОЗЯЙСТВЕННЫХ КУЛЬТУР В ПРИБРЕЖНОЙ ЧАСТИ ПРОВИНЦИИ ЭСМЕРАЛЬДАС, ЭКВАДОР

Аннотация: *Исследованы эрозионно опасные земли в прибрежной части Эквадора. Проводилось сравнение участков с различными сельскохозяйственными культурами и расположенных на склонах с одинаковой крутизной в 8°. Изучались сектора, используемые для возделывания Африканской пальмы, какао и банановых культур, а также пастбища. Установлено, что наибольшее содержание органического вещества отмечено в почвах на полях занятых Африканской пальмой - 10,5 %. Также для данного участка выявлено наиболее высокое содержание азота. Для пастбищ тоже характерно высокое содержание органического вещества в почве - 9,37 %. Самый низкий процент органического вещества отмечен в почвах, используемых для возделывания какао-культур - 3,26 %. На землях всех секторов выявлено низкое содержание фосфора, и высокая концентрация железа и марганца.*

Ключевые слова: *почва, склон, эрозионно опасные земли, сельскохозяйственные культуры.*

Введение.

Для экономики ряда провинций республики Эквадор значимым является такая отрасль хозяйства как растениеводство. Особенно это важно для административно-территориальных образований, в которых подавляющее большинство составляет сельское население. Разнообразие природных условий страны приводит к необходимости детальной оценки как воздействия сельскохозяйственных культур на деградацию земель, так и подбора наиболее подходящих географических провинций для конкретных растений.

Особенность экваториальных и тропических зон состоит в интенсивных процессах преобразования почв. В ряде случаев эрозионные процессы могут развиваться с очень высокой интенсивностью, выводя из хозяйственной деятельности значительные площади.

Специфике взаимовлияния земель и сельскохозяйственных культур, в том числе с учетом эрозионных процессов в тропических и экваториальных зонах различных районов мира был посвящен ряд исследований [1- 10].

Целью данной работы является сравнительная характеристика эрозионно опасных земель используемых для возделывания различных сельскохозяйственных культур в прибрежной провинции Эквадора.

Материалы и методы

Для выбора ключевых участков использовались крупномасштабные топографические карты и результаты аэрофотосъемки. Метеорологические показатели получены по информации «Instituto Nacional de Meteorología e Hidrología del Ecuador». Изучалась история использования сельскохозяйственных земель. В 2017-2018 годах были проведены полевые исследования. Для изучения морфометрических характеристик склонов использовался теодолит DGT 10 CSTBERGER/Digital. Проводился отбор почвенных проб. Анализ почвы выполнялся в лаборатории «Agrocalidad», г. Кито.

Результаты и их обсуждение

Исследование проводилось в Эквадоре на территории провинции Эсмеральдас (Esmeraldas), в прибрежной части кантона Сан Лоренцо (San Lorenzo). Ключевой участок расположен в пределах административно-территориального образования Тулулби (Tululbí), входящего в указанный кантон.

Территория представляет из себя равнину близ Тихоокеанского побережья. Высота над уровнем моря от 10 до 70 метров. Однако наличие склонов разной крутизны создает предпосылки для развития эрозионных процессов. Расположение близ экватора предопределяет основные климатические характеристики. Средняя температуры составляет около 25° С и мало меняются по месяцам. Среднегодовое количество осадков превышает 2500 мм. Наиболее дождливым месяцем является январь, минимальное значение осадков отмечается в сентябре. Характерны различия в годовом распределении осадков. Влажный сезон приходится на период с января по июнь-июль. В период с января по апрель количество осадков составляет около 300 мм в месяц. Относительно сухой сезон приходится на период август – декабрь. На изученной территории овражная эрозия проявляется очень незначительно. Отмечаются отдельные неглубокие промоины.

Сравнительный анализ проводился на четырех ключевых участках расположенных на склоне с уклоном 8°. Следует отметить, что данные склоны относятся к эрозионно опасным. Особенно с учетом выраженных сухого и влажного сезонов года. Значительная часть осадков выпадает в виде ливневых дождей.

Рисунок 1. Агроэкосистема какао в исследуемом районе.

Каждый исследованный сектор используется для возделывания различных сельскохозяйственных культур: африканская пальма, банановые и какао культуры, пастбища. На рисунках 1 и 2 приведены фотографии агроэкосистем какао и африканской пальмы в изученном районе.

Рисунок 2. Агроэкосистема африканской пальмы в исследуемом районе.

В **таблице** 1 представлены результаты исследования почв.

Прежде всего обращает на себя внимание различие в содержании органического вещества в почвах на участках занятых различными культурами. Наибольшее содержание отмечено на полях занятых Африканской пальмой (10,5 %). На участках возделывания данной масличной культуры отмечается также наибольшее процентное содержание азота, среди исследованных секторов. Пастбищные почвы также отличаются высоким содержанием органического вещества 9,37%. Самый низкий процент отмечен в почвах используемых для возделывания какао-культур - 3,26 %. Сравнительной характеристике склонов различной крутизны используемых для выращивания какао была посвящена одна из предыдущих работ авторов [7], где отмечались существенные различия в зависимости от угла наклона поверхности.

В то же время для пастбищ и полей с африканской пальмой установлено низкое содержание калия, тогда как на двух других секторах – высокое. Также в местах возделывания африканской пальмы отмечается крайне низкое содержание кальция и магния. Почвы кислые. По интерпретации «Agencia Ecuatoriana de Aseguramiento de Calidad Agro» для прибрежной зоны Эквадора почвы всех исследованных участков бедны фосфором, но характеризуются высокой концентрацией марганца, и очень высокой (около 300 mg/kg и более) железа.

Выводы.

В исследованных природных условиях земли расположенные на уклонах в 8° можно отнести к эрозионно опасным. При сравнении почв на участках склона одинаковой крутизны, но с различными сельскохозяйственными культурами выявлены существенные различия. Самый высокий процент органического вещества отмечен в почвах используемых для возделывания африканской пальмы (10,5 %), самый низкий - на полях с какао культурами (3,26 %). В почвах очень высокое содержание железа.

Таблица 1. Результаты исследования почв склоновых земель ключевых участков.

Параметры	Участок 1 Какао культуры	Участок 2 Пастбища	Участок 3 Африканская пальма	Участок 4 Банановые культуры
Органическое вещество (%)	3,26	9,37	10,5	4,32

Азот (%)	0,16	0,47	0,52	0,22
Фосфор (mg/kg)	3,5	3,5	5,8	3,5
Калий (cmol/kg)	0,55	0,13	0,1	0,56
Кальций (cmol/kg)	3,7	7,81	0,92	3,9
Магний (cmol/kg)	1,22	1,41	0,22	1,23
Железо (mg/kg)	534,2	606,4	298	360,7
Марганец (mg/kg)	16,85	40,99	20,9	24,94
Медь (mg/kg)	4,7	7,36	10,44	2,96
Цинк (mg/kg)	3,11	7,04	3,83	3,21
pH	5,34	5,87	4,42	5,02

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SECTION 7. Mechanics and machine construction.

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DISTRIBUTION OF PRESSURE WAVES IN THE UNLIMITED WATER, THEIR REFLECTION FROM THE HARD SCREEN AND THE FREE SURFACE OF THE FLUID

Abstract: *Numerical calculations are given in the axisymmetric formulation of the expansion of explosion products in infinite water, the formation of underwater waves, their reflection from the rigid screen and the free surface of the liquid. Also, pressure fields were calculated around an instantaneous detonating cylindrical charge varying in radius and thickness and located in an unlimited aqueous medium.*

Key words: *cylindrical charge; hard screen; free surface; underwater wave; pressure; bubble.*

Language: *Russian*

Citation: Abdirashidov, A., & Karshiyev, A. (2018). Distribution of pressure waves in the unlimited water, their reflection from the hard screen and the free surface of the fluid. *ISJ Theoretical & Applied Science, 12 (68),* 316-322.

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РАСПРОСТРАНЕНИЕ ВОЛН ДАВЛЕНИЯ В БЕЗГРАНИЧНОЙ ВОДЕ, ИХ ОТРАЖЕНИЕ ОТ ЖЕСТКОГО ЭКРАНА И СВОБОДНОЙ ПОВЕРХНОСТИ ЖИДКОСТИ

Аннотация: *Приведены численные расчеты в осесимметричной постановке расширения продуктов взрыва в безграничной воде, формирования подводных волн, их отражение от жесткого экрана и свободной поверхности жидкости. Также рассчитывали поля давления вокруг мгновенно детонирующего цилиндрического заряда, изменяющегося по радиусу и толщине и находящегося в безграничной водной среде.*

Ключевые слова: *цилиндрический заряд; жесткий экран; свободная поверхность; подводная волна; давление; пузырь.*

Введение.

В работе изучено воздействие заряда цилиндрической формы на окружающую среду (рис.1).

Поведение жидкости и газа описывалось уравнением сохранения в цилиндрической системе координат при $s_{ij} = 0$, а их состояние - общеизвестным уравнением в форме Тэта и адиабатическим приближением соответственно [2, 4]. Система уравнений гидродинамики дополнялась краевыми и начальными условиями: на поверхности контакта - условия равенства скоростей частиц сред, а на бесконечности - условия покоя жидкости; начальные условия

полагались нулевыми (кроме давления в газе). Для совместного решения уравнений гидродинамики использовался численный метод М.Уилкинса [2,4,7].

1. Распространение взрывной волны в безграничной водной среде.

Расчет проведен для небольшого цилиндрического заряда взрывчатого вещества, детонирующего в безграничной жидкости. Продукты детонации и вода предполагаются идеальными, невязкими и сжимаемыми.

В рассматриваемом случае задача изучается в следующей последовательности. Взрывчатое превращение ВВ и расширение продуктов детонации происходит по схеме мгновенной детонации. При детонации во всем объеме заряда мгновенно устанавливаются давление и плотность продуктов детонации, равная начальной плотности ВВ. После этого ударная волна генерируется в воде, а в области газа распространяется волна разрежения. Авторами известных работ [1-3] показано существование вторичной ударной волны. За волной разрежения следует вторая ударная волна, которая образуется у границы раздела, движется обратно в направлении к центру и после прихода в центр отражается. Достигнув границы раздела между газом и водой, ударная волна частично переходит в воду, а частично отражается. Процесс внутреннего отражения скачка и частичной передачи его давления в воду может многократно повторяться. Таким образом, течение внутри газового объема представляет собой последовательность волн разрежения, связанных с расширением, и последовательность вторичных волн сжатия, которые накладываются на волны разрежения.

Начальное состояние воды, окружающей заряд, было взято таким: P_0 = 1 атм; ρ_0 = 1000 кг/м^3 , а для газового пузыря, образовавшегося при взрыве пентолита, - ρ_0 = 1650 кг/м^3 ; D = 7655 м/с - скорость детонации; $P = 0.125\rho_0 D^2$; толщина и диаметр заряда равны 0.02 м.

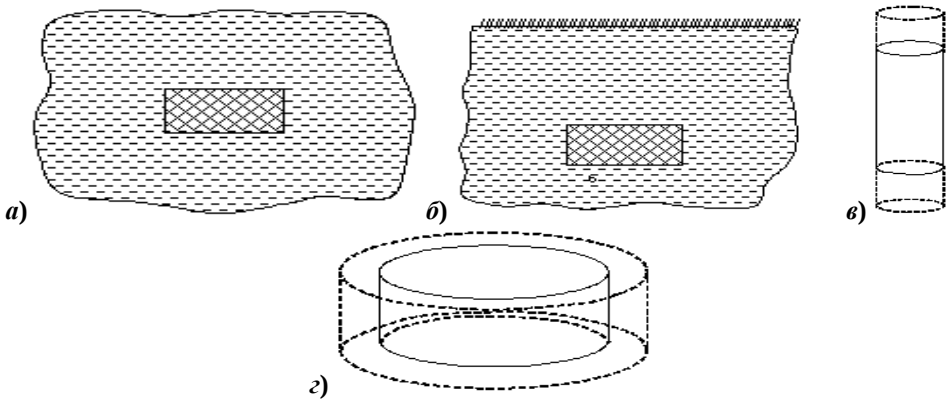

Рис. 1. Объект исследования: *а* - взрыв в безграничной жидкости; *б* - взрыв вблизи твердой границы. *в, г* - виды цилиндрических зарядов в безграничной жидкости.

В расчетах использовалась сеточная область, состоящая из 50 х 50 ячеек, причем область, занятая взрывчатым веществом, разбивалась на квадратную сетку с шагом 0.2 см. Ширина ячеек, прилегающих к газовому объему, равнялась 0.35 см. Начальная ширина остальных ячеек в воде задавалась так, чтобы ширина каждой ячейки в 1.005 раз превосходила ширину предшествующей ячейки. Ячейки представляют собой цилиндрические кольца. Поскольку расчеты проводятся в лагранжевых переменных, то масса каждой ячейки фиксируется при начальном выборе положения границ ячеек и остается постоянной в продолжение всего расчета.

При расчетах использовался переменный временной шаг. В начале расчета он равнялся τ = 0.05 мкс. Далее τ находилась на условиях устойчивости Куранта. Для этого в каждом шаге по времени определялась ячейка минимальных размеров по радиальному и осевому направлениям. Затем находим шаг по времени для жидкости и газа, обеспечивающих устойчивые численные расчеты. В расчетах используем минимальную из этих двух величин. Когда газовый пузырь расширяется до размеров объема газа, ширина ячеек жидкости, прилегающих к газовому объему, становится небольшой из-за радиального и осевого сжатия. Тогда эти размеры ячейки определяют наибольший шаг по времени, который может быть взят для расчетов. Для прослеживания за распространением ударной волны до расстояния, равного нескольким десяткам радиуса заряда, следует использовать последовательно алгоритм перестройки сетки в окружности газового объема.

Расчеты заканчивались, когда основная ударная волна проходила от границы раздела газ-вода расстояние 12 р.з. (р.з. – радиус заряда). Время расчетов охватывало лишь небольшую часть полного периода колебания пузыря [4]. В конце расчета радиус пузыря и шаг по времени равнялись 3.7 р.з. и 0.02 мкс соответственно, а время составляло 70 мкс.

На рис.2 приведен график относительных пиковых значений давления на ударной волне, построенный в зависимости от положения основного ударного фронта в воде. Эти значения представляют собой величины относительных пиковых давлений, взятых с кривых, связывающих давление и расстояние при фиксированном времени.

На рисунке штриховыми линиями обозначены расчетные данные, полученные для сферического пентолитного заряда. Этот взрыв описан в работе [6], и приведенные данные считаются надежными. Видно, что максимальные давления на фронте ударной волны мало отличаются. Пиковые давления на расстоянии больше 10 р.з. находились в соответствии с хорошими результатами работы [6]. Кроме того, спад пиковых давлений на фронте подводной волны происходит ближе по закону, установленному для сферических подводных волн. В окрестности газового пузыря давление на ударной волне резко падает. Например, когда ударный фронт находится на расстоянии 2.1 р.з., пиковое давление падает до 1100 МПа.

Зависимость радиуса газового пузыря от времени показана на рис.3. Дана также расчетная кривая изменения радиуса сферического пузыря со временем (штриховая кривая), опубликованная Ч.Мейдером [6]. Видно, что согласие между кривыми удовлетворительное. Эти кривые характеризуют небольшую часть полного периода колебания радиуса пузыря.

Рассмотрим движение волны в жидкости. Зависимость давления от расстояния для момента времени t = 65 мкс, когда подводная волна прошла расстояние 12 р.з., изображена на рис.4. В этом положении ударной волны давление в газовом пузыре не является равномерно распределенным и меняется от 0.78 МПа на границе раздела между газом и водой до 0.007 МПа в центре.

Так же рассчитывали поля давления вокруг мгновенно детонирующего цилиндрического заряда, изменяющегося по радиусу и толщине и находящегося в безграничной водной среде. Численные расчеты проводили по осесимметричной лагранжевой схеме с искусственной вязкостью для зарядов с отношениями длины к радиусу, равными 1,2,4,8, и наоборот. В этом случае также использовали алгоритм расчета предыдущей задачи.

На рис.5,*а,б* приведена зависимость относительного давления на фронте подводной ударной волны от относительного радиуса и толщины при взрывах цилиндрических зарядов.

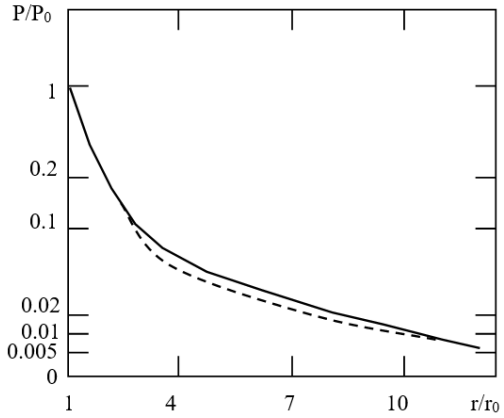

Рис.2. Зависимость относительных пиковых давлений на ударном фронте от относительного радиуса.

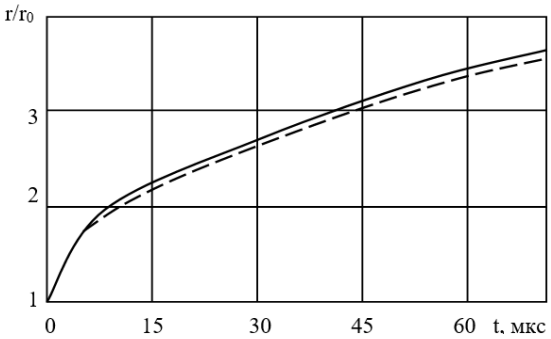

Рис.3. Относительный радиус границ раздела между продуктами детонации и водой, построенный как функция от времени для случая цилиндрического (сплошная линия) и сферического (штриховая линия) заряда.

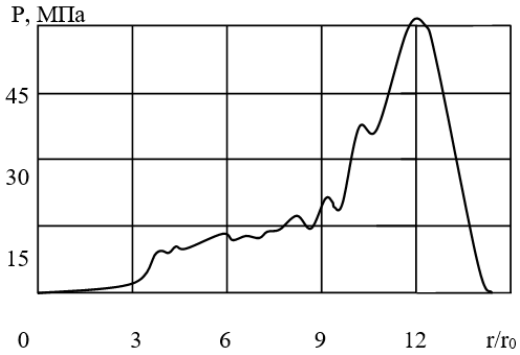

Рис.4. Давление, рассчитанное в зависимости от радиуса в момент времени $t = 6.5 \cdot 10^{-5} c.$

Рис.6 иллюстрирует зависимость относительной толщины $y = h / h_0$ и радиуса $y = r / r_0$ цилиндрического заряда от времени. Положение фронта ударной волны и газового пузыря определяли до относительных расстояний r / r_0 = 12 или z / h_0 =12, где r_0 , h_0 - начальный радиус и толщина цилиндрического заряда.

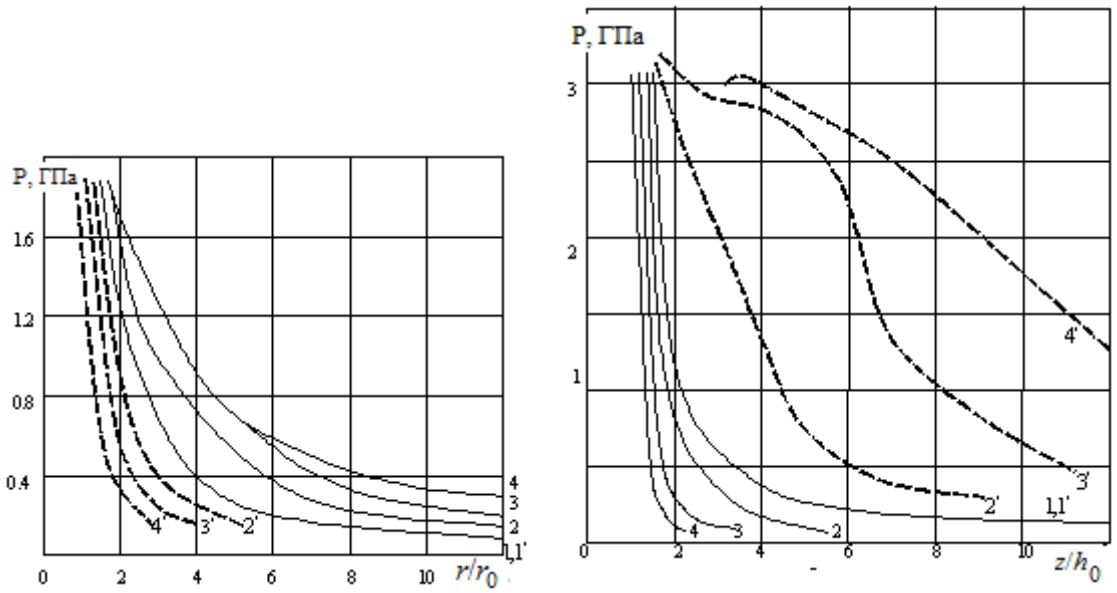

Рис.5. Зависимость относительного давления на фронте подводной ударной волны от относительного радиуса (*а*) и относительной толщины (*б*) при взрывах цилиндрических зарядов для r_0=1 см и h_0=1 см (*1*); 2 см (*2*); 4 см (*3*); 8 см (*4*) (сплошные линии) и для h_0=1 и r_0=1 см (*1*); 2 см (*2*); 4 см (*3*); 8 см (*4*) (штриховые линии).

На основе проведенных расчетов установлено, что спад давления на фронте ударной волны происходит по закону, установленному для сферических подводных волн; расширение газового пузыря и максимальное давление на фронте ударной волны по горизонтальному и вертикальному направлениям одинаково; в процессе отражения ударной волны от неподвижной границы, ее пиковое значение возрастает почти в два раза от значения перед отражением; с увеличением радиуса заряда максимальное давление на фронте ударной волны по радиусу падает с расстоянием быстрее, чем по оси симметрии; спад давления по закону, установленному для сферических волн, начинается с расстояния $r/r_0 > 2$ и $z/h_0 > 2$ при удлинении заряда и $r/r_0 > 2$ и $z/h_0 > 10$ при увеличении радиуса заряда.

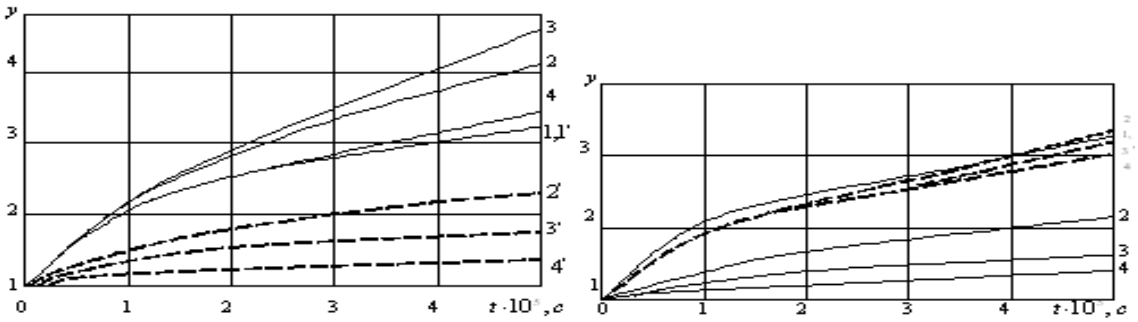

Рис.6. Зависимость относительной толщины y=h/h₀ (сплошные кривые) и радиуса y=r/r₀ (штриховые кривые) цилиндрического заряда от времени:

а) для h_0 = 1 см и r_0 = 1 см $(1,1')$; 2 см $(2,2')$; 4 см $(3,3')$; 8 см $(4,4')$;

б) для r_0 = 1 см и h_0 = 1 см $(1,1')$; 2 см $(2,2')$; 4 см $(3,3')$; 8 см $(4,4')$.

2. Подводный взрыв вблизи свободной поверхности жидкости

Изучены волновые процессы, возникающие при нестационарном расширении газового пузыря вблизи свободной поверхности жидкости. При относительно малых глубинах расположения источника волны возникают кумулятивные выемки, и эта задача сводится к расчету зоны разрушения жидкости [2, 4, 5]. Эксперименты показали, что при расширении сферического газового пузыря вблизи свободной поверхности после отражения ударной волны от сферической поверхности возникают кумулятивные выемки, зона разрушения, также развивается зона кавитации, которая настолько глубока, что даже охватывает газовый пузырь [2].

По алгоритму первой задачи проведено численное исследование влияние глубины погружения на зоны разрушения и кавитации в жидкости. Начальное давление в газовом пузыре равнялось 200 МПа, а погружение пузыря варьировалось d = 6 ... 12 см. Давление на свободной поверхности воды равнялось атмосферному.

Результаты расчета показали, что вначале вблизи свободной поверхности возникает зона разрушения, а потом формируется зона кавитации. При заглублении пузыря зона разрушения постепенно исчезает, а зона кавитации, становясь все более однородной, поднимается относительно пузыря, все более примыкая к свободной поверхности. Размеры зон разрушения и кавитации существенно зависят от начального давления в газовом пузыре и от величины статического давления на поверхность жидкости. Возникновение кавитации может существенно сказаться на характере выбросов жидкости и формировании нелинейных поверхностных волн.

3. Подводный взрыв вблизи недеформируемой стенки.

В качестве твердой границы рассматриваем фиксированную границу, ограничивающую полубесконечный объем жидкости. Вблизи этой границы происходит высокоскоростное расширение газового объема, возникающего после мгновенного подрыва пентолитого заряда цилиндрической формы. В этом случае используем вышеописанный алгоритм расчета динамики подводного взрыва. Расстояние между зарядом и стенкой равно 6 р.з. Некоторые профили давления для рассматриваемого случая показаны на рис.7. Направления движения подводной волны и волны отражения показаны стрелками, а граница раздела между газом и водой - вертикальными черточками; штриховыми линиями указаны величины пиковых давлений на ударном фронте.

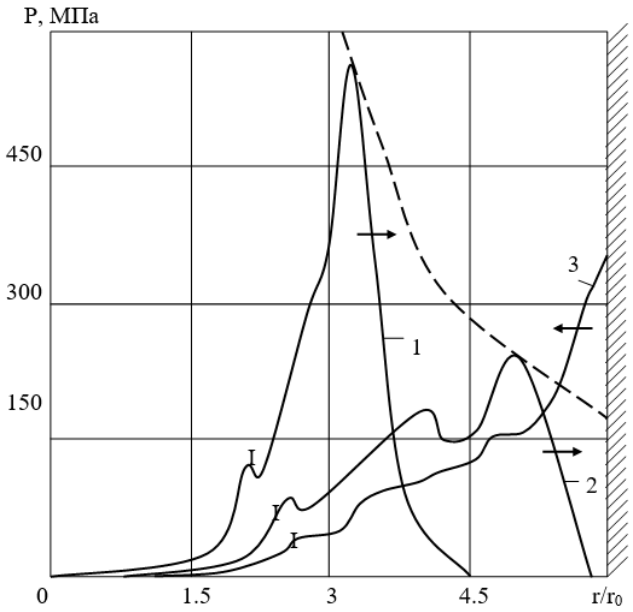

Рис.7. Давление в волнах отражающихся от жесткого экрана:
$1-t=10^{-5}\,c,\ 2-t=2\cdot10^{-5}\,c, 3-t=2.5\cdot10^{-5}\,c.$

Давление отраженной волны выше, чем давление от падающей ударной волны. Например, пиковое давление ударной волны на расстояние 5 р.з. равно 230 МПа (t = 20 мкс), а давление отраженной волны поднимается до 350 МПа (t = 25 мкс), т.е. пиковое значение волны давления приблизительно удваивается при отражении от жесткого экранах [2, 4]. В расчетах анализировали только первые мгновения отражения ударной волны.

Выводы.

Рассмотренный алгоритм и результаты работы можно использовать при решении многих задач гидроупругопластичности [7-11], т.е. при изучении нестационарного взаимодействия плит, пластин и оболочечных элементов конструкций с деформируемой средой (например, с жидкостью или грунтом) при импульсном и гидродинамическом нагружениях.

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SECTION 1. Theoretical research in mathematics

QR – Issue QR – Article

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APPLICATION OF APPROXIMATE ADOMIAN DECOMPOSITION METHOD AND A VARIATIONAL ITERATIONS METHOD TO SOLVING A CAUCHY PROBLEM WITH THE HEAT DISSIPATION AND LAPLACE EQUATIONS

Abstract: *In this paper, the Cauchy problem with the heat dissipation and Laplace equations is solved analytically using the Adomian decomposition method and the variational iteration method. It is shown that these methods are the most effective and convenient for solving some evolution equations. The obtained approximate solutions were compared, the results of these methods are the same; while the method of decomposition of Adomian can be much simpler, more convenient and more efficient to approach such problems as compared to the method of variational iteration and other traditional methods.*

Key words: *equations of heat dissipation and Laplace, Cauchy problem, variational iteration method, Adomian decomposition method, exact solutions.*

Language: *English*

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Introduction.

Nonlinear phenomena are of fundamental importance in various fields of science and technology. Nonlinear models of real-world problems are still difficult to solve either numerically or theoretically. Recently, much attention has been paid to the search for better and more efficient approximate or exact, analytical or numerical methods for solving for nonlinear models [10,11]. There are many standart semi-analytical methods for

solving linear and nonlinear partial differential equations, for example, the Adomian decomposition method [2,11] and the variational iterations method [7-10]. The Adomian decomposition method and the variational iterations method is one of the well-known methods for solving various linear and nonlinear evolution equations. Many studies have proven that these methods are reliable and effective for a wide range of scientific applications, linear and nonlinear equations with bounded and unbounded domains [2-7, 10, 11]. These methods have no special requirements, such as linearization, small parameters, and so on for nonlinear operators. Below, the Cauchy problem with heat dissipation and Laplace equations are solved analytically using the Adomian decomposition method and variational iterations method.

1^0. Setting the first problem. It is required to solve approximately the following Cauchy problem with the heat equation in *n* dimensional space using the Adomian decomposition method and variational iterations method:

$$u_t(x,t) = a^2 \Delta u(x,t), \quad x \in R^n, \quad t > t_0, \qquad (1)$$

$$u(x,t)\big|_{t=t_0} = f(x) \qquad (2)$$

where $x = (x_1, x_2, ..., x_n)$ - is a point in R^n space, $\Delta = \frac{\partial^2}{\partial x_1^2} + \frac{\partial^2}{\partial x_2^2} + ... + \frac{\partial^2}{\partial x_n^2}$ - Laplace operator, $u(x,t)$ - unknown function (temperature function), $f(x)$ - given function (temperature at $t = t_0$ time).

Algorithm for solving the first problem. To solve this problem, we will use the Adomian decomposition method and variational iterations method.

1.1. *Adomian decomposition method* (*ADM*). By the idea of an ADM, we have:

$$\int_{t_0}^{t} u_\xi(x,\xi)d\xi = \int_{t_0}^{t} a^2 \Delta u(x,\xi)d\xi \Rightarrow$$

$$u(x,t) = f(x) + \int_{t_0}^{t} a^2 \Delta u(x,\xi)d\xi$$

$$u(x,t) = \sum_{n=0}^{\infty} u_n(x,t) \Rightarrow$$

$$u_0(x,t) + u_1(x,t) + u_2(x,t) + ... = f(x) +$$

$$+ \int_{t_0}^{t} a^2 \Delta\left[u_0(x,\xi) + u_1(x,\xi) + u_2(x,\xi) + ...\right]d\xi$$

Then we have

$$u_0(x,t) = f(x);$$

$$u_1(x,t) = \int_{t_0}^{t} a^2 \Delta u_0(x,\xi)d\xi = (t-t_0)\cdot a^2 \Delta f(x)$$

$$u_2(x,t) = \int_{t_0}^{t} a^2 \Delta u_1(x,\xi)d\xi = \frac{(t-t_0)^2}{2!}\cdot a^4 \Delta^2 f(x)$$

$$...; \quad u_n(x,t) =$$

$$= \int_{t_0}^{t} a^2 \Delta u_{n-1}(x,\xi)d\xi = \frac{(t-t_0)^n}{n!}\cdot a^{2n}\Delta^n f(x)$$

and so on.

Finally we find the solution to the problem:

$$u(x,t) = u_0(x,t) + u_1(x,t) + u_2(x,t) + \\ + ... = \sum_{n=0}^{\infty} \frac{(t-t_0)^n}{n!}\cdot a^{2n}\Delta^n f(x) \qquad (3)$$

1.2. *Variational iterations method* (*VIM*). According to the idea of VIM we have:

$$u_{n+1}(x,t) = u_n(x,t) + \\ + \int_{t_0}^{t} \lambda(\xi)\left[\frac{\partial v_n(x,\xi)}{\partial \xi} - a^2 \Delta \tilde{v}_n(x,\xi)\right]d\xi.$$

Where $\lambda(\xi)$ - Lagrange multiplier, and for the stationary case $\lambda'(\xi)\big|_{\xi=t} = 0$, $1 + \lambda(\xi)\big|_{\xi=t} = 0$ and then we have $\lambda(\xi) = -1$.

$$u_{n+1}(x,t) = u_n(x,t) - \\ - \int_{t_0}^{t}\left[\frac{\partial v_n(x,\xi)}{\partial \xi} - a^2 \Delta \tilde{v}_n(x,\xi)\right]d\xi.$$

Applying VIM, we get the following results:

$$u_0(x,t) = u(x,t_0) = f(x);$$

$$u_1(x,t) = f(x) + (t-t_0)\cdot a^2 \Delta f(x);$$

$$u_2(x,t) = f(x) + (t-t_0)\cdot a^2 \Delta f(x) + \\ + \frac{(t-t_0)^2}{2!}\cdot a^4 \Delta^2 f(x) \text{ and so on.}$$

Finally we find the solution to the problem:

$$u(x,t) = \lim_{n\to\infty} u_n(x,t) = \lim_{n\to\infty}\Big[f(x) + (t-t_0)\cdot \\ a^2 \Delta f(x) + \frac{(t-t_0)^2}{2!}\cdot a^4 \Delta^2 f(x) + ... + \\ + \frac{(t-t_0)^n}{n!}\cdot a^{2n}\Delta^n f(x)\Big] = \qquad (3^*)$$

$$= \sum_{n=0}^{\infty} \frac{(t-t_0)^n}{n!}\cdot a^{2n}\Delta^n f(x).$$

We will check for uniform convergence of a given series with the help of the Weierstrass theorem [4].

Theorem (*Weierstrassian alert*). If each term of the functional series

$$\sum_{n=1}^{\infty} u_n(x) = u_1(x) + u_2(x) + \\ + u_3(x) + \ldots + u_m(x) + \ldots \quad (4)$$

in the set $M(M \subset R)$ to satisfy the inequality

$$|u_n(x)| \le c_n \quad (n=1,2,\ldots)$$

and is convergent number series

$$\sum_{n=1}^{\infty} c_n = c_1 + c_2 + c_3 + \ldots + c_m + \ldots,$$

then the functional series (4) converges uniformly in the set *M*.

If the function $f(x)$ is continuous in $x \in R^n$ and has continuous derivatives in it, then at the $t_0 < t < T$ time moment for the series (3) the following estimate holds

$$|u(x,t)| = \left| \sum_{n=0}^{\infty} \frac{(t-t_0)^n}{n!} \cdot a^{2n} \Delta^n f(x) \right| \le \\ \le \sum_{n=0}^{\infty} \frac{p^n}{n!} \quad (5)$$

where *p* = const.

Now we will check for convergence of the $\sum_{n=0}^{\infty} \frac{p^n}{n!}$ number series. On the basis of D'alembert [4] on the convergence of a numerical series with positive coefficients, we have

$$\lim_{n\to\infty} \frac{a_{n+1}}{a_n} = \lim_{n\to\infty} \frac{p^{n+1}}{(n+1)!} \cdot \frac{n!}{p^n} = \lim_{n\to\infty} \frac{p}{n+1} = 0 < 1.$$

Then the $\sum_{n=0}^{\infty} \frac{p^n}{n!}$ number series converges. From the validity of the estimate (5) and on the basis of the Weierstrass theorem, series (3) uniformly converges. Then, the function $u(x,t)$ is a solution to problem (1)-(2).

Note: If one $\psi(x,t)$ particular solution of the inhomogeneous heat equation is known

$$u_t(x,t) = a^2 \Delta u(x,t) + \varphi(x,t), \quad (6)$$

where $\varphi(x,t)$ - known function, then replacing

$$v(x,t) = u(x,t) + \psi(x,t) \quad (7)$$

equation (6) can be brought to mind

$$v_t(x,t) = a^2 \Delta v(x,t), \quad (8)$$

and solution (8) can be found using (3) or (3*).

Below are the possibilities of applying formulas (3) or (3*) in some examples.

Example 1.1. Find an solution of the Cauchy problem with the heat equation:

$$u_t(x,y,z,t) = 4\Delta u(x,y,z,t),$$
$$u(x,y,z,0) = \sin x \sin y \sin z.$$

Solution. We use the formula (3), where $a = 2,\ x = (x_1, x_2, x_3) = (x, y, z)$ and $t_0 = 0$. Then we have

$$u(x,y,z,t) = \sum_{n=0}^{\infty} \frac{t^n}{n!} \cdot 2^{2n} \Delta^n f(x,y,z).$$

Using this expansion we find the exact solution of the problem:

$$u(x,y,z,t) = \sum_{n=0}^{\infty} \frac{(4t)^n}{n!} \cdot \Delta^n (\sin x \sin y \sin z) = \\ = \sin x \sin y \sin z - \frac{12t}{1!} \sin x \sin y \sin z + \\ + \frac{144t^2}{2!} \sin x \sin y \sin z + \ldots + \\ + \frac{(-12t)^m}{m!} \sin x \sin y \sin z + \ldots = \\ = e^{-12t} \sin x \sin y \sin z.$$

Example 1.2. Find an solution of the Cauchy problem with an inhomogeneous heat equation:

$$u_t(x,y,z,t) = \Delta u(x,y,z,t) + xyzt,$$
$$u(x,y,z,0) = e^{x+y+z}.$$

Solution. We use the replacement

$$u(x,y,z,t) = v(x,y,z,t) + \frac{xyzt^2}{2},$$

then

$$v_t(x,y,z,t) = \Delta v(x,y,z,t),$$
$$v(x,y,z,0) = e^{x+y+z}.$$

The solution to this problem will be found using (3), where

$a = 1,\ x = (x_1, x_2, x_3) = (x, y, z)$ and $t_0 = 0$.

Then we have the solution of an auxiliary problem of the form

$$v(x,y,z,t) = \sum_{n=0}^{\infty} \frac{t^n}{n!} \Delta^n (e^{x+y+z}) = \\ = e^{x+y+z} \left[1 + \frac{3t}{1!} + \frac{(3t)^2}{2!} + \ldots + \right] = \\ = e^{x+y+z+3t}.$$

Using this solution we find the exact solution of the problem:

$$u(x,y,z,t)=v(x,y,z,t)+\frac{xyzt^2}{2}=$$

$$=e^{x+y+z+3t}+\frac{xyzt^2}{2}.$$

2^0. Setting the second problem. It is required to solve approximately the following Cauchy problem with the Laplace equation in *n* dimensional space by the Adomian decomposition method and variational iterations method:

$$\Delta u(x)=0,\quad x\in R^n, \tag{9}$$

$$u(x_1,x_2,...,x_n)\big|_{x_n=x_0}=\varphi(x_1,x_2,...,x_{n-1}),$$

$$\left.\frac{\partial u(x_1,x_2,...,x_n)}{\partial x_n}\right|_{x_n=x_0}=\psi(x_1,x_2,...,x_{n-1}) \tag{10}$$

where $x=(x_1,x_2,...,x_n)$ - is a point in R^n space, $\Delta=\frac{\partial^2}{\partial x_1^2}+\frac{\partial^2}{\partial x_2^2}+...+\frac{\partial^2}{\partial x_n^2}$ - Laplace operator, $u(x,t)$ - unknown function (harmonic function), φ and ψ - given functions.

Algorithm for solving the second problem. To solve this problem, we will use the Adomian decomposition method and variational iterations method.

2.1. *Adomian decomposition method* (*ADM*). By the idea of an ADM, we have:

$$\int_{x_0}^{x_n}d\xi\int_{x_0}^{x_n}u_{x_nx_n}(x)d\xi=$$

$$=-\int_{x_0}^{x_n}d\xi\int_{x_0}^{x_n}\left[u_{x_1x_1}(x)+u_{x_2x_2}(x)+...+u_{x_{n-1}x_{n-1}}(x)\right]d\xi$$

$$\Rightarrow$$

$$u(x)=\varphi(y)+(x_n-x_0)\cdot\psi(y)-$$

$$-\int_{x_0}^{x_n}d\xi\int_{x_0}^{x_n}[u_{x_1x_1}(x)+u_{x_2x_2}(x)+...+u_{x_{n-1}x_{n-1}}(x)]d\xi$$

where $y=(x_1,x_2,...,x_{n-1})$ - is a point in R^n space. By the idea of an ADM, we have:

$$u(x)=\sum_{n=0}^{\infty}u_n(x)\Rightarrow$$

$$u_0(x)+u_1(x)+u_2(x)+...=$$

$$=\varphi(y)+(x_n-x_0)\cdot\psi(y)+$$

$$+\int_{x_0}^{x_n}d\xi\int_{x_0}^{x_n}\{[u_0(x)+u_1(x)+u_2(x)+...]_{x_1x_1}+$$

$$+[u_0(x)+u_1(x)+u_2(x)+...]_{x_2x_2}+...+$$

$$+[u_0(x)+u_1(x)+u_2(x)+...]_{x_{n-1}x_{n-1}}\}d\xi$$

$$u_0(x)=\varphi(y)+(x_n-x_0)\cdot\psi(y);$$

$$u_1(x)=-\int_{x_0}^{x_n}d\xi\int_{x_0}^{x_n}\left([u_0(x)]_{x_1x_1}+...+[u_0(x)]_{x_{n-1}x_{n-1}}\right)d\xi=$$

$$=-\frac{(x_n-x_0)^2}{2!}\cdot\Delta\varphi(y)-\frac{(x_n-x_0)^3}{3!}\cdot\Delta\psi(y);$$

$$u_2(x)=-\int_{x_0}^{x_n}d\xi\int_{x_0}^{x_n}\left([u_1(x)]_{x_1x_1}+...+[u_1(x)]_{x_{n-1}x_{n-1}}\right)d\xi=$$

$$=\frac{(x_n-x_0)^4}{4!}\cdot\Delta^2\varphi(y)+\frac{(x_n-x_0)^5}{5!}\cdot\Delta^2\psi(y);...;$$

$$u_k(x)=-\int_{x_0}^{x_n}d\xi\int_{x_0}^{x_n}\left([u_{k-1}(x)]_{x_1x_1}+...+[u_{k-1}(x)]_{x_{n-1}x_{n-1}}\right)d\xi=$$

$$=(-1)^k\frac{(x_n-x_0)^{2k}}{(2k)!}\cdot\Delta^k\varphi(y)+$$

$$+(-1)^k\frac{(x_n-x_0)^{2k+1}}{(2k+1)!}\cdot\Delta^k\psi(y)$$ and so on.

Finally we find the solution to the problem:

$$u(x)=u_0(x)+u_1(x)+u_2(x)+...=\sum_{k=0}^{\infty}(-1)^k\cdot$$

$$\cdot\left[\frac{(x_n-x_0)^{2k}}{(2k)!}\cdot\Delta^k\varphi(y)+\frac{(x_n-x_0)^{2k+1}}{(2k+1)!}\cdot\Delta^k\psi(y)\right] \tag{11}$$

2.2. *Variational iterations method* (*VIM*). To solve the VIM problem, we first use the replacement

$$u(x)=\int_{x_0}^{x_n}v(x)d\xi+\varphi(y) \tag{12}$$

Then equation (9) is reduced to an integro-differential equation of the form

$$v_{x_n}(x)+\int_{x_0}^{x_n}[v_{x_1x_1}(x)+v_{x_2x_2}(x)+...+v_{x_{n-1}x_{n-1}}(x)]d\xi+ \tag{13}$$

$$+\Delta\varphi(y)=0,\quad v(x)\big|_{x_n=0}=\psi(y)$$

To solve this problem, the formula of VIM is

$$v_{n+1}(x)=v_n(x)+\int_{x_0}^{x_n}\lambda(\xi)\left[v_n(x)\right]_{x_n}+$$

$$+\int_{x_0}^{\xi}\left([\tilde{v}_n(x)]_{x_1x_1}+[\tilde{v}_n(x)]_{x_2x_2}+...+[\tilde{v}_n(x)]_{x_{n-1}x_{n-1}}\right)d\eta$$

$$+\Delta\varphi(y)\Big]d\xi.$$

Where $\lambda(\xi)$ - Lagrange multiplier, and for the stationary case $\lambda'(\xi)\big|_{\xi=x_n}=0$, $1+\lambda(\xi)\big|_{\xi=x_n}=0$ and from here we have $\lambda(\xi)=-1$. Then we have

$$v_{n+1}(x) = v_n(x) - \int_{x_0}^{x_n} [v_n(x)]_{x_n} +$$

$$+ \int_{x_0}^{\xi} \left([\tilde{v}_n(x)]_{x_1 x_1} + [\tilde{v}_n(x)]_{x_2 x_2} + \ldots + [\tilde{v}_n(x)]_{x_{n-1} x_{n-1}} \right) d\eta$$

$$+ \Delta\varphi(y) \Big] d\xi .$$

Now applying VIM, we get the following results:

$$v_0(x) = \psi(y);$$

$$v_1(x) = \psi(y) - (x_n - x_0) \cdot \Delta\varphi(y) -$$

$$- \frac{(x_n - x_0)^2}{2!} \cdot \Delta\psi(y);$$

$$v_2(x) = \psi(y) - (x_n - x_0) \cdot \Delta\varphi(y) -$$

$$- \frac{(x_n - x_0)^2}{2!} \cdot \Delta\psi(y) + \frac{(x_n - x_0)^3}{3!} \cdot \Delta\varphi(y) +$$

$$+ \frac{(x_n - x_0)^4}{4!} \cdot \Delta\psi(y)$$

and so on. Using this expansion we find the formula for solving the problem:

$$v(x) = \lim_{k \to \infty} v_k(x) =$$

$$= \lim_{k \to \infty} \Big[\psi(y) - (x_n - x_0) \cdot \Delta\varphi(y) -$$

$$- \frac{(x_n - x_0)^2}{2!} \cdot \Delta\psi(y) + \ldots +$$

$$+ (-1)^k \frac{(x_n - x_0)^{2k-1}}{(2k-1)!} \cdot \Delta^k \varphi(y) +$$

$$+ (-1)^k \frac{(x_n - x_0)^{2k}}{(2k)!} \cdot \Delta^k \psi(y) \Big].$$

Finally using replacement (12) we find

$$u(x) = \varphi(y) + (x_n - x_0) \cdot \psi(y) + \ldots +$$

$$+ (-1)^k \frac{(x_n - x_0)^{2k}}{(2k)!} \cdot \Delta^k \varphi(y) +$$

$$+ (-1)^k \frac{(x_n - x_0)^{2k+1}}{(2k+1)!} \cdot \Delta^k \psi(y) + \ldots$$

$$u(x) = \sum_{k=0}^{\infty} (-1)^k \left[\frac{(x_n - x_0)^{2k}}{(2k)!} \cdot \Delta^k \varphi(y) + \right. \qquad (11^*)$$

$$\left. + \frac{(x_n - x_0)^{2k+1}}{(2k+1)!} \cdot \Delta^k \psi(y) \right].$$

We will check for uniform convergence of a given series with the help of the Weierstrass theorem [4].

If the $\varphi(y)$ and $\psi(y)$ functions is continuous in $y \in R^n$ and has continuous derivatives in it, then the following estimate holds for series (11)

$$|u(x)| = \left| \sum_{k=0}^{\infty} (-1)^k \left[\frac{(x_n - x_0)^{2k}}{(2k)!} \cdot \Delta^k \varphi(y) + \right. \right.$$

$$\left. \left. + \frac{(x_n - x_0)^{2k+1}}{(2k+1)!} \cdot \Delta^k \psi(y) \right] \right| \le$$

$$\le \left| \sum_{k=0}^{\infty} (-1)^k \frac{(x_n - x_0)^{2k}}{(2k)!} \cdot \Delta^k \varphi(y) \right| +$$

$$+ \left| \sum_{k=0}^{\infty} (-1)^k \frac{(x_n - x_0)^{2k+1}}{(2k+1)!} \cdot \Delta^k \psi(y) \right| \le \qquad (14)$$

$$\le \sum_{k=0}^{\infty} \frac{p^k}{(2k)!} + \sum_{k=0}^{\infty} \frac{q^k}{(2k+1)!}$$

where p, q = const.

Now we will check for convergence of $\sum_{k=0}^{\infty} \frac{p^k}{(2k)!}$ and $\sum_{k=0}^{\infty} \frac{q^k}{(2k+1)!}$ numerical serieses. On the basis of D'alembert [4] on the convergence of a numerical series with positive coefficients, we have

$$\lim_{n \to \infty} \frac{a_{n+1}}{a_n} = \lim_{n \to \infty} \frac{p^{n+1}}{(2n+2)!} \cdot \frac{(2n)!}{p^n} =$$

$$= \lim_{n \to \infty} \frac{p}{2n+2} = 0 < 1 .$$

Then the $\sum_{k=0}^{\infty} \frac{p^k}{(2k)!}$ number series converges.

Similarly, it can be shown that the $\sum_{k=0}^{\infty} \frac{q^k}{(2k+1)!}$ number series also converges. From the validity of the estimate (14) and on the basis of the Weierstrass theorem, series (11) uniformly converges. Then, the function $u(x)$ is a solution to problem (9)-(10).

Note: If one $q(x)$ particular solution of the Poisson equation is known

$$\Delta u(x) = f(x), \qquad (15)$$

where $f(x)$ - known function, then replacing $v(x) = u(x) + q(x)$ equation (15) can be reduced to the form $\Delta v(x) = 0$ (16), and the solution (16) can be found using (11).

Below are the possibilities of applying formulas (11) or (11*) in some examples.

Example 2.1. Find an solution of the Cauchy problem with the three-dimensional Laplace equation:

$$\Delta u(x, y, z) = 0,$$

$$u(x, y, 0) = x \sin y, \quad u_z(x, y, 0) = \cos y .$$

Solution. We use the formula (11), where $x_n = z$, $x_0 = 0$, $\varphi(y) = x\sin y$, $\psi(y) = \cos y$. Then we have

$$u(x,y,z) = \sum_{k=0}^{\infty}(-1)^k\left[\frac{z^{2k}}{(2k)!}\cdot\Delta^k(x\sin y) + \frac{z^{2k+1}}{(2k+1)!}\cdot\Delta^k(\cos y)\right].$$

Then we find the exact solution of the problem:

$$u(x,y,z) = x\sin y\left(1+\frac{z^2}{2!}+\frac{z^4}{4!}+\ldots\right)+$$

$$+\cos y\left(z+\frac{z^3}{3!}+\frac{z^5}{5!}\ldots\right) =$$

$$= x\sin y\,\mathrm{ch}z + \cos y\,\mathrm{sh}z.$$

Example 2.2. Find an solution of the Cauchy problem with the three-dimensional Poisson equation.

$$\Delta u(x,y,z) = 1, \quad u(x,y,0) = \frac{x^2}{2},$$

$$u_z(x,y,0) = e^{2x}\sin y.$$

We first introduce the notation of the from: $u(x,y,z) = v(x,y,z) + \frac{x^2}{2}$, then we have the problem

$$\Delta v(x,y,z) = 0, \quad v(x,y,0) = 0,$$

$$v_z(x,y,0) = e^{2x}\sin y.$$

To find the function $v(x,y,z)$ we use formula (11), where $x_n = z$, $x_0 = 0$, $\varphi(y) = 0$, $\psi(y) = e^{2x}\sin y$. Then we have the solution of an auxiliary problem of the form

$$v(x,y,z) = \sum_{k=0}^{\infty}(-1)^k\frac{z^{2k+1}}{(2k+1)!}\cdot\Delta^k(e^{2x}\sin y) =$$

$$= e^{2x}\sin y\left(z-\frac{z^3}{3!}+\frac{z^5}{5!}+\ldots\right) = e^{2x}\sin y\sin z.$$

Then we find the exact solution of the problem:

$$u(x,y,z) = v(x,y,z) + \frac{x^2}{2} =$$

$$= e^{2x}\sin y\sin z + \frac{x^2}{2}.$$

Conclusions.

In this work, VIM and ADM were successfully applied to solve the Cauchy problem with the heat dissipation and Laplace equations. It is obvious that VIM an ADM are very powerful and effective methods for finding analytical solutions for wide classes of nonlinear problems. It is worth noting that these two methods are a quick convergence of solutions. Both methods are convenient and effective for solving such problems, and they also do not require large computer memory and discrimination of the variables *t* and *x*, and the application of ADM to the problems discussed has more advantages than VIM and most other methods; it overcomes the difficulties in calculating other methods and auxiliary parameters; it helps us to obtain a solution for smaller approximations. Also, the ADM does not require changing some parameters in the equation, therefore, the calculations are simple and straightforward.

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

EVALUATION OF EFFICIENCY OF PERSONNEL MANAGEMENT IN THE OIL FATING INDUSTRY

Abstract: *This article discusses the issues of improving personnel management in the oil and fat industry, developed a system of indicators characterizing the intensification of development trends and factors of personnel development in the oil and fat industry, on the basis of which the level of development was assessed. It was also studied that the branches of the enterprise in the oil and fat industry were staffed by categories and professions, and the causes and main indicators of the effectiveness of the staff decline were identified. At the end of the article, conclusions were drawn based on econometric analyzes and scientific recommendations were proposed.*

Key words: *fat-and-oil industry, personnel management, innovative development, assessment of labor productivity, employment.*

Language: *English*

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Introduction

Qualified professionals in the oil and gas industry in the country to develop a plan of personnel management, combine them for work activities, manage business processes, coordinate the work of the divisions and staff of the enterprise, control the work process, and know the requirements of the international standard standards the lack of access to information is justified by the need to introduce new governance principles. At present, the Republic of Uzbekistan is developing high competitiveness through modernization and diversification of major sectors of the national economy, technical and technological renewal of production, deep processing of high-tech industries, first of all on the basis of deep processing of local raw materials. to a qualitatively new level of the transition to a rapid development of finished products A qualified professionals demand increased. In this regard, the strategy for the five main priorities of development of the Republic of Uzbekistan for 2017-2021 occupies a special place in the training of highly qualified personnel in accordance with modern requirements of the labor market. [1]

In current economic conditions in the fast growing world markets, issues of radical improvement of national economy competitiveness, technical and technological renewal of production, deep structural reforms in the economy, consistent continuation of sectors modernization and diversification are essential in our economic policy, the role of the industrial sector is increasing steadily. The share of industry in the country's GDP is 25.7 percent, economy employment - 13.6 percent, fixed capital investments - 32.5 percent, and exports - 34.3 percent. In this regard, the issue of increasing the quality of production and new standards of its management, introduction of cutting-edge technologies is important in the food producing companies.

In response to the Presidential decree of the Republic of Uzbekistan from February 18, 201 of No. PP-2492 "About measures for further enhancement of management of the food industry of the republic" from the President of the Republic of Uzbekistan No. PP-4947 "About Strategy of the further development of the Republic of Uzbekistan from February 7, 2017" Resolution Cabinet of Ministers of the Republic of Uzbekistan "On Approval of the Concept and Measures Complex for the Health of the Population of the Republic of Uzbekistan for 2015-2020" the Resolution of the President of the Republic of Uzbekistan dated March 14, 2017 "On Measures to Increase Soybean

Production and Soybean Production in the Republic in 2017-2021", the Decree of the President of the Republic of Uzbekistan "On measures to accelerate the development of oil and fat industry" 2018 this dissertation research will serve to a considerable extent in implementing the tasks set out in the 19th of January, 2001, and other regulatory and legal acts in the field.

Level of knowledge of the problem. As industry is a leading industry in every country, the scientific, theoretical, and practical aspects of its development and effective management have always been at the center of the attention of economists. In particular, IAnsoff [2], L. Vodacheck [3], F. Taylor [4], O.Vodachkova, P. Dukker [5], and other scientists in the field of human resource management, M.Meskon [6], B. Carroll, R.Uotermen [6], L.Yakokk [7] sufficiently emphasized.
One of the prominent economists of the CIS states: Vihanskiy O.S [8], Genkin B.M. [11], Zaytsev GG [10], Krasovskiy Yu.D [11], Slobodskoy A.L. [12], Utkin E. [13] in their scientific views reflected the organizational change, leadership in managing issues, and the issues of improving personnel management in industry.

The fact that special attention is paid to the development of the real sector of the economy in our country is the subject of scientific interest of economists of the republic. In particular, economics-mathematical modeling and forecasting, programming of economic processes, such as well-known economists of Uzbekistan, Kh.Abdurahmanov, Sh.R.Xolmuminov, N.Yuldashev, D.Qosimova [14], D. Rakhimova [15], N.Ismoilova, B.A.Abdukarimov [16], A.B. Bektemirov [17] plays a special role in this regard. However, scientific research in this area does not provide a comprehensive picture of the development of personnel management in the oil and fat industry, based on the present state of our national economy. Also, the need to carry out researches reflecting the incomplete approach to systematic research of trends in the management of fat-and-oil industry personnel, the complex quantitative analyzes taking into account specific features of the oil-and-fat industry and its characteristic dynamics and dynamics, justification.

Analysis and results

In accordance with the objectives of the Strategy of Action and the Concept of Administrative Reforms in the Republic of Uzbekistan in five priority areas of development of the Republic of Uzbekistan for 2017-2021, the State Committee of the Republic of Uzbekistan for Architecture and Construction (Uzpakhtasanoateksport) Shares in the charter capital of JV "Uzpakhtayog", according to the Decree of the President of the Republic of Uzbekistan of November 28, 2017 "Cotton growing On measures for radical improvement of the network management system ", pursuant to Decree No-3408; "road map" of the oil and fat industry of the Republic of Uzbekistan, which envisages expanding the resource base for oil and fat products, modernization of equipment in oil and fat-products enterprises, equipping them with modern process control and accounting processes; Liquidation of the Ministry of Economy of the Republic of Uzbekistan, the Ministry of Finance: "Ozuqa em SUPPORT" LLC for the sale of cereals and cucumbers; then the export of extracted cotton oil for industrial processing only was put up for sale to the enterprises of Uzpakhtaij JSC through exchange trades. By January 1, 2019, vegetable oil producers are exempted from payment of value added tax on volumes produced on the basis of imported oil-fat raw materials. According to our analysis, by 2016, the number of employees at JSC "Uzpakhtayog" was 13235 people, which is 0.1% less than in 2015. Employees accounted for 3.9%, engineer-technical staff 10.1%, staffing staff 7.7% and workers 78.1% (Table 1).

Table-1. Dynamics of positions in JSC "Uzpakhtayog".

Rates	2014 y		2015 y		2016 y		2016/2014 ratio, percent
	Number (person)	Share (%)	Number (person)	Share (%)	Number (person)	Share (%)	
Number of employees - population	13245	100	13281	100	13235	100	99,9
Including:							
Management staff	512	3,91	519	3,90	517	3,90	101,0
Engineer-technical staff	1348	10,11	1356	10,21	1349	10,19	100,1
Assistant Staff	1040	7,85	1037	7,81	1025	7,74	98,4
Employees	10345	78,1	10369	78,07	10344	78,15	100,0

Source: Compiled by the author on statistical data of JSC "Uzpakhtayog".

According to the results of the analysis, the managerial staff of JSC "Uzpakhtayog" made up 1% in 2016 as compared to 2015. Engineer-technical staff decreased by 0.1%.

Auxiliary staff in the 2016 decreased by 1.6% compared to 2015. There was no change in the number of employees.

Only 1.9% of the population aged 56 and over in the JSC. Also, the decrease in the number of people aged between 16 and 25 years old aged 46-55 and those aged 56 and over is observed. The number of people aged 36-45 increased by 1.9%, and the number of people aged 26-35 increased by 0.9% (Table 2.5). These analyzes show that there are structural shifts in the number of employees of JSC "Uzpakhtayog".

Implementation of production plans also depends on the structural changes in the structure of industrial workers. Throughout the year, the composition of the enterprise staff changes through recruitment and dismissal. These changes are characterized by the labor force turnover. The analysis is conducted to monitor the implementation of the set of measures for training and retraining of personnel. For this purpose, the average salary of the workers is determined. Staff negligence has a negative impact on production.

In order to determine the unemployment rate, the total number of employees who lost their jobs due to their dismissal and disruptions in labor discipline should be based on the average number of employees in the list. This indicator is compared to previous years and relevant conclusions are made.

Table-2. Employees in "Uzpakhtayog" JSC are unemployed indicators (person).

Years	Total Number of Employees	Unemployed	Indicators of occupancy (%)
A	**1**	**2**	**3=(2:1)x100%**
2015	13272	201	1,5
2016	13281	235	1,7
2017	13235	246	1,8

Source: the table has been compiled by the author on the statistical basis of JSC "Uzpakhtayog"

Analyzes show that the level of unemployment in the surveyed period of the "Uzpakhtay" JSC has been increasing year by year. First of all, this relentlessly linked to the worker's self-employment, high salary, job conditions, illness. At the same time, we can see that some years have been abandoned by the administration because of non-compliance with labor discipline, lack of employment, and job vacancy (Table 2.10).

When analyzing the labor supply of the two enterprises within the "Uzpakhtayog" JSC, the number of employees in these enterprises is 657 and 699 respectively, which is mainly attributable to the high share of workers.

Table-3. Enterprise Manpower Supply (as of January 1, 2017).

№	Rates	Unity	"Guliston Extract Oil" JSC		"Yangiyul oil and fat" JSC	
1	Total workers	Person	657	100,0	699	100
	Including: -Objectives - engineer-technicians -They -sayers		 3 97 560 -	 0,4 14,7 84,9 -	 3 85 601 10	 0,4 12,1 85,3 10,5
2	Women working at the enterprise	Person	101	15,3	16	22,8
3	Employee education:	Person	-	100,0	-	100,0
	- educated -It's special -middle and full secondary		69 248 340	10,5 31,1 58,4	59 220 420	8,4 31,4 60,2

As of January 1, 2017, the share of women in the total number of employees of JSC "Guliston Ekstrakt Yam" accounted for 15.3%, and "Yangiyul oil-moy" - 22.8%.

At the same time, according to the level of knowledge of the employees, 10.5% of Gulistan Extract Oil JSC and 8.4% in JSC "Yangiyul oil-moy".

Employees of "Guliston Ekstrakt Yam" JSC in the studied year employed 10 people in the "Yangiyul oil and fat" JSC without the labor of the workers.

As of January 1, 2017, there are 657 employees listed in Gulistan Extract Oil Joint Stock Company, including:

- technical staff - 97 people;
- 560 people;

There are 0 people

- seasonal and seasonal workers - 0 people

Depending on the level of knowledge of the total worker in the company:

69 people with legal education

There are special 248 people

- 35 middle and middle school students;

Of the 12 directors, 11 are university graduates.

Total employed women - 101 people.

In 2016, a total of 138 people were recruited, of which 122 were employees and 16 were employed temporarily and seasonally.

At this time, 139 people were dismissed.

Of 139 dismissed employees:

-4 persons were released under article 99, paragraph 5, of the Criminal Code;

-129 people dismissed voluntarily.

-4 people were dismissed from point 3 of Article 106 of the Criminal Code.

-2 were dismissed in accordance with Article 106, paragraph 5, of the Criminal Code.

As of January 1, 2018, the total number of employees was 21.1%.

We analyze the labor indicators of JSC "Guliston Extractive Oil".

At the beginning of 2017, the number of registered workers was 658 people

2. The number of people employed during the year - 138 people

3. The number of dismissed people during the year is 138 people

Including:

a) at their own discretion - 129 people;

b) Number of dismissed employees - 10 people;

In particular, 4 persons were expelled from paragraph 3 of Article 106 of the Labor Code of the Republic of Uzbekistan, 2 persons were released under item 5 of the Labor Code of the Republic of Uzbekistan.

Based on this information, we will find the number of registered employees of the Gulistan Extract Oil Company by the end of 2017,

$T^1=T^o+QQS- IBC =658+138-139=657$ киши

Thus, the number of registered employees at the enterprise was 657 at the end of the year. During the analysis, we find the average number of employees in the "Guliston Extract Oil" JSC. For this purpose, we use the average simple arithmetic formula for calculating the average statistics:

$T=T^o+T^1/2=658+657/2= 657,2$ persons

Here is the average number of T-entities in the enterprise

T^o- the number of employees in the enterprise at the beginning of the year

T^1- the number of employees registered at the end of the year.

Based on the above information, we consider the coefficients representing the movement of employees in the enterprise, ie:

1. Recruitment coefficient in the enterprise

К=QQS*100/T=138*100/657,5=20,3%.

Thus, the employment rate at JSC "Guliston Extract Oil" was 20.3%.

2. The dismissal factor (Pk)

К=ИБС*100/T=139*100/657,5=21,1%

Thus, the decline in employment was 21.1% as of January 1, 2018.

3. Labor force transformation coefficient ($К_{алм}$)

К=QQS/ IBC

К=QQS/ IBC=138/139=0,992

Thus, the coefficient of exchange at the enterprise is 0.992 and is smaller than ever. This indicates a high level of staffing in the enterprise.

In our country, the accelerated development of scientific and technological progress in the economy under the conditions of liberalization of the economy greatly increases the importance of specialists in increasing productivity.

In addition to the absolute difference in the number of workers in the oil-and-oil industry enterprises, it is also necessary to determine the relative difference. The only difference in the number of administrative and managerial personnel in the enterprise is that it is necessary to determine the relative difference, taking into account the growth rate of production by the number of employees. The method of determining the relative difference in the number of employees is as follows: the actual number of employees in the previous year is increased by the growth rate of net sales of goods or products last year compared to the previous year and then divided into face. Thus, the calculated index is compared with the actual number of employees in the reporting year. The result is a relative shortage or excess of the number of workers. The relative lack of evidence suggests that labor productivity has increased.

We create a table to determine the absolute and relative difference in the number of employees. Net revenue from sales of goods at the beginning of the

reporting year amounted to 34083,401 soums. Net profit from sale of goods at the end of the reporting year was 56070452 thousand soums (56070452 * 100/34083401) = 164.51%

According to the data of the table, the absolute difference in the number of employees was 22 people, not taking into account the growth rate of production. Considering the relative growth in the volume of sales compared with the previous year, the relative deficit was 397. This testifies to the increased productivity of the enterprise.

It is advisable to use correlation to improve the effectiveness of personnel management. Correlation is used to calculate the relationship of two or more indicators. If the coefficient of correlation is 0, then there is no correlation with the study parameters. If the correlation coefficient is 1, then the dependence on the study indicators is complete, ie functional.

Table-3. Indices of correlation indicators for each other.

Correlation bond size	0,1-0,3	0,3-0,5	0,5-0,7	0,7-0,9	0,9-0,99
Relationship level	Low level	Sufficient	Substantially	high level	Very high level

We will consider the level of staffing and stock-savings of the oil-and-oil industry by correlation.

Table-4. The correlation link between stock-stock and labor productivity at the oil-and-gas industry.

Years	Workers' armed stock (Average annual value of fixed assets / average number of employees)	Labor productivity (equivalent to one employee) (Net revenue from product sales / average number of employees)	X^2	Y^2	$X^* Y$
2014	4835,36	46377,94	23380706,32	2150913318,64	224254035,95
2015	4906,82	58562,54	24076882,51	3429571091,25	287355842,52
2016	7495,95	100125,80	56189266,40	10025175825,64	750537990,51
Cost	17238,13	205066,28	103646855,23	15605660235,53	1262147868,98

Correlation coefficient $= \frac{\sum \text{▒} \llbracket X * Y}{(\sqrt{(\sum)}(X\text{^}2 * Y\text{^}2)}$

1262147868,98/103646855,23*15605660235,53 =0,99

The correlation coefficient was 0.99 points according to the results of calculations. The scale is considered to be high.

The results of the analysis show that 99 per cent of workers' stock-savings are linked to labor productivity. And 1 percent depends on other factors.

Conclusions

As a result of the research on the topic "Improving Personnel Management in Oil and Fat Stock Industries," the following conclusions were presented:

1. The content of the personal management system consists of several elements, the most important of which are the quantitative and qualitative staffing, personnel training and retraining, the system of remuneration of labor, relationships between employees and their adaptation to the enterprise;

2. Today the following tendencies are observed in the field of management improvement:

strengthening the targeted nature of management activities;

creation of flexible management structures and improvement of the management apparatus, including by reducing excessive management stereotypes;

the role of teams in production management and their orientation towards achieving high results;

improvement of social conditions of labor activity. Based on these tendencies, the directions of improving the structure of the governing bodies of the enterprises have also been identified, based on their quality characteristics;

3. Rapidness (operability) - accurate interaction with all functional units, where necessary, for production units to ensure timely and quality execution of managerial decisions.

Reliability - timely information retrieval and timely delivery to executives and executives. Reliability and efficiency are key factors in the effectiveness of current and future management systems.

4. Ensuring that enterprises in the oil and fat-and-oil industry must precisely be specialized in each process, its scope and sequence of labor;

Every type of work must be distributed in a fixed time frame;

clearly identifying the management responsibilities and achieving the proper distribution of responsibilities;

As a result of the innovative development of oil and fat-and-oil industry enterprises, the increase in output and the growth of labor productivity contributed to the increase in the state budget;

the increase in the volume of production at the enterprises will allow the population to purchase local goods for the wholesale of goods.

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Section 31. economic research, finance, innovation, risk management

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IMPROVING THE MANAGEMENT ACTIVITY OF THE FRUIT AND VEGETABLE INDUSTRY ENTERPRISES

Abstract: *This article highlights the issues of effective management of fruit and vegetable industry enterprises. The creation of agro clusters in all sectors and sectors will make a great contribution to the development of the economy and increase the productivity of agricultural enterprises along with the production of competitive products. At the end of the article, recommendations for improving the management of the fruit and vegetable industry enterprises are proposed.*

Key words: *fruit and vegetable network, clusters, competitiveness, institutional structure, management process, functional processes.*

Language: *English*

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Introduction

At the current level of economic development, the country's agricultural sector is rapidly developing, as is the case with all industries and sectors. At the same time, the consistent implementation of large-scale reforms in the sphere, the current state of agriculture and all-round support of the state are yielding its results. Continuing structural reforms in all sectors of the country, unshakable continuation of structural reforms in the economy, primarily in agriculture, accelerated development of private property, entrepreneurship and small business, protection of macroeconomic balance, is a key priority. [1]

A number of activities are underway in the direction of agriculture development. Due to the large-scale implementation of the agrarian reforms in Uzbekistan, the economic freedoms of agricultural producers were expanded, the structure of large agricultural enterprises with low profitability and unprofitable enterprises was created, on the basis of which farms were established, material- technical base has been developed. Organizational and economic principles of sustainable economic activity through deepening of processing of agricultural raw materials, modernization, technical and technological re-equipment of agricultural production, optimization of farmland area parcels, creation of modern service infrastructure to support their activity was created. At the same time, special attention is paid to the deep processing of agricultural produce and the development of their storage infrastructure. As a result of carried out work, annual prices allow for seasonal increase of prices, uninterrupted supply of population with main types of agricultural products, expansion of export of these products, maintenance of price stability.

Materials and methods

In order to increase the efficiency of the fruit-and-vegetable sector and to ensure consistent agricultural extension of the population throughout the year, the issues of agro-clusters formation have been studied. In order to carry out this research, a collection of materials on agriculture and its fruits and vegetables was utilized. Studies of foreign scientists in this direction have been investigated. In the study, the method of abstract thinking, the khash method, the specific analysis was used.

The Role of Fruit and Vegetable Sector in Agriculture and the Issues of the Creation of Agroclusters

In the agricultural structure, the fruit and vegetable sector has an important role and importance, which carries out tasks related to the

annual supply and export of fruit and vegetable products to the population. The accelerated and sustainable development of the fruits and vegetables sector is directly related to its competitiveness and modernization. Modernization, in turn, will create a promising competitive model of the fruit and vegetable complex, the strengthening of interaction between various managing subjects involved in the production, processing and sale of fruit and vegetable products, their optimal social structure and the organizational structure of agricultural producers the development of species. Formation of efficient agro-clusters currently in the fruit and vegetable sector of the country is an important factor. Agro-clusters, which are set up in the fruit and vegetable sector of agriculture, are a new institutional structure. One of the pressing issues of modernity is the creation of not only the need to organize them, but also to organize them effectively. In many countries, theoretical and methodological aspects of agroclipurs have been studied. At the same time, it is necessary to study the theoretical and methodological aspects of effective agro-clusters in the fruit and vegetable industry of our country, taking into consideration that each country and the various stages of development of the economy have such specific features as the creation of such new structures. In the conditions of deepening of current market relations, effective organization of agro-clusters in the fruit and vegetable industry and organization of their activity on the basis of modern management principles are very important. [2]

First of all, it is necessary to analyze the theoretical nature of the concept of cluster. We know that the term cluster (when translated from the English word "cluster") is understood as an independent unit that combines several elements with one another, accumulating, group meaning and, to some extent, specific characteristics. The term "cluster" was used primarily in mathematics and natural sciences until it came to governance. In the 1970's, economists from Sweden, K. Fredriksson and L. The Lindsmark used this term to determine the concentration of enterprises in a restricted area. In the 80's of the 20th century, the scientific process Cluster terms porter is included as an economic category. In his opinion, the cluster is a geographical cross-sectoral association of companies and institutions operating in a particular area. The essence of agroclipster A.A. Nastin is well-founded: A geographically located, interconnected, and complementary, diverse ownership - family farms, farmers, and farmers, in order to combine agrococrats simultaneously and collaborate in production tasks and environmental protection. cooperatives, social and scientific organizations, educational institutions and advisory services. In scientific literature, we can find many more agrocluster rates. By analyzing, summarizing and summarizing them, we can now summarize the agro-clusters in the agricultural and agro-market, as follows:

- Agro-clusters in agriculture

- preparation of agricultural land for agricultural production and the production of agricultural products, and reorganize the process of recycling, unilaterally integrate the storage and sales processes into a single chain and deliver high-tech innovations. Along with the classification, it consists of subjects of the economy engaged in raising the competitiveness of agricultural products both in domestic and foreign markets. In our opinion, the tariff given to the clusters in the fruit and vegetable industry will help explain the essence and functions of the fruits and vegetables. In the field of fruit and vegetable growing, agrocrocessors start with the process of land preparation for fruit and vegetable production, which means the delivery of the crop to consumers in a manner that does not violate their quality and effectiveness and benefit from it. The whole complex process is brought to life. At the present time, the importance of organizing and improving agro-clusters in the field of fruit and vegetable production, with the systemic governance activities becoming more and more evolving. [3]

Increasing the efficiency of agro-clusters in the fruit and vegetable sector

Building an agro-cluster in the fruit and vegetable sector is a key aspect of the issue, with the creation of an efficient agro-cluster based on the proper organization of its activities. It is important not only to organize agro-clusters, but also to build effective productivity. Achieving sustainable growth in the performance indicators determined by the ratio of access to agro-cluster results, and the increased efficiency of agro-clusters in ensuring their viability. There are a number of challenges to be pursued to ensure the effective functioning of agro-clusters in the fruit and vegetable sector, which includes:

a) All activities should be focused on raising the competitiveness of fruit and vegetable products and enhancing the economic potential of the regions. To do this, try to work at all stages in accordance with the regulations. In any case, it is impossible to get rid of the regulation.

b) to take measures to produce and increase the range of fruit and vegetable products in the regions;

c) developing a system of specific measures for their export, in addition to increasing the competitiveness of fruit and vegetable products;

d) Provide farmers who produce fruit and vegetable produce with a variety of fertile, disease resistant, and human health benefits. To carry out large-scale work in the research institutions operating for this purpose and to create varieties that meet the above requirements;

d) further expand the network of infrastructure facilities serving the agro-cluster organizations in the fruit and vegetable sector;

d) introduce a system of preferential loans to meet the different needs of agro-clusters in the fruit and vegetable sector;

e) Establishment of trade houses for sale and sale of fruit and vegetable agro-bracing products in foreign countries.

i) relationships with experts, academics, and researchers should be taken into account in organizing the agro-cluster organizational structure in the fruit and vegetable sector. The most effective organizational structure should be accepted. [4]

In the agro-bazaar created in the fruit and vegetable sector, it is necessary to take into account and analyze the internal and external factors affecting their activities. It is important to distinguish between clear variables that affect agrocliparts and accept alternate variants. At agroclusteres, it is necessary to focus on the objectives of the ride. Activities should be undertaken to ensure that their strategic and tactical goals are achieved and that they achieve significant benefits as a result of their achievement. Given the dynamic change in the objectives, managers need to increase the responsibility for their achievement. In the organization of the agrocluster activity, it is necessary to pay more attention to the goal-action plan, which is the main scheme of management. [5] Once the goal is set, strategic and tactical action is taken to achieve that goal. Regular control over the expected outcome of the action is crucial. Before the goals have been set and action is taken to achieve them, it is necessary to create agro-cluster organizational structures. Organizational structure of management in agroclusteres is achieved through the creation of divisions and subdivisions, which can contribute to the achievement of the goals. The importance of predicting how each unit in the organizational structure of agro cluster management will contribute to achieving the overall objective is extremely important.

It is important to designate each position and assignment in the organizational structure of the agro-clusters in the fruit and vegetable sector on a common ground. The purpose of the overall system should be primary and then the purpose of each unit. In determining the purpose of each unit, it is important to focus on coordination between the parts of the general system. It is important to note that the purpose of any division is not intended to be a common goal. For example, the increase in the amount of fruit and vegetable production should not have a negative impact on the quality and composition of products. First of all, the level of satisfaction of consumers' needs and the consumer value of fruit and vegetable products grown.

The correct selection of technology for the final crop production in agro-clusters in the fruit and vegetable industry is of great importance. Product acquisition technology, with low cost and high productivity, results in the output of agro-clusters in the network to exceed the cost of inputs. Trying to keep up this difference will increase your awareness and ensure efficiency.

Another important aspect of raising productivity of agroclusteras is the rational organization of labor activities. This is primarily due to the fact that staff selection and continuous professional development are the result of increased agro-clusters in the fruit and vegetable sector. Each employee should be consistent with the functions he / she performs, have a deep knowledge of the functional requirements, and continuously improve his / her professional skills. At the same time, it is important to organize their labor, control and analysis and to organize a system of incentives based on results. Every staff member in the fruit and vegetable sector is regularly monitored and evaluated. The rating of each employee in the network is determined. Based on this rating, they are encouraged or punished, that is, raising the burrows and taking measures such as decreasing or dismissing. Such activities will result in increased productivity and productivity of the workers in the agro-bazaar network. [6]

Organization of communication processes is also of great importance in raising the efficiency of agro-clusters in the fruit and vegetable sector. There is a need for effective communication between the network and the transfer of any information that is being transmitted only to the effectiveness of the communication. In order to eliminate the semantic and empathic factors that have a negative impact on the information exchange process, there is an ongoing effort. Information Achieving free movement between all agro-cluster divisions and gaining access to non-essential information increases the efficiency of the communication process. The effectiveness of the communication process will increase the effectiveness of decision-making in agro-bazaar. This will be an important factor in increasing the efficiency of agro-clusters in the fruit and vegetable sector.

Implementing management activities in agroclusters

For the creation and operation of agro-clusters effectively, it is necessary to use modern management models and to apply the management strategies that fit the current development level. In the fruit and vegetable growing industry, first of all, it is necessary to introduce the process of agro-clusters based on the full process of management. [7]

The management process is a combination of interconnected, interrelated, and interconnected processes that are combined into a single target. This action is carried out in the overall objective of the

organization and is supported by all elements. Management process is a set of actions that are carried out by managerial managers on the basis of professional, functional and qualitative division of labor. They make their own management tools as their primary tool, and perform their management functions in their work, following the principles of management. In the work of fruit and vegetable agro-clusters, the complexity of the management process increases. Because here various types of activities are interconnected and management processes need to be carried out in a very rational way to make their work more effective. At the fruit and vegetable agro-factories, there are enterprises and organizations involved in agriculture, industry, transport, construction and service industries. Because of the inherent features of management in these areas, management of them in a single center creates some problems.

Effective activity creates the need for effective management technology in agro-bazaars in the fruit and vegetable sector. In order to introduce management technology in agroclusteres, it is necessary to analyze and analyze tasks, actions and operations, which are part of the management technology, and their parts, methods and activities. In order to carry out such managerial actions, it is necessary to introduce a more detailed study of the division of labor into agrocroclover management. This division of labor leads to the increase in management efficiency and productivity. [8]

Improvement of professional division of labor in the management of the fruit and vegetable industry envisages the separation of tasks among professionals by types of activities. For example, an economist, accountant, an economist, an accountant, and so on. In order for the management technology to be effective, the division of skilled labor should also be revised and further deepened. It is desirable to organize division heads in departments of industrial production of agroclotheses (canning, juice production, grain processing, etc.), ie division managers in several categories. [9] All of them are provided with service duties. Managers who carry out their assigned task assignments will work for the benefit of agro-cluster activities and contribute to the achievement of the goals. The agrocluster's total goal is to equal 1, and for each category, the coefficient of coefficients is given to managers. As a result, this coefficient is monitored on a regular basis and, if necessary, using motivational channels. [10]

In agrocluster, complex functional processes that are not yet up to date. At the same time, various sectors such as agricultural production, industrial production and long-term storage of finished products are kept without disturbance of quality and consumption value. [11] It is necessary to properly organize the functional processes in the management system so that they can work together effectively. It is necessary to determine the amount, sequence and nature of the actions to be taken in management activity. As a result, optimal management technology is selected. Management of such complex systems is carried out with specific difficulties. For this reason, agro-clusters in the fruit and vegetable sector should regularly use systematic analysis.

In the fruit and vegetable sector, aggressive agro-clusters should be properly adjusted to establish effective productivity. It is important to note that this management policy is consistent with the strategic objectives of agro-clusters. A set of conditions must be met to establish a business management policy for businesses and businesses. first of all, the agroclimatic management policy must be in line with the actual situation and the current legislation. The second important prerequisite is that the management targets at different parts and levels of the agroclimatic complement each other and achieve the necessary motivation. The third requirement is that the agrocluster management policy should be accurate and clear to all participants.

Conclusions

In order to establish agro-clusters in the fruit and vegetable sector and to ensure their successful operation, it is necessary first of all to introduce modern management principles, methods and tools in these structures. Achieving the benefits of the system can be achieved by selecting, evaluating, and responding to important internal and external factors in the agro-clusters in the fruit and vegetable sector. In this regard, one should pay attention to the correct selection of agro-cluster technology and the efficiency of its employees. In the agro-bazaar created in the fruit and vegetable sector, the implementation of the above-mentioned management orientation is a major factor. Implementation of these targets and accomplishment of tasks will contribute to the effective agro-cluster production in the fruit and vegetable sector and will serve to meet the demand for products of the fruit and vegetable sector not only seasonally, but also throughout the year, to meet the highest quality and health of the population. At the same time, exports of fruit and vegetable products will increase.

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

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ANALYSIS OF THE CURRENT SITUATION OF PRESCHOOL EDUCATION SERVICES IN UZBEKISTAN

Abstract: *In the article have been described the theoretical and methodological aspects of the development of the preschool education market in Uzbekistan from the point of view of the main trends in the development of the market for pre-school educational services. And also, in order to increase the satisfaction of consumers with pre-school education services, the types of educational services are listed in which the main tasks of preschool educational institutions on these issues should be provided and listed. The scientific research of the results of foreign scientists' research on topical issues of development of preschool education is studied and the author's approach is given.*

This article describes the results of a sociological questionnaire randomly conducted throughout Uzbekistan based on the Likert scale among 446 parents whose children, aged 3-6 years, are currently educated in pre-school educational institutions, in order to study the degree of satisfaction with pre-school education. Analyzes of the results of the sociological questionnaire on statistical information on the activities of pre-school institutions conducted by the author on the basis of marketing research are given. Analysis of the results showed that the number of parents who are satisfied with the quality of preschool education is much higher.

Key words: *educational services, pre-school education services, research of preschool education services, research of consumers and competitors, satisfaction with the quality of education.*

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Introduction

In the modern economy, the market plays an important role of educational services, as the level of knowledge and skills of personnel through the provision of educational services is one of the most important factors in improving the quality of the labor market. According to the concept of modern education, the development of pre-school education is the first stage in the development of education.

Therefore, the government attaches great importance to the development of a new economy, in particular, the system of pre-school education, which is one of the priorities of state policy on the basis of further improvement of modern knowledge. In accordance with the resolution of the President of our country “On measures of further improving the system of preschool education in 2017-2021” of December 29, 2016, measures are being taken on strengthening the material and technical base of the existing preschool education institutions, construction of new ones, including in rural areas, providing them with modern inventory, equipment, educational and methodical aids, multimedia resources [1]

The main tasks of the new ministry are the phased coverage of all children with preschool education system, creation of a network of state and non-state preschool education institutions in the country for healthy competition, introduction of alternative forms of preschool education and upbringing of children.

As well as, taking into account the population growth in th country, the necessary level of coverage for improving the system of preschool education for children is ensured, the organization of construction and repair work to create and strengthen the material and technical base of preschool institutions, the development of non-state sectors is being gradually implemented to further improve the quality of preschool education services. Since the introduction

of public-private partnerships in the field of pre-school education is the most effective way to solve existing problems in the system of pre-school education, it contributes to saving the state budget for education and improving the quality of pre-school education.

Today, there are significant changes in the development of the competitive environment of the education system, which also has a positive effect on the market for pre-school education services. As a result of competition in the preschool education market, each market participant will be forced to evaluate their position in the market, as well as conduct marketing research. Education services are ready to analyze the market environment, analyze the activities of direct and indirect competitors and change their services in accordance with the requirements of customers.

The main purpose of marketing research in the preschool education market - identify needs for promising educational services, assess their satisfaction, study and predict the hypothesis of consumer behavior. At the same time, it is necessary to study the market of educational services and the segmentation of the object and the subject of education, the principles and methods of marketing of educational services, the impact of the marketing sphere on konyunkturu market conditions, market research in education, forecasting demand for professionals formation on educational market prices and features of the educational services market research.

Materials and Methods

Theoretical and methodological aspects of the formation of the educational services market began to develop at the end of the 20th century and led to the formation of the global educational services market, significantly changing all aspects of human life due to a greater number of world knowledge.

Educational services are educational events or training programs for an educational organization or an individual entrepreneur to continue their studies at the next stage of organizing and implementing the educational process for training special educational programs, subjects and professional activities. (Г.А.Астратова, 2016, [2]).

Today, preschool education services should have a positive impact on the child's intellectual, psychiatric, creative and physiological development, as well as helping parents meet the needs of their children in a comprehensive and modern manner. Preschool education and parenting teachers require parents to learn to interact with their children, build a peaceful solution to the conflict and compromise, and also communicate with peers through their own actions.

The main tasks of preschool educational institutions in the market of educational services:

-development and provision of new types of educational services;

-organization of high-quality educational services;

- marketing research in the preschool education market;

-increase and promote the demand for pre-school education services;

-increasing the competitiveness of pre-school educational institutions;

-implementation of the pricing policy of educational services;

-increase the scientific potential of specialists;

-creation of the brand of the educational institution and strengthening its credibility;

-development and implementation of the strategy of marketing activities of an educational institution;

- forecasting of promising educational services.

Theoretical and methodological aspects of the development of the market for pre-school education and research on this issue can be divided into two parts:

2.1. Studies on the effective organization and management of preschool education services. They studied the positive impact of the "Universal Preschool Education Program" in increasing the effectiveness of the child's education (J.Dietrichson, L.Kristiansen и V.Nielsen, 2018) [3, studied and analyzed the monitoring of the system of preschool education in 57 countries (K.Anderson, A.Raikes, S.Kosaraju и A.Solano, 2017) [4], Five Asian countries have theoretical and methodological aspects of early childhood care and development, governance structures and demographics, financing and the public-private market in China, Indonesia, Singapore, South Korea and Vietnam, the structure and structure of early childhood and education, studied the current problems of our time (Rayginne G H Tan, 2016) [5], theory and practice of early parenting in Japan; a system for preparing national pre-school educational programs and curricula; comprehensive education and care reform; analysis of development trends in pre-school education (A.Nanakida, 2015) [6], the professional development of the pre-school education system and the increase in their knowledge have had a positive impact on the education of children by comparing the work of public and private institutions for the care of young children and education (E.Park и S.Park, 2015) [7].

2.2. Scientific research on the factors contributing to the increase in satisfaction with the quality of preschool education services and their satisfaction with the preschool education provided to their children:

They conducted 344 monitoring activities related to the activities of children, parents and teachers in Ghana, in partnership with the University

of Pennsylvania, as part of a comprehensive survey on improving the quality of education in pre-school institutions (Sh.Wolfa, E.Tsinigob, J.Behrmanc и J.Aberd, 2017) [8], in Tanzania, a questionnaire was conducted for 829 parents whose children at the age of 5-6 years receive pre-school education (D.Libent, 2015) [9], conducted a questionnaire of 810 parents, whose children in 3-5 years of age are accepted in Taiwan kindergartens (L.-F.Jang, L.Moore и Y.-M.Lin, 2014)[10].

The complex research processes of the above scientists showed how satisfied parents and teachers are in living and working conditions, the level of knowledge and skills of teachers, the quality and characteristics of preschool education programs, the relationship and satisfaction of parents with the preschool education provided to their children.

Research results showed: satisfaction of parents with the quality of pre-school education and existing curricula; improving the knowledge and skills of teachers, as well as the effective cooperation of teachers and parents in teaching the child a positive effect on improving the quality of preschool education

A.M.Barriers studied the existing problems in the early stages of education with the participation of 150 parents from Mumbai. Among the 36 parents there were significant differences in the level of satisfaction, 65.6% of the parents encountered problems and obstacles at an early stage of education and were unsatisfactory. In the course of this study, parents were able to find out how parents can involve their children in early childhood education, as well as the effect of “parental participation” on the quality of the child’s education. It was found that mothers are trying to improve their time in order to support the education of their children, and that fathers face problems with their working time [11].

E.Nitecki surveyed among 3 teachers and 18 parents, 48 observations in the classroom, using inductive research to determine their collaboration with Millsereka School to study the system of teaching children with disabilities in preschool education. Based on this study, he developed a methodology for effectively monitoring the access of children with disabilities to preschool education and showed that the cooperation of parents and teachers has a positive effect on the effectiveness of direct education[12]

Over the next five to ten years, S.M.Walton determined the supply and demand for early childhood education in Benton and Washington and predicted population growth from 2016 to 2027. The method used by the researcher allowed the birth of both countries to predict the number of children under five years of age[13]

O.B. Savinskaya believes that in the decision-making process of management in pre-school educational institutions, a broad assessment of parents is necessary, as a comprehensive assessment of the quality of services provided by parents for the effectiveness of management of pre-school institutions can increase the ability to manage direct education and improve the quality of educational services.

Using the above-mentioned research methods, Uzbekistan used comprehensive marketing research in the system of pre-school education to study the activities of pre-school educational institutions in collaboration with ministries and organizations so that it was possible to study the general situation of pre-school education and identify and eliminate existing weaknesses.

In our opinion, the effective use of research methods by foreign scientists to identify and eliminate existing shortcomings and problems in the system of preschool education in Uzbekistan will improve the quality of services of preschool education..

Research methods

The study presents the author's approach, explaining the results of research by foreign scientists on topical issues of the development of preschool education.

There is a survey based on the four-point Likert scale, scanned by random 892 parents of 3-6-year-old children in Uzbekistan. To determine the opinion of parents on the quality of preschool education, the first part of the survey includes the demographics of respondents, the second part contains 15 questions with 4 answers on the quality of preschool education, and the third part - the parents' opinion on improving the quality of preschool education and left their suggestions.

Methods of statistical analysis were used on the basis of a comparative analysis of the collected data. The survey was conducted in May - June 2018. Data processed using Microsoft Excel.

Analysis and Results

In developed countries, the needs of modern day-to-day pre-school education are the basis for the development of private pre-school educational centers and development centers, which provide additional educational services for the comprehensive development of children. Therefore, in developed countries, private pre-school educational institutions are relatively high in public pre-school education. For example, in the US, only 2% of pre-school educational institutions are public pre-school institutions.

Despite the fact that in recent years, the amount of payment of parents paid for private non-state pre-school institutions in Uzbekistan is ten times higher than in public pre-school institutions, but the demand for them is growing.

Because they have more advantages than state pre-school institutions, with various privileges, such as providing quality education and training, providing high-quality staff, and organizing various additional clubs, especially in the field of language and mathematical skills. The following information is the basis for Picture 1.

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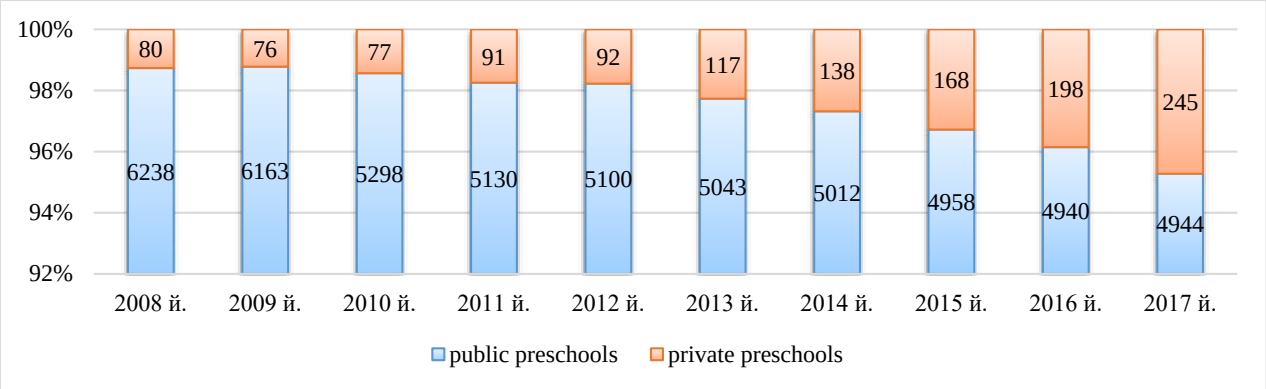

Picture 1. Growth of public and private preschool education's in Uzbekistan.

Thus, the above analysis shows that the quality of educational services provided by private non-pre-school educational institutions is increasing from year to year, despite the fact that fees are high.

In order to improve the quality of educational services provided by state pre-school institutions in order to provide quality pre-school educational services to the population on the basis of incomes of the population of the Republic and social protection, it is necessary to introduce and develop additional educational services. First of all, it is necessary to determine the demand for services of preschool education, depending on the financial needs of parents.

Marketing research in the preschool education market includes the following processes:

Market research - trends and processes of the market for preschool education services, the structure and location of the market, its capabilities and development dynamics, obstacles and problems, opportunities and risks, as well as the state of competition and the current situation.

Consumer research - This is a comprehensive set of stimulating factors that help parents of children in preschool institutions choose educational services and evaluate their quality..

Competitive research – analysis of existing competitors and their competitiveness in the market of pre-school education, to obtain the information necessary to ensure the competitiveness and the search for ways to interact with competitors.

Thanks to marketing research in the preschool education market, it is possible to determine the opinion of parents about educational services, the level of satisfaction with the quality of education and the specific educational needs of parents.

Therefore, a random social survey was conducted in 892 parents of children aged 3-6 years who are currently participating in the pre-school institutions of the republic. The results of survey are below in the Figure 2.

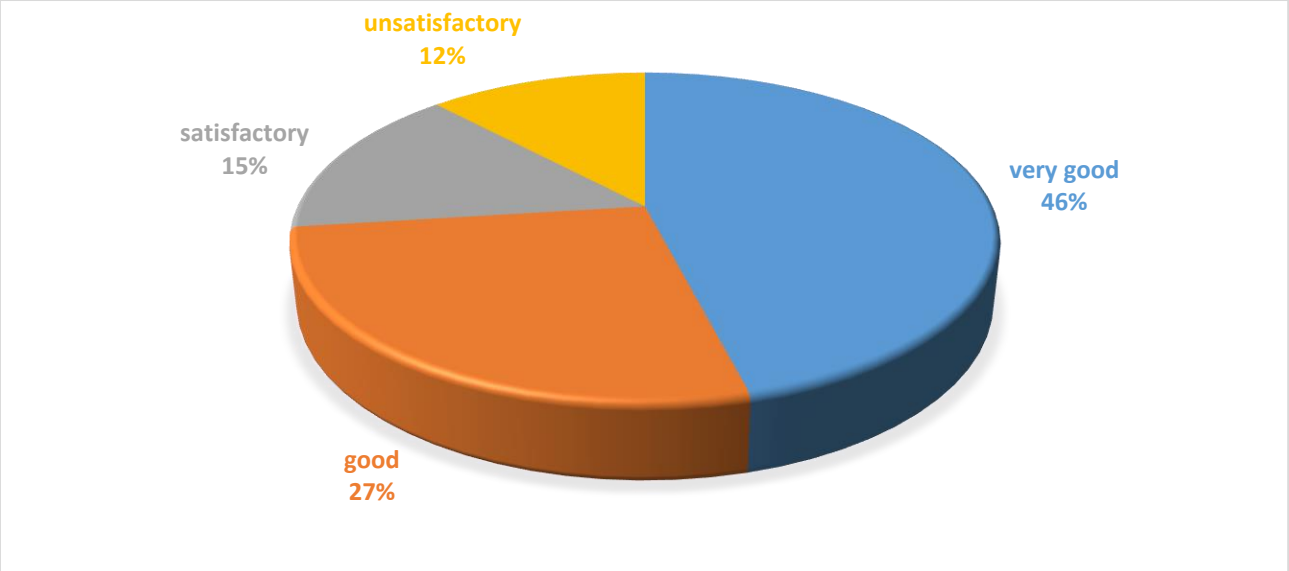

Figure 2. The results of satisfaction of parents with the quality of education.

From the above chart, we can say that according to the results of a sociological survey conducted among parents of children in preschool institutions, the quality of preschool education services was determined, 46% of parents answered "satisfactory" to the quality of preschool education services, 27% of respondents answered "unsatisfactory", 15% of respondents answered "Very satisfying", "very unsatisfactory" answered 12% of respondents. Thus, we can conclude that many parents are satisfied and they are satisfied with the quality of preschool education.

Conclusion

1. For the development of the market for pre-school education, it is necessary to identify the shortcomings and problems of pre-school educational institutions in our country and find ways to solve them.

2. Particular attention should be paid to the development of the private sector in the pre-school education system to create the necessary infrastructure and competitive environment. At the same time, it is necessary to introduce the public sector of pre-school education in business activities and develop the market of paid educational services.

3. In order to improve the quality of preschool education, great attention is paid to raising the level of knowledge and skills of teachers while ensuring the availability of modern information technologies in the learning process.

4. It is important to ensure the participation of parents and teachers in decision-making on issues of pre-school education management and effective cooperation of parents and teachers in the education of the child.

5. Every year, it is necessary to conduct social surveys based on marketing research to determine the demand for services of preschool education, satisfaction of parents and their satisfaction with the quality of educational services provided.

6. The creation of "Corporate pre-school institutions", based on public-private partnerships to provide legal and financial support to organizations and companies that initiated the creation of a pre-school educational institution, will increase the number of new pre-school educational institutions.

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

DIRECTIONS OF IMPLEMENTATION OF FOREIGN EXPERIENCE CORPORATE MANAGEMENT IN COMMERCIAL BANKS

Abstract*: The article analyzes the foreign experience of corporate governance, in particular, considered the features of corporate governance in the United States and Britain. Based on the study of foreign experience, the author suggested ways of introducing elements of corporate governance in commercial banks.*

Key words*: bank, corporate governance, foreign experience, market economy.*

Language*: English*

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Introduction

The widespread introduction of corporate governance, including the banking sector, is related to the fact that the global economic development is intensified by institutional integration of business entities at the beginning of the 21st century. This is because first of all it is explained by the desire of banks to reduce the cost of production, distribution and sale of goods, to increase the revenues, to increase the profitability of the capital, and to strengthen their competitiveness in the national and international markets.

Recently, the problem of corporate governance in the Republic of Uzbekistan has attracted the attention of mass media and the public. This, first of all, provides for the protection of rights and interests of stockholders and other stakeholders. It is worth noting that many of the key factors in corporate governance are investors' decision to invest in our country in capital investment.

Problems of corporate governance in commercial banks of the Republic have started to develop in the early years of the 21st century. Research on various aspects of this issue has been published in 2001, and this trend remains one of the most important and relevant issues at the moment. Before speaking about the essence and peculiarities of corporate governance in commercial banks, it is appropriate to describe its concept.

Literature review

Theoretical bases of corporate governance in commercial banks Gerashenko V.V., Djonatan Meysi, Morin Ohara, Diana Mak Noton, Jan Matuk, Zaharoz BC, Chris Barltrop, Klaus Baynke, Kiselev V., Lavrushin O., Matovnikov M. Yu., Olxova R.G., Rid E., Kotter R., Savinskiy Yu.P., Usoskin V.M. and other scientists' scientific findings.

In the transition to a market economy, some aspects of corporate governance were studied by M.Hamidulin, I.Butikov and others. Most of these things are basically curricular descriptions, in which the general theoretical aspects of corporate governance are highlighted.

However, comprehensive, scientific and theoretical and practical research on corporate governance issues has not been undertaken in commercial banks.

Purpose of research

Development of relevant recommendations and practical recommendations on improving the effectiveness of corporate governance practices in the context of deepening of the market economy and re-structuring international experience of corporate governance.

Analysis and results

Corporate governance is a complex of core activities and rules that are exercised by the General Meeting of Shareholders, the members of the

Council and other executives in managing the activities of joint-stock companies;

- Ensuring the effectiveness of joint-stock companies' activity, ownership and other interested parties (bank employees,
- a system of relationships between bank managers and owners (shareholders) on issues of protecting the interests of creditors, partner banks;
- all laws, regulations, regulations, measures and procedures to address the problems arising from the direct deterrence of corporate property from proprietors;
- is a set of organizational, legal and economic measures that will unite the interests of key stakeholders in organizing effective bank management through them.

As a result of analyzes and studies, it was found out that in the developed foreign countries the following models of corporate governance are being used:

- unitary model - USA, UK, Australia;
- two-stage (stakeholder) model - Germany;
- Continental model;
- network model - Japan (keyretsu), Korea (chaebol).

Unitary Model System:

Unlike the executive directors, the Unity Board of Directors, which has more than one independent director, is a British Commonwealth Model (24% - 30% share-based, long-term, smaller, and controlling package, 70-80% shares, vice versa, with the time being released and easily available from one owner to another;

- The majority of stock capital is invested in invested in English-language traditions ("Protestant capitalism");
- shares held by non-physical entities are mainly concentrated in the hands of institutional investors;
- The bulk market is characterized by high efficiency and liquidity;
- Protecting monetary shareholder rights at a high level. In a two-step model, the management functions are clearly divided into two stages:
- Board of Directors (Board of Directors);
- executive board.

In the system of the Continental model, corporations, as well as joint-stock companies, may also have other legal entities such as various types of companies (full, limited liability companies), economic societies (limited liability companies), business associations (concerns, associations, holdings), production and consumer co-operatives is understood. The Anglo-Saxon model system also includes corporations that are not legal entities or entities that are not recognized as corporates in the Continental Model System (here it is about government agencies dealing with word-management activities). Thus, in the case of the continental model, corporations are generally considered as subjects of the private model, in the Anglo-Saxon model system they (England, USA) are not only private, but also the subject of the mass model.

All corporations, such as the United States, are divided into four groups: public, semi-public, commercial, non-profit. Popular corporations include government and local authorities. Semi-mass corporations are corporations, which account for the general needs of the population (eg gas, water, electricity). Religious organizations, corporations, such as corporations, schools, colleges, universities, corporations, etc. Corporations (entrepreneurial) corporations are corporations with a view to obtaining income, which are distinguished by the fact that they are economically powerful amongst the aforementioned corporations The political influence of such corporations is also significant medical involvement includes a complex system (combining with the modeling of a public modeling regulatory model) and is more detailed in relation to other types of corporations.

If the essence of the concept of commercial corporations originates, it is clear that the concept of corporations is clear and broader in Europe than in the UK and the US model.

Under the law, shirkats are not included in the UK as well as corporations that have the status of a legal entity in the United States. According to the general principles of the common model, the partnership is a combination of individuals and is not recognized as a legal entity. Commercial corporations are based only on equity capital, ie their corporation that reminds the state-owned companies in their continental model system.

In England and the United States, state-owned enterprises are relatively smaller than those of Europe, yet they are recognized as corporate entities in the Anglo-Saxon model. The european continental model is one of the most important signs of corporations, with regard to state-owned companies, that is, the combination of capital, the use of state-owned property and economic and organizational management of economic and organizational management as legal entities are not recognized as such corporations. Property relations arising among them are not related to the property conviction.

One of the major signs of the corporation is the existence of a pooled equity through the purchase of shares on a voluntary basis at the expense of founders or participants. The range of individuals and their share of their capital to organize the corporations' activities can be fixed at any time at the presence of corporations. As state enterprises do not have such criteria, the continental model is not recognized as corporations in the system. In the Continental model, there is relatively strong relationships between the members of the corporation. This is explained by the fact that each

participant has an important role in the corporation through its distinctive feature of its activities that involves direct and indirect participation. However, there is a combination of participants (except in the United States) who are not indispensable for individual participation, even in joint-stock companies, which promotes the importance of the General Assembly of Shareholders. This approach allows the individual interests of the shareholders to correlate corporate interests, that is, the common interests of all members. Large corporations with relative strengths in the United States, where capital accumulation plays an important role, can only be effectively created if they use appropriate management technology. The opportunity to influence their shareholders on the business of the continental model shows that the legal status of the shareholders is their freedom and equality. The intrinsic corporate relationships with Anglo-American corporations are where the legal status of shareholders is characterized by stockpiles and omissions of shareholders in managing corporations. Strangely enough, it should be noted that this is a positive situation and serves as a foundation for successful corporate governance, as managers of non-profit managers quickly and efficiently solve many issues and achieve profitability and profitability by expressing common and individual interests .

Whereas American and UK corporations are relatively free, the activities of European corporations are significantly regulated by the government. In the initial stages, European countries sought to regulate only external relations of corporations and their relationships with other legal entities (such as taxation, competition, consumer relationships, pensions and benefits to employees). Nowadays, the relationships within the corporation (such as the shareholder register, bookkeeping, conducting financial calculations through the bank) are also regulated by the state.

In the Anglo-Saxon model, the legal capacity of corporations was initially very special. The supreme legislative or executive authorities issued a permit for the existence of a particular type of activity. Today, many countries using this model have switched to the corporation to set up a common legal capacity that would enable the corporation to engage in any type of government-run business activity. The 1984 American Entrepreneurial Corporation Act, as well as the statutory US law, has been permitted to engage in activities that are well-known in the future with industry or business relationships, or have nothing to do with its core business. Therefore, no corporation is practically limited in its activities regardless of its type of business.

Therefore, the distribution of shares in these countries is as follows: 70-80% of the stock holdings are held for permanent owners; 20-30% of shares are offered for retail sale, and customers are considered as funds for temporary placement of funds;

- Large "wholesale" investors form the share capital,

the system of mutual ownership (strong dependence) of each other's shares is widely developed;

- Representation of the Company's employees at the Supervisory Board;

- far-reaching investors;

- The securities market is smaller and liquidity is low. Network (Japanese) model

The Japanese model does not resemble both the US model and the German model, but features some of the features of both models:

- Independent directors of the Board of Directors are responsible for this.

All members of the Council are senior managing bodies or former dictators;

- The share of equity investments is largely invested by major investors and the ownership of shares of one of the members of a single industry group is critical.

- The American system of corporate governance is directly related to the properties of the US property. In particular, there is no major investor in American corporations that can effectively influence other investors. The share capital of American corporations has largely been subdivided into smaller packages, with no individual or institutional investor registered in most U.S. registries, over one percent of total capital. As a result, no group of shareholders can nominate a member of the board of directors. The second important feature is that most of the shares that are not owned by individuals are concentrated in the hands of institutional investors - pension funds and mutual funds. It's a great opportunity for investors to invest more than 50% in their hands, as more financial manager. and do not seek to participate in the board of directors, and usually avoid the responsibility for the ownership of companies that own large packages.

Shared capital stock makes it easier for shareholders to move from one owner to another. In May the shareholder can easily decide on the sale of its shares, but the sale of a large shareholder will usually result in changes in strategic plans and the loss of the offered value of the shares (one-time increase in the market offer). The high level of efficiency and liquidity of the American securities market makes it difficult for small investors to sell their packages quickly and technically. Accession, acquisition, acquisition and acquisition of a company are a common practice of the American stock market, which makes the stock market an effective tool for managing the managers' operations effectively and easily.

In contrast to the United States, the majority of Germany's equity capital is owned by other

companies: more than half of Germany's gross share capital comprises a system of interoperability with ownership of one another's shares. Even though private investors form the second largest group of investors in Germany (they hold approximately 16% of German companies), many of their shares are certified by their respective holders, whose certificates are owned by their respective owners, whose majority of shares are owned by banks. For this reason, a large proportion of German companies' shares (more than 90%) are traded by organizational investors, even if they are not shareholders.

The Goldman Sachs Joint Stock Company focuses on infor- mation technologies in the implementation of corporate governance. Particularly, in 2008, they managed to reduce the costs by 90% without waiting for the crisis, and as a result, it was reported that 1000% provided their clients and clients.

The Goldman Sachs financial institution focuses on maintaining asset trust and repayment of bank assets through asset management in asset management (based on bank assets' risk level). These issues were directly achieved through the corporate governance of the Bank's shareholders.

The Goldman Sachs Bank focuses on managing corporate governance in the context of crisis, focusing on asset allocation, risk management, and commitment.

Goldman Sachs achieved positive results in the context of the global financial crisis, taking into account the third-party partners involved in corporate governance, which effectively utilized their financial resources on close and economical basis with the "third partners".

Until recently, state-owned enterprises in Uzbekistan have absolute majority, and today their numbers have dropped significantly. Many enterprises were transformed into joint-stock companies. However, in most of the joint-stock companies, a significant part of the stock controlling block is owned by the state. While the share of state-owned enterprises in the Continental Europe is still small, it still exists. In Uzbekistan, state-owned enterprises can be employed in areas such as transport, communication, informatics, fuel and energy, which serve the whole population of the population (such as defense enterprises) or in areas that are only publicly funded (mining and oil refining, and industry).

Introduction of the international experience of corporate governance in the National Bank system and its prospects

It is well-known that one of the most important issues of commercial banks is the involvement of free funds in the economy and the effective allocation of these funds. Because of the intensification of market relations and further liberalization of the economy, the demand for financial resources is growing in commercial banks, and the need for long and short-term loans from banks is growing. Formation of these funds and their effective management remain one of the important issues. There is a positive impact on the "free distribution" between banks and the growth of free competition in attracting additional resources from the financial market.

It is known from the experience of the international banking practice and the short-lived market economy that the main resource base of commercial banks is their depository resources. Demand deposits in the structure of deposits are low-cost, but in terms of uncertainty. Term and savings deposits of banks are stable in terms of their duration, but are the source of expensive loans.

The following figure analyzes the structure and dynamics of deposit resources of commercial banks of the Republic of Uzbekistan.

According to the image data, the share of fixed-term deposits in the structure of deposits of commercial banks is the most important. This figure declined between 2008 and 2009 when the total amount of deposits was 79.5% as of 1 January 2008. However, this source of deposits in commercial banks had a tendency to rise again on January 1, 2010.

The share of demand deposits (fixed-term deposits) in the structure of deposit funds of commercial banks testifies to the existence of contradictory situations in which they are vulnerable to deposit base and effective resource management. Specifically, there are problems with the lack of funds in the balance sheet, the lack of customer satisfaction, and the need to provide the requisite resources for the financing of projects.

The findings and findings of the study indicate that most commercial banks do not have a short-term and long-term strategic development policy in attracting resources. This is a reason for their strict implementation of the deposit policy in the country's financial market. As a result, some commercial banks are formed from relatively stable resources and their share remains high.

The problem of introduction of corporate governance in the formation of the commercial banks' resources is explained by the following:

• First of all, the practice of forming resources at the expense of time deposit funds of commercial banks is very weak.

Commercial banks have a strong need for sustainable resources as a short-term credit institution. The main part of this demand will be the liquidity of the banks, which will be financed through their deposits.

As we have already mentioned, the funds on demand deposits of banks are relatively unstable.

Banks can use these funds as credit resources in active operations. However, the use of these funds as a loan source has a significant adverse effect on their liquidity. Because the deposited deposit can be partially or entirely unexpectedly anticipated by the customer at the time of the request. Or, due to the financial disadvantage of the borrower, the loan can not be returned to the bank. In this case, the bank will suffer double economic damage. First of all, it can not satisfy the customer as a result of the inability to provide liquidity. Secondly, the loan will be deprived of the credit and credit interest expected from it. Hence, the deposition of long-term savings deposits into long-term asset operations is an unstable financial source, which may have a detrimental effect on banks' stability and their stability.

• Secondly, financial resources of commercial banks are formed from relative sources of funding or their capacity for active operations is limited.

The picture below shows the dynamics and dynamics of demand deposits in total deposits of commercial banks of the Republic of Uzbekistan. As you can see from Figure 2.2, the share of fixed-term deposits in total deposits of commercial banks has remained almost unchanged during 2008-2012 and still remains high. This reduces the liquidity level of banks. This was a problem of effective management of financial resources of commercial banks.

Thirdly, legal entities and individuals are not interested in the transfer of funds to banks' term and savings deposits.

Legal entities and individuals tend to invest money on long-term and savings deposits only if they are convinced that the Bank has been able to maintain, recover and replenish the funds deposited.

The level of inflation also plays an important role in depositing funds into fixed-term funds. If the level of inflation is considerably high, the economic interest of the depositors will be reduced. As a result, the tendency of bank transfer to the bank is reduced. Because the amount of income from these deposits will lose their value due to inflation.

Commercial banks do not have the resources they are exposed to at the expense of deposit funds in terms of their active operations. Because the total amount of deposit resources in the commercial banks is very low.

Thus, the practice of attracting credit resources from commercial banks' deposit operations is very weak, which is one of the major problems in managing bank resources.

When analyzing the structure of deposit funds of commercial banks, the share of fixed-term and savings deposits was insignificant. In our view, one of the main reasons for the decline in the share of time and savings deposits in commercial banks is the vulnerability of the population to the banking system. Poor vulnerability of the population to the banking system has a significant impact on the banks' attraction of deposits and creates the basis for the cash flows out of the bank.

It is noteworthy that in most (even in the developed) countries, a certain amount of money transactions between economic entities is carried out outside of the banking system. This is due to the existence of the economy.

In general, the share of the economy in the developed countries is 5-10% of GDP, while in the developing and the Commonwealth of Independent States - 25 to 60%. It should be noted that when the share of the economy in the country is about 40-50 percent of GDP, its effect is growing so that its effect is observed in practically all sectors of the society. Hence, the presence of these circumstances in the society has a negative impact on the strengthening of the population's confidence in the banking system, but also creates direct conditions for the outflow of funds.

In our opinion, it is necessary to take into account the following key factors in increasing the involvement of time deposits in deposit accounts of commercial banks and strengthening their confidence in the banking system.

Article 38 of the Law of the Republic of Uzbekistan "On Banks and Banking Activity" states that "Banks guarantee the confidentiality of operations, accounts and savings of their clients and representatives".

Failure to provide customers with full or partial cash flows will have a negative impact on the volume of cash payments to their banking system. By February 2003, due to the fact that the cashier's scheme was in effect in the banking system, it required the banks to stop cash in the third decade of each month. Despite the cancellation of the cashier's plan since February 2003, satisfaction of customers' cash needs in the banking practice has not yielded any positive effect.

It should be noted that the National Bank of the Republic of Uzbekistan (TIF) accounts for 30.5% of the total deposits of commercial banks formed as of January 1, 2007. Hence, the National Bank of TIF is the only major bank in Uzbekistan to attract deposits among commercial banks.

Despite the fact that the deposit base of the National Bank of TIF is the only leader in total deposits of commercial banks of the republic, it is clear that the share of long-term savings deposits is relatively stable. The same can be said about Asakabank.

It is worth noting that almost all of the analyzed commercial banks remain in the form of a resource formation through the circulation of savings deposits, while the source of the commercial banks' resources is recognized as a sustainable financial resource.

One of the main benchmarks for managing commercial banks' resources in international

banking practice is their share in the total social output of the country.

If we compare commercial banks with the coefficient of total investment to GDP, we will see that this level is much lower.

However, it is possible to raise this coefficient by reducing the volume of off-bank turnover, but the lack of confidence in the banking system does not give an opportunity to increase the effectiveness of the work done.

At the same time, it should be noted that the deposit market concentration in large banks of the country remains high. As a result, the banks' monopoly level affects the financial stability of medium and small banks.

Ways to Use Positive Aspects of International Corporate Governance Experience

Based on the research and researches in the study, we have witnessed the international experience of coordinating management in commercial banks. One of the key players in this regard is the effective system of corporate governance in a modern competitive bank, in accordance with the Basel Committee's documents, which will be reflected in the following main principles:

- The existence of a system of corporate culture, which has been strengthened in compliance with the code of conduct and other ethical standards, as well as a system that promotes these principles in practice;

- The existence of a clearly defined development strategy, the results of the work of all banks and individuals are assessed accordingly;

- Rights (including the hierarchy of certain rights in the decision-making sphere) and the precise distribution of responsibilities;

- The existence of a mechanism of effective cooperation between the Board of Directors, top managers and auditors;

- availability of a reliable internal control system (including effectiveness of this system by internal audit and external auditor) and risk management services (regardless of business lines and business units), as well as other elements of "restraint and balance" system;

- Continuous risk monitoring in certain sectors of the banking business, where potential conflicts of interest are likely to occur (first of all, those areas are interconnected with borrowers - affiliated and dependent individuals, major shareholders and senior managers, and secondly, leading traders in the stock market);

- availability of incentives for managers and other employees to increase their financial and service stuctures;

- availability of the required transparency of the information flow systems that provide internal needs of the organization and the external counterparts.

It is crucial for the banking business to operate on the principle of "restraint and balance" of corporate governance structures. The system of mutual restrictions includes four levels of control: a) Board of Directors; b) specially authorized persons not involved in day-to-day operations management; c) subdivisions of the bank which are directly responsible for various activities; g) risk management and internal audit services, independent from the business units and business units of the bank.

Under the Basel Committee on Banking Supervision, there are at least four members of the Board of Directors: audit, reward, assignment and risk management committees. Let's see how this procedure is being implemented in ten leading banks in the United States and the EU.

Conclusion and recommendations

Given the importance of a comprehensive approach to the competence and integrity of shareholders in banks, I have developed a number of specific proposals aimed at improving the efficiency of corporate governance at enterprises in Uzbekistan:

1. It is recommended to introduce the multi-disciplinary and multi-disciplinary system based on the latest educational technologies in the field of personnel recruiting, retraining and advanced training as an effective tool for improving the professionalism of the staff of joint-stock banks.

2. Intensive training of stockholders must include: computer technology for managerial analysis and decision making; independent work with scientific literature and execution of personal plan tasks;

use of distribution media; Testing the knowledge assessment module; studying new experiences in places; independent essays and research; educational system used in video equipment; computers and other modern teaching aids.

3. In the process of professional development of the staff of joint-stock banks it is necessary to achieve a new scientific methodological level,

so that they have the opportunity to acquire the latest knowledge in the field of market economy and to build up modern financial management skills.

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

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FEATURES OF THE FORMATION OF FINANCIAL-INDUSTRIAL GROUPS IN THE DEVELOPMENT OF THE KOREAN ECONOMY

Abstract: *The article discusses the role and place of financial-industrial groups in the economy of the Republic of Korea and analyzes the features of their development. In particular, financial and industrial groups in the world have been studied, and a comparative analysis of the characteristics of financial groups of developed countries has been done. At the end of the article, the author summarizes the results of theoretical analyzes of financial and industrial groups in the economy of the Republic of Korea.*

Key words: *financial-industrial groups, chaebol, integration, technology, conglomerate, innovation, exports, imports, nanotechnology, holding company.*

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Introduction

It is important to develop and develop financial and industrial groups to enhance its competitiveness in the process of integrating the economy of the country into the global economy. Consequently, international economic relations require high competitiveness of the participants. From this point of view, one of the most urgent issues is the modernization of leading industries in ensuring the country's economic stability, diversification of export-oriented products, development of the banking and financial system and industry sectors.
In particular, it is important to create favorable conditions for the formation of high-intensity production complexes of financial-industrial groups, transnational corporations in economic development of countries. From this point of view, it is important to introduce the advanced aspects of the experience of the developed countries in the socio-economic development of the country to the national economy.

Literature review

In general, scientific literature describes financial-industrial groups as follows: Financial and Industrial Groups (MSG) have the centralized management system to incorporate their own resources (production, finance, labor, non-fiscal, etc.) in order to ensure the efficiency of production, economic, financial and other types of activities, and the form of integration of independent legal entities with financial and credit institutions [2]. The experience accumulated by financial-industrial groups, especially in the Korean economy, is of particular importance. Therefore, it is important to overcome economic difficulties and achieve high rates of economic growth by forming MSGs on the basis of state programs of the Republic of Korea.

Financial and industrial groups in the modern world

In most market economies that successfully modernized the economy after the Second World War, powerful financial-industrial groups, a kind of "metastructure", have played and continue to play an important role in the development of industrial production. Modern financial-industrial groups are universal in nature and transnational in their scale, which include, based on joint-stock, financial, and

business forms of relations, industrial firms, banks and other financial institutions, trading and construction companies, as well as companies related to other sectors of the economy. Therefore, among the huge variety of forms of interaction of interrelated partners there are traditional concerns led by a large industrial corporation (General Motors, El du Pont de Nemours, General Elektric, Ford Motors, AT & T, IG Farben Industry , "Flik", "Thyssen-Openheimer", "Fiat", etc.), groups formed around financial institutions ("Chase", "Morgan", "Mellon", "Limen-Goldmen, Sacks" in the USA or Deutsche Bank AG, Dresdner Bank AG in Germany, etc.) and include in their composition controlled production enterprises, family holding companies (for example, South Korean chaebols - "Daewoo", "Samsung", "LG International", "Hynd ai "and others.). In addition, there are also universal diversified associations - business groups that are most prevalent in Japan (Südany - Mitsubishi, Mitsui, Sumitomo, Dai-Ichi Kangyo, Fuje, Sanva). For today's highly integrated corporate associations - financial-industrial groups that concentrate a significant part of GNP in their hands, economic control became characteristic not of individual economic sectors and business sectors, but over the entire national economy, which gives them the status of centers of economic power. Here are just some examples.[1]

• In the mid-1980s, about 2/5 of the GNPs of both countries accounted for 30 UK companies and 180 US companies.

• According to official data, the cumulative annual sales of six groups of giants make up about 14-15% of the gross national product of the country, taking into account subsidiaries - about 25%. They control (taking into account their member companies) about 50%, and according to some estimates, up to 75% of the total industrial assets of the country.

• In the sales volume of the top 10 South Korean industrial holdings, about half of the Republic of Korea’s GNP was reached. And the scale of activity of the largest of them, the Samsung group, today is such that they are best compared with the national economic indicators of Korea. The volume of sales of the corporation is more than 10% of GDP, exports - more than 12%.

Thus, the problems of the world economy associated with development trends along the path of creating large financial and industrial associations, naturally, cannot but interest Russia. But it’s just as clear and another, even more important for us is the question of the extent to which the practice of such development is acceptable to today's Russia, with great difficulty looking for a way out of the socio-economic crisis, to normalize its national economy. Which in turn determines the study of the main trends of global transformations of the organization of production activities in the world economy.

The existing financial and industrial associations in the United States can be divided into two groups: the first includes structures dominated by banks, while the control over enterprises is exercised by the banks. Among the most well-known banking associations with a set of controlled enterprises, we single out the Chase, Morgan, Mellon, Limen-Goldman, Sachs groups.

The organizational structure of banking financial and industrial groups is a horizontal association of large oligopolistic firms, in the center of which is a leading commercial bank.

In most cases, these groups have a similar history of creation and development, have the same structure. For example, the financial component of the Chase group includes the commercial bank Chase Manhattan Corp. (Chase Manhattan Corp.), created on April 1, 1996 as a result of the merger of Chase Manhattan Bank with Chemical Bank, and two life insurance companies (Metropolitan Life Insurance K. and Equiteble Life). The industrial component of the group is 21 non-financial corporations, each of which is among the top 100 largest US companies, including five transportation companies, including three airlines and two railways; two aircraft manufacturing companies, two chemical companies; two retail companies. All of these companies are controlled by Chase Manhattan Corp.

The second group is dominated by industrial enterprises ("General Motors", "El du Pont de Nemours", "General Electric", "Ford Motors", "AT & T" [5]), but the financial structures in them are also very strong ("General Motors Acceptance Corp., "General Electric Capital Services", "Ford Motor Credit Corp.", "IBM Credit Corp.", etc.)

Characteristic black.

• A characteristic feature of the American model of corporate business is the principle of strict separation of the financial and industrial sectors of the economy, which has recently become more and more criticized, as contrary to the fact that the countries with banking-oriented financial systems have been very successful. In this regard, the inevitable nature of integration processes in the American economy is increasingly accompanied by raising the question of the need to remove barriers to closer contact between the industrial and financial sectors, to the increasing role of large financial institutions in corporate governance and the subsequent formation of conglomerates from banks and industrial companies.

• The economic policy of the American state, contrary to the “antitrust laws”, not only did not prevent the spread of control by the banking structures over industrial structures, but even facilitates this process. At present, the stakes of

industrial enterprises at the disposal of banking monopolies are quite significant (analysis of the distribution of the decisive votes in 122 large corporations showed that 25.2% of the votes were banks, and 4.3% were insurance companies). This gives banks the opportunity to directly influence corporate policy, not limited to only conducting advisory activities related to tax maneuvering.

• Features of the structure and development of financial-industrial associations in countries with a banking-oriented financial system.

In countries with a banking-oriented financial system, the industry, in the initial stages of its development, was in dire need of additional financial resources, but was unable to create them independently without a financial and credit system. On the one hand, this was due to the fact that the level of profitability in industrial production was insufficient to develop independently, only by reinvesting its own profits. On the other hand, these countries have historically been characterized by a relatively low level of development of financial markets. Therefore, industrial corporations could not accumulate additional capital by placing the next issue of shares among the population.

At the same time, the low level of development of the stock market significantly limited the possibilities for diversifying investments. Savings were transformed mainly in the form of short-term and long-term loans through a network of commercial banks and other savings institutions. Therefore, a significant proportion of all financial contracts was concentrated in the hands of the banks themselves, and their lending policies are directly aimed at financing industrial corporations.

All this led to the fact that banks were forced to combine both the functions of long-term lending to industrial enterprises and the functions of control over the activities of industrial enterprises, since only in this case can we count on the effectiveness of using the credit investments themselves.

In addition, unlike countries with a market-oriented financial system, countries with a banking-oriented financial system are characterized by a more liberal attitude towards grouping enterprises, integrating financial and industrial capital. Not only industrial enterprises, but also commercial banks, as a rule, did not have (with rare exceptions) and did not have strict restrictions on the choice of investments and control over the activities of other corporations. This explains the characteristic feature of the close relationship between banks and industry, as well as a high degree of concentration of share capital.

For example, German antimonopoly legislation allows, in addition to cartel agreements in the field of standardization, in the field that does not reach the dominance of specialization, agreements of small and medium enterprises also create cartels of rationalization and structural crisis, if participating companies can prove that the agreement provides for rationalization of production or to export growth.

Under certain conditions, intercompany cartel-type agreements are also permitted in Japan. Under certain conditions, the cartelization of the economy is not an obstacle to the development of the country's industry. According to Japanese economist Kozi Yamomura, "the anti-competitive effects of restricting imports, oligopolization and cartelization of key industries in Japan were largely negated by the power of the" investment race "and strong competition in world markets."

In addition, according to Japanese law, companies are allowed to enter into a temporary cartel agreement, recognizing the industry as "structurally unfavorable", provided that no less than 2/3 of the industry’s companies insist on this. In this case, production quotas are determined for the parties to the agreement (the fixing of prices for the products produced by the cartel members, however, is not allowed). At the same time, with the help of the government, the companies belonging to such a cartel are developing a program to rehabilitate the industry, including the elimination of excess production capacity.

In France, the most widespread financial and industrial associations created around the largest industrial complexes. The most famous of them are the groups: "Elf-Akiten" (ELF Aquitane), "Company franças de petrol" (petrochemical industry); "Company Generale Electrosite" (electronics and electrical engineering); Ron-Poulenc (chemistry); Aerospatial (aerospace industry), etc.

The industrial component of these associations are, as a rule, a single entity in terms of production - formed on the basis of technologically interconnected enterprises. Groups may include from several tens to several hundred legally independent firms. Banking institutions that are part of groups are often controlled by the main industrial enterprises of the group.

Along with the industrial groups in France, the distribution and trade. Large trading companies (Cora, Intermarsh, Oshan) stood at the origins, and subsequently controlled a number of banks (Bank Accord, Bank Sabrière), spreading their influence over some sectors of the French economy.

A characteristic feature of financial and industrial groups in Sweden is the predominance of industrial associations associated with the families of large Swedish businessmen and financiers. In general, the data of FIGs demonstrate characteristics close to the German financial and industrial associations. As in the German groups, cross-ownership of shares, reaching up to 25%, is widespread in them.

In the Italian economy, banking financial and industrial groups dominate. Among the largest Italian banks that have played a decisive role in the process of the formation of financial-industrial groups in Italy, can be called the "Italian loan", "Rome Bank", "Commercial Bank". First of all, this is due to the fact that raising capital through the issuance of additional share issues by industrial enterprises did not lead to the expected results. Therefore, the Italian concerns, in order to increase investment, were forced to resort to using a bank loan, in turn, more and more dependent on the banks lending them.

Considerable amounts of loans provided, taking into account high interest rates and the fact that the overwhelming majority of shares issued by industrial companies were also acquired by creditor banks, played a decisive role in the predominance of banking capital over industry.

Financial and industrial groups in the development of the Korean economy

For a relatively short period of time, the Republic of Korea has ranked first in Asia in the development of the education system, one of the HDI indicators, and ranked seventh in the world [3]. Innovative development has a special place in the activities of the financial and industrial groups of the Republic of Korea. As a result, the Republic of Korea has achieved a high rate of economic growth in 2000-2010 compared to other developed countries. Innovative approach to MSGs is reflected in the focus of large financial resources on industrialization, consistent introduction of complex technologies, and rapid use of scientific solutions in practice.

The fact that the Korean financial and industrial groups are similar to the Japanese "dzaybatsu" holding companies can be explained by the fact that the formation of the first Chels in the Republic of Korea was due to the colonial era of Japan. But the independence of the Republic of Korea and the sharp development of the country's economy have increased the importance of developing financial and industrial groups. The organizational development of MSGs dates back to the 1960s.

In our view, financial assistance from the United States to South Korea has led to the occurrence of the above.

It should be noted that initially the vertical integrated group-holding corporations were established as the basic organizational-economic model for the Republic of Korea, based on the family control of foreign capital.

In particular, the centralization of capital in the Republic of Korea has led to the creation of large financial and industrial groups. This, in turn, has played an important role in the integration of financial and industrial groups (chelals) along with the industrialization of the Korean national economy and its integration into the global economy. An example is the emergence and development trends of Samsung, Hyundai, and LG.

The main features of the proposed MSGs are: [4].

- The principal amount of Samsung shares belongs to the Li family;
- The Hyundai Motors group belongs to the Chon family;
- The control of the group is passed from generation to generation, and family members accept the basic decision on each issue, ie the system of ownership, centralized management.

The processes of active organization of financial-industrial groups were in the 80s of the XX century. For example, in 1953 there were only 5 Chebels in South Korea, 10 in 1965, 20 in 1975, and in 1985, their number reached 70. By the end of the 1990s the number of financial-industrial groups exceeded 100.

It should be noted that between 1965 and 1985, the formation and development of financial-industrial groups played an important role in stabilizing the national economy of the Republic of Korea, in particular, by 20 per cent of GDP growth [5]. As a result of the reforms undertaken in the 60-70th years of the twentieth century, a favorable period for the development of Chebols has emerged as a result of the government's policy aimed at this goal. In the 70s of the 20th century, annual growth rate of assets of 46 large-scale assets exceeded 23%. Meanwhile, GDP growth in this period was 9.9 percent, which means higher growth rates than the global average. As a result, their share in the production of GDP in 1973-1978 increased from 9.8 pp to 17.1 pp (Table 1).

Table 1. Average annual GDP growth rate in the Republic of Korea.

	1965-1980		1990-2001		2012*
	Worldwide	Republic of Korea	Worldwide	Republic of Korea	Republic of Korea
GDP	4.1	9.9	3.3	8.7	2.7

Source: *Changes in GDP of South Korea www.ereport.ru*

It should be noted that the expansion of foreign economic activity of the local population is actively supported by the state. In this process, the government measures of 1975, which give the big conglomerates the status of "large trading companies", are of particular importance. These reforms have made it possible for the Chels to use additional tax and financial benefits.

There are 11 financial and industrial groups in the Republic of Korea, one of the 500 largest in the world, 4 of them are in the top ten. [10]

Normative-legal foundations and financial support have been provided by the government to form large financial and industrial groups in the Republic of Korea. These activities were regulated by the following principles:

- Implementation of norms on imported goods for the development of export potential of Chebols;
- cancellation of export customs duties;
- Creation of direct tax incentives for large exporters;
- Creation of conditions for insurance of export goods and services, issuing instructions on prevention of risks;
- Creation of free trade zones, improvement of infrastructure for export development;
- Increasing the role of Korean Trade Association and trade development agencies in support of exporting enterprises;
- Establishing new industries and providing opportunities for companies;
- Implementation of export software development for companies.

In our view, exports to major exporters of industrial products have a positive impact on the economic growth of the Republic of Korea. The increase in the competitiveness of the financial and industrial groups of the Republic of Korea in the world market is linked to a number of factors. Specifically:

- the great potential of the national currency's appreciation;
- introduction of new technical technologies;
- creation of new industries;
- a low level of taxation on export earnings.

At present, the share of exports in the economic development of the Republic of Korea is 40% of GDP, or an average of 552.6 bn. US dollars. [9]

The Republic of Korea has five integrated components of MSGs, which include:

1. shipbuilding;
2. Automotive industry;
3. Chemical industry;
4. Light industry.

Also during the last decades the process of developing ICT equipments and technologies has been intense. In 1988, the share of industry in the country's exports was 12.25%, while in 2000 this figure was 32%. Particularly, in 2012 the volume of ICT industry made up 140 billion soums. US dollars were exported [6].

In particular, the Republic of Korea is one of the leading producers of liquid crystal and plasma monitors in the world. Samsung Electronics Co. and LG Electronics have 38 per cent of the global market, with their financial assets reaching $ 35.5 billion [7].

Conclusion

Investments in new industries, nanotechnology-based industry-driven industries will be 130 billion by 2017. USD can be made. The goal of these measures is to increase the country's share in the world market to 45%. In this regard, the integration of production and science plays an important role. Part of the means to be allocated is the budget of the state budget. The bulk of these funds are allocated for the creation and operation of solar-powered technologies. This is rapidly developing the domestic market infrastructure in order to maintain the industry's position in the foreign market. It should be noted that the experience of the Korean financial and industrial groups during the economic crisis of 1997 became unique in this respect. Mainly for export-oriented policies, the production of new products has led to increased financial outcomes through innovation using new technologies [8].

This success has been achieved through the following factors:

- Consideration of major domestic private enterprise in the Republic of Korea with the creation of stable economic and political conditions;
- wide diversification of commercial activities, numerous economic benefits, targeted government support for foreign economic expansion;
- Most of the State budget allocations from the Republic of Korea are dedicated to the creation and operation of technology.

In summary, it should be noted that the formation of the financial and industrial groups in the Republic of Korea, along with the growth of the national industry, was the guarantee of significant growth of the state financial and industrial groups, thus creating a strong place in the world market. In our opinion, the fact that the practice of establishing MSG in the Republic of Korea is exactly the same in the industry of information and communication technologies.

In particular, it is important to apply the following recommendations in practice: Establishing MSG for suppliers of export-oriented products:

- tax exemptions;
- Guarantee fees for insurance against risks;
- Providing tax breaks to their business when importing advanced technology.

The financial and industrial groups are involved not only for stable industrial enterprises but also for

the development of economically insolvent enterprises.

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

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FOREIGN EXPERIENCE IN LABOR PRODUCTIVITY MANAGEMENT

Abstract: *The article discusses the international experience of labor productivity management: the United States and Japan. The management models are described in detail as mechanical, system and models oriented to human resources. Examined in the world of methods and approaches to improving labor productivity in industrial enterprises.*

Key words: *labor productivity, management methods, management, personnel, motivation, control.*

Language: *English*

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Introduction

In modern conditions of development of a market economy, one of the main problems of the practice of managing enterprises is the process of managing labor productivity. At enterprises, very little attention is paid to the indicator of labor productivity. As a rule, no one is engaged in its analysis, control, planning, forecasting. This is explained either by an elementary misunderstanding of the importance, the priority of the problem, or by the unwillingness to understand this importance, or by the unwillingness to waste time and money on solving it. However, the experience of the industrially developed countries of the world, the leading corporations in them suggests that they do not spare either time or money for finding and implementing reserves of productivity growth, and later it turns into a decrease in production and non-production costs, growth in profits, and success in competition. on the world market. Back in the last century, labor productivity attracted much attention of foreign academic economists and organizers, such as G. Emerson, for example. He first raised the issue of production efficiency on a large scale. In his book "The Twelve Principles of Productivity," he formulated the principles of proper organization of both the labor of an individual contractor and the production process of an enterprise (tab. 1). The main idea of Emerson is as follows: true labor productivity always gives maximum results with minimum effort. G. Emerson believes that production should not be adjusted to the management, but management should serve the production [4].

Literature review

The degree of elaboration of the problem. Foreign economics classics made a significant contribution to the development of the theory of labor: William Petty, A. Smith, D. Ricardo, G.Ch. Carey, J.S. Mill, F. Taylor, G. Emerson.

The importance of labor productivity to ensure the sustainability of the development of the national economy was considered in the works of researchers E.G. Antosenkova, R.V. Baburova, I.S. Vinnikova, A.K. Gasteva, B.M. Genkina, Su. Gorbarets, Yu.P. Kokina, V.V. Kulikova, V.I. Lenin, N.A. Morozova, A.A. Nikiforov, PF Petrochenko, M.Yu. Pitkevich, E.A. Polov-kina, OG Semenyuta, D.P. Smolkova, S.G. Strumilina, A.I. Scherbakova, R.A. Yakovlev. At the same time, most of the listed authors took for an axiom the statement that the growth of wages should not exceed the growth of labor productivity.

Analysis and results

Studies show that labor productivity is a dynamic indicator, its increase is the most important condition for the growth of material production and income.

Labor productivity of an individual worker depends on his abilities, skills and knowledge, age, health status and other reasons.

From the position of effective work for the employer, it is important to find an employee whose working capacity and productivity is potentially above average.

A special role is played by factors affecting the relationship in the team and labor discipline, the value system of employees, the principles of interaction affecting the target attitudes of staff and the behavior of employees, their interaction both in groups and in the team as a whole. Not unimportant role have organizational factors, covering a whole range of actions for the organization of labor and personnel management, including the choice of size, specialization and combination, as a form of organization of production at the enterprise, style of enterprise management, definition of the tasks of its division. [5]

The foreign experience of the effectiveness of the incentive effect of wages on workers entirely depends on the reasonableness of the proportions in wages.

The peculiarity of labor stimulation is the intrafirm differentiation of wages, which has two sections. One of them reflects the indirect differences between simple and complex labor. This is a vertical differentiation of wages, the subsequent goal of which is to link tariff rates or salaries with the amount of labor. What ensures the interest of workers in improving the level of professional knowledge and the accumulation of practical experience.

Foreign experience suggests that the industrialized countries of the world are constantly discovering reserves of growth of labor productivity, which in the future will reduce production costs, increase the competitiveness of enterprises in the world market, increase profits [1].

In classical theory, the emergence of enterprises of various types was accompanied by well-known theories in management. Enterprise models of the 20th century The mechanical model was formed at the end of the 19th century and became widespread in the first half of the 20th century (see Fig. 1 below). From the standpoint of this model, an enterprise is considered as a mechanism, which is a combination of many factors: the means of production, labor, raw materials and materials.

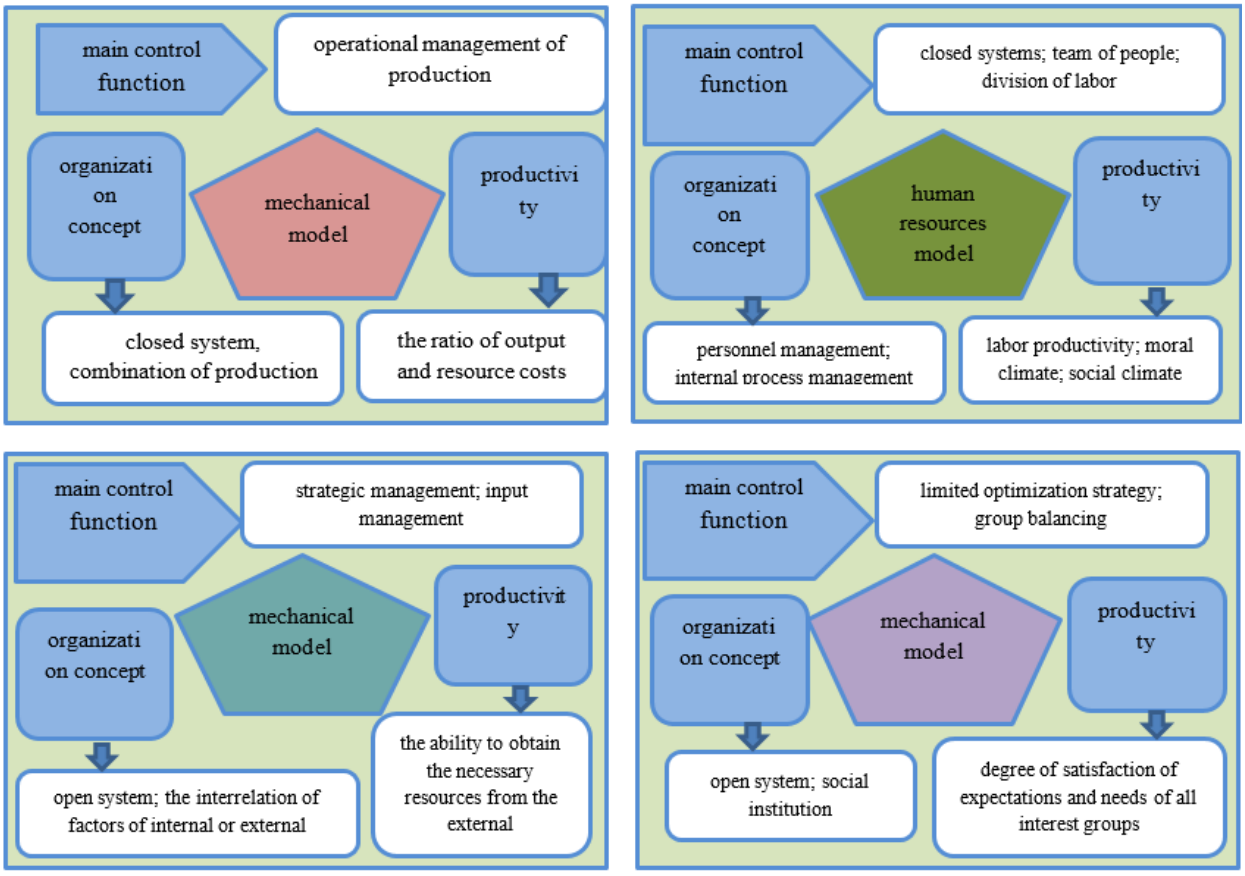

Fig.1. Models of labour effectiveness and management.

Therefore, in the analysis process, great importance is attached to the technical and economic analysis and the influence of various factors on productivity. The main trend of increasing productivity is cost reduction. We note that the mechanical model of an enterprise is critically evaluated by modern science and practice because of its desire to preserve stability (conservatism), universal control over the quality and implementation of planned tasks, ideas about top managers who are “wiser than market". The model focused on human resources is a group of people using the principles of division and cooperation of labor. The systems of scientific management of labor collectives working in socialist enterprises belonged to this type. Special attention was paid to the management style, its influence on the increase in labor productivity and employee satisfaction with their work, their involvement in the process of developing management decisions (see Fig. 2 above). The system model is presented in the form of a complex hierarchical system that is in close contact with the external environment (see Fig. 3 above). The main idea is to recognize all elements of the system and the system as a whole with the external environment. It should be noted that the effectiveness of this model is doubtful, due to the fact that it was formed under the supervision of the state and the effectiveness was determined mainly by the internal environment of the organization. The model of an organization as a public education is presented in the form of an integrated system, in accordance with which organizations should take into account the interests of consumers, suppliers, competitors, and society as a whole (see Fig. 4 above). The result of such a system is the complete satisfaction of the expectations and needs of all interest groups. In modern realities, organizations do not use only one management model, but move from one to another or have elements of all four basic concepts depending on the combination of external and internal factors. [10]

Note that the increase in labor productivity has occurred, mainly due to the capacity utilization and an increase in the number of the working population. However, a further increase in the productivity indicator due to the same factors is impossible, and an integrated approach to solving problems is necessary. The models of labor productivity management in the USA and Japan are radically different (Table 1).

Table-1. Methods and approaches to increasing productivity in industrial enterprises

	1960–1970 yy	**1980–1990 yy**	**2000–2010 yy**
USA	– Production Management Orientation - Cost Minimization - Mechanization of Production Processes - Increased Labor and Capital	- Reducing the complexity of technological equipment in the manufacture of high-tech and complex products - A new leap in increasing productivity - The creation of a humane society - Investment in innovation	– Reducing hierarchical levels of management - Improving quality while minimizing production costs - Using the latest technologies in innovation - Human resource management
Japan	– Cost reduction - Productivity Improvement Program - Internship in the USA, study of management methods - Participation in the development of measures to increase the productivity of administration and labor collective - Use of electronics and computer technology	- High-quality products at minimum cost - Preserving the principles of productivity growth, as the basis for economic growth - Developing your own model of "human potential" - Humane relations between the administration and the employee - Growth of funding in innovation	- Reducing the complexity of technological equipment in the manufacture of high-tech and complex products - A new leap in increasing productivity - The system of decision-making "Ringisei" - The creation of a humane society - Investment in innovation

Source: collected by the author.

The peculiarity of the Japanese model of management is its focus on human resources. It is the Japanese model of management that ensures the harmonic relationship between production, sales and the flow of finance. The Japanese management model boils down to optimizing work methods: identifying and analyzing problems, creating new work methods (instructions), adapting working

conditions and standards, depending on the work of the staff. The system of labor incentives in the Japanese model is developed at a high level: public recognition of merit, social programs, etc. We also note that thrift and economy are characteristic of Japanese culture, which is inextricably linked with the creation of high-quality products. This is reflected in technologies such as Lean-approach, Kaizen system (continuous improvement), Kanban (continuous replenishment of stocks), Pok-yoke (error protection) and many others. [6].

Conclusion

Marked a vivid example of the superiority of the Japanese model of control over the American. The Japanese company Matsushita, which bought the TV manufacturing company of the American firm Motorola TV, was able to reduce the warranty repair fund from $ 22 million to $ 3.5 million, also reduce the number of manufacturing defects by 100 receivers from 140 to 6, reduce complaints in the first 90 days after the sale from 70 to 7% and reduce staff turnover from 30 to 1% per year [7]. One of the main reasons for the difficulty of implementing lean transformations lies in the specific management culture of the Japanese. Respectful attitude to the regulations there and the highest performing discipline are combined in Japanese companies with the tradition of consensus - joint discussion of decisions. The coherence of actions, teamwork are of great importance for the Japanese worker. Labor Productivity Management in the USA Let us examine the experience of labor productivity management in the USA. In contrast to the Japanese approach associated with continuous and integrated optimization of working methods, the American tradition is characterized by an inverse sequence: first, the maximum attainable goal or result is defined in terms of productivity and quality, and then measures are taken to achieve this result. It is based on a measurement and benchmarking system. One of the most common measurement indicators is OEE (overall equipment effectiveness), which is how efficient the main production assets are used. This indicator consists of three components: availability, productivity and quality. [8]

After setting goals, identify the causes of problems and plan changes. The reasons may be: improper placement of equipment, excessive or, on the contrary, insufficient capacity at one of the stages of production, incorrect sequence of operations, sub-optimal number or distribution of duties, etc. Not every manager has enough knowledge and experience, and sometimes even time to take all the necessary measurements. [9] It is in the American tradition that there are often dedicated quality services or divisions of labor rationing, while in many Japanese enterprises these functions are performed by employees of the main production units. Thus, the idea of the Japanese approach: creating a culture of continuous improvement, supplying workers with the necessary methods, counting on a responsible, team approach to change and submission to the rules adopted in the team. While the American approach is designed for a different, managerial culture: much more personal, depending on the decisions of specific people [6].

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

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THE INFLUENCE OF MATERIAL PROPERTIES ON DESIGN SOLUTIONS AND TECHNOLOGICAL PROCESSES IN THE MANUFACTURE OF CORSELETS

Abstract: *The article is devoted to the analysis of the properties of different materials used in the production of corsets of underwear products and their impact on the design and technological solutions of these products. Practical recommendations on the selection of materials in packages in the manufacture of corsets and underwear products and the choice of design solutions of the connecting and edge seams are given.*

Key words: *material, package of materials, stitching, seam, fabric, knitted fabric, corset and linen product, allowance.*

Language: *Russian*

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ВЛИЯНИЕ СВОЙСТВ МАТЕРИАЛОВ НА КОНСТРУКТИВНЫЕ РЕШЕНИЯ И ТЕХНОЛОГИЧЕСКИЕ ПРОЦЕССЫ ИЗГОТОВЛЕНИЯ КОРСЕТНО-БЕЛЬЕВЫХ ИЗДЕЛИЙ

Аннотация: *Статья посвящена анализу свойств различных материалов, используемых при производстве корсетно-бельевых изделий и их влиянию на конструктивные и технологические решения данных изделий. Даны практические рекомендации по подбору материалов в пакеты при изготовлении корсетно-бельевых изделий и выбору конструктивных решений соединительных и краевых швов.*

Ключевые слова: *материал, пакет материалов, строчка, шов, ткань, трикотажное полотно, корсетно-бельевое изделие, припуск.*

Введение.

В процессе производства [1] и при эксплуатации [2] корсетно-бельевых изделий проявляются такие свойства материалов, которые обязательно необходимо учитывать при производстве одежды. Эти свойства существенно влияют как на конструктивные особенности, так и на организацию технологических процессов раскроя, пошива и окончательной отделки швейных изделий [3, 4]. Они диктуют способы ухода за изделиями. К таким свойствам относятся: толщина и поверхностная плотность материала, его растяжимость, жесткость, тангенциальное сопротивление, раздвижка нитей в швах, осыпаемость, прорубаемость, термостойкость, формовочная способность и формоустойчивость, усадка [5, 6].

Объекты и методы исследования.

Толщина материала и прямо связанная с ней поверхностная плотность влияют на: конструкцию изделия, величину припусков, ширину и конструкцию швов, обусловливают выбор прокладочных материалов. Чем толще материал, тем большую величину припусков необходимо предусматривать при разработке конструкции изделия. Если материалы толстые, необходимо увеличивать ширину швов, используя при этом швы, конструкция которых позволяет минимизировать количество слоев

материалов в месте соединения (стачные вразутюжку, накладные с открытыми срезами, расстрочные). Для изделий из толстых тканей выбирают более толстые и жесткие прокладки. От толщины материала зависит число полотен в настиле при раскрое. Чем толще ткань, тем меньше полотен в настиле. При увеличении толщины материала увеличивается и расход скрепляющих материалов (ниток). В зависимости от толщины материала выбирают тип швейного оборудования, регулируют высоту подъема зубчатой рейки и давление лапки на материал.

Результаты и обсуждение.

Растяжимость материалов в различных направлениях и повышенную растяжимость эластичных полотен необходимо учитывать при изготовлении корсетно-бельевых изделий. Для предохранения швов от разрушения при эксплуатации изделий необходимо, чтобы растяжимость строчки и растяжимость материала были соизмеримы не только между собой, но и с величиной нагрузки, которую испытывает изделие в процессе эксплуатации. Это достигается следующими путями: использованием кромки вдоль шва для уменьшения растяжимости строчки; применением в структуре шва стежков легко деформируемых переплетений (цепных, обметочных); применением швейных ниток повышенной растяжимости (лавсановых, капроновых) [7].

Большое влияние на растяжимость швов оказывают технологические параметры пошива: частота строчки и натяжение ниток на швейной машине. Увеличение натяжения ниток на швейной машине уменьшает растяжимость шва. При увеличении частоты стежков в строчке возрастает растяжимость швов. Изменяя длину стежка и натяжение ниток на швейной машине, можно добиться необходимой растяжимости и прочности швов.

Жесткость материалов при их переработке в швейном производстве и в процессе эксплуатации готовых изделий является негативным свойством. Одежда из жестких материалов создает дискомфорт, затрудняет движения. Вместе с тем при изготовлении корсетно-бельевых изделий для придания им требуемой формы необходима определенная жесткость. Жесткость текстильных материалов влияет не только на формоустойчивость изделий, но и на технологический процесс их изготовления. Повышенная жесткость материалов затрудняет их раскрой из-за интенсивного нагрева режущих элементов раскройного оборудования. При стачивании материалов повышенной жесткости наблюдается значительное повышение температуры иглы швейной машины, что приводит к уменьшению прочности и увеличению обрывов швейных ниток; увеличивается число повреждений стачиваемых материалов.

У текстильных материалов силы трения и сцепления проявляются одновременно. Их характеристикой является коэффициент тангенциального сопротивления, который влияет на такие свойства текстильных материалов, как сопротивление истиранию, продвигаемость, скольжение материала, устойчивость к осыпанию срезов ткани, распускаемость трикотажа и др. При раскрое и стачивании деталей из материалов с небольшим коэффициентом тангенциального сопротивления легко происходит смещение деталей, что приводит к перекосу, деформации и стягиванию деталей и швов. При раскрое может происходить скольжение тканей, которое зависит от характера их поверхности, т. е. от гладкости применяемых нитей и их переплетения. Ткани с гладкой поверхностью скользят в настиле, что может привести к смещению полотен и искажению кроя. При раскрое таких тканей уменьшают число полотен в настиле, применяют прокладки из бумаги и специальные зажимы для скрепления настила.

Для снятия остаточного напряжения трикотажных полотен необходима отлежка полотна в течение 24 часов в размотанном состоянии перед настиланием. Легкорастяжимые полотна настилают с минимальным постоянно контролируемым натяжением. При очень долгом хранении, а также, для того чтобы облегчить релаксацию настила выполняют надрезание настила по ширине полотна через каждые 2-2,5 метра в межлекальной зоне между деталями [8].

Кромки полотен выравнивают при настилании, поскольку попытки выровнять кромки после настилания могут привести к вытяжке, неодинаковому напряжению и «зарезке» деталей. Высоту настила формируют в пределах 15 см. В качестве основных рекомендаций предлагается формировать настил из трикотажных полотен высотой 48 слоев. Для предотвращения закручиваемости деталей кроя при настилании некоторых материалов необходимо прокладывать в настил плотную бумагу через каждые 2 слоя. Это особенно желательно выполнять при раскрое мелких деталей. Трикотажные полотна, содержащие волокно «лайкра», обычно не скользят.

Для облегчения раскроя полотен, а также для предотвращения скольжения полотен могут быть использованы зажимы, скобы или иглы. Кроме того, слои материала могут быть соединены между собой путем сверления специальным нагреваемым сверлом в местах межлекальных выпадов.

Большое значение трение и сцепление имеют при эксплуатации одежды. Например, подкладочные ткани должны иметь пониженный коэффициент тангенциального сопротивления, чтобы уменьшались силы трения и сцепления, возникающие при соприкосновении поверхности изделия и тела человека. Коэффициент тангенциального сопротивления для различных материалов изменяется в широком диапазоне и зависит от волокнистого состава, вида переплетения, плотности, способа отделки, вида покрытия и т.д.

Для облегчения перемещения материалов, имеющих повышенный коэффициент трения, их стачивание выполняют на швейных машинах с применением тефлоновой лапки и рольпресса или на швейных машинах с дифференциальным механизмом перемещения материалов.

Закручиваемость срезов трикотажных полотен является их существенным недостатком, поскольку вызывает целый ряд осложнений в процессах изготовления изделий. Из-за закручиваемости краев трикотажа приходится применять при настилании и разрезании специальные зажимы по кромкам настила. Так же это свойство вносит осложнение в при комплектовке кроя и проверке его качества. Так как достаточно отделить от пачки кроя одну деталь, как она тут же начинает закручиваться. Поэтому раскроенные изделия из трикотажа нельзя комплектовать поштучно; в пачке же за счет сил тангенциального сопротивления между слоями трикотаж удерживается в расправленном состоянии [9]. В ряде случаев данное свойство трикотажа также используют в качестве отделки швейных изделий.

Для получения ровных швов и повышения производительности труда стачивающе-обметочные машины, на которых выполняется большинство операций по изготовлению изделий из трикотажных полотен, имеют в своей конструкции ножевые механизмы, т. е. края обрезаются прежде, чем будет проложена строчка. Для того чтобы заложенный на шов припуск не был срезан на машины устанавливают специальные расправители краев.

Раздвижка нитей в ткани характеризуется смещением нитей одной системы относительно, нитей другой системы (основы относительно утка или утка относительно основы). Раздвижка возникает из-за недостаточного сопротивления взаимному перемещению нитей в ткани. Она может явиться следствием структурных особенностей ткани – наличия крайних фаз строения (в отдельных тканях, например, поплине), использования раппорта с большими перекрытиями (в атласных тканях), применения нитей пониженной крутки, уменьшения плотности ткани, а также нарушения строения и отделки ткани при ее производстве [10]. В готовых изделиях раздвижка нитей проявляется преимущественно в области швов.

Осыпаемость ткани характеризуется смещением нитей около срезанного края ткани до спадания нитей одной системы с нитей другой (основы с утка или утка с основы). Осыпаемость ткани является следствием недостаточного закрепления нитей в структуре ткани; она обусловливается главным образом небольшими силами трения и взаимного сцепления, возникающими между нитями основы и утка. Осыпаемость ткани обусловлена видом волокна и переплетением ткани, структурой пряжи, плотностью ткани, фазой ее строения, линейной плотностью основы и утка, направлением среза ткани и другими факторами.

Наибольшей осыпаемостью обладают ткани из химических нитей, наименьшей – шерстяные и хлопчатобумажные ткани. Причиной этого являются различия в коэффициентах трения, сцепляемости волокон и природе нитей. Осыпаемость тканей в значительной степени зависит от их волокнистого состава. В порядке возрастания степени осыпаемости ткани располагаются в такой последовательности: хлопчатобумажные; из натурального шелка; из вискозной пряжи; из ацетатных, триацетатных, лавсановых, капроновых нитей. Большое влияние на осыпаемость оказывает вид переплетения ткани (осыпаемость тканей сатинового переплетения в 3 раза больше, чем полотняного). Наибольшей осыпаемостью характеризуются ткани атласных переплетений с большими перекрытиями нитей, наименьшей – ткани полотняного переплетения. Уменьшение плотности тканей по одной из систем нитей вызывает увеличение осыпаемости нитей противоположной системы.

Осыпаемость срезов тканей, расположенных под различными углами к нитям основы или утка, неодинакова. Наибольшую осыпаемость имеют срезы тканей вдоль нитей основы, утка или под углом не более 15° к нитям как основы, так и утка. При расположении среза под углом 45° к той или иной системе нитей осыпаемость минимальная. Повышенная осыпаемость срезов деталей увеличивает расход материалов и затраты труда на изготовление изделий, ухудшает их качество. Осыпаемость ткани существенно влияет на износостойкость одежды, так как значительное осыпание приводит к быстрому разрушению швов в процессе эксплуатации одежды. Для предупреждения разрушения швов в результате осыпания ткани обметывают срезы, проклеивают края деталей, увеличивают ширину швов и применяют швы специальных конструкций.

Устойчивость к осыпанию срезов швов, обработанных вподгибку, на 25-30% больше, а с закрытым срезом в три раза больше, чем обметанных срезов. Наиболее устойчивы к осыпанию срезы в двойном запошивочном и окантовочном швах. Надежность закрепления срезов возрастает с увеличением, как ширины обметочной строчки, так и числа стежков на 1 см. С увеличением ширины строчки при обметывании от 3 до 6 мм устойчивость срезов к осыпанию возрастает в 3-5 раз. При увеличении частоты строчки от трех до шести стежков в 1 см строчки устойчивость срезов к осыпанию возрастает в 2,5-7 раз.

Прорубаемость при стачивании текстильного материала характеризуется частичным или полным разрушением отдельных нитей материала иглой в процессе пошива. Разрушение нитей, проявляющееся после стирки изделий, принято называть скрытым прорубанием. Прорубание текстильного материала приводит к ухудшению внешнего вида изделия, снижению прочности шва, а, в конечном счете – к непригодности изделия для эксплуатации. Степень прорубания материала зависит от ряда факторов: структуры, плотности, жесткости, вида отделки исходной пряжи и самого материала, а также типа и размера иглы, натяжения швейной нитки и др.

Повреждения в процессе стачивания возникают при изготовлении изделий из любых плотных материалов: тканей, трикотажа. Прорубание особенно опасно для трикотажа, так как оно вызывает распускание петель. Значительное влияние на прорубание оказывает отделка, используемая при изготовлении материала. Определенные виды отделки материала приводят к уменьшению его коэффициента трения об иглу, снижают прорубание при стачивании.

На прорубание материала, обусловленное процессом пошива, существенно влияет толщина (номер) машинной иглы. С изменением номера машинной иглы от 90 до 100 прорубание трикотажных полотен может увеличиваться в 1,5-3 раза. Швейная нить оказывает меньшее влияние на частоту повреждений, чем игла. Но все же, чем мягче швейная нитка, тем меньше прорубание обрабатываемого материала. Например, меньше прорубаются швы, выполненные с использованием в качестве швейных ниток пряжи (хлопчатобумажной и штапельной полиэфирной), больше – с применением армированных, комплексных синтетических или прозрачных капроновых швейных ниток (мононитей). При частых обрывах швейной нитки число повреждений иглой стачиваемых материалов значительно возрастает, так как на прорубание влияет температура иглы, которая резко повышается в результате обрыва нитки. Для предотвращения прорубания материалов необходимо тщательно подбирать игольную пластину. Диаметр отверстия игольной пластины должен превышать диаметр иглы не более чем в 1,7-1,8 раза [11].

Термостойкость – это способность материала реагировать без изменения физических свойств на продолжительные или кратковременные нагревы. Термостойкость материала обычно характеризуется максимальной (критической) температурой. При температуре выше критической наступает ухудшение свойств материала, препятствующее его использованию. В процессе изготовления швейных изделий текстильные материалы подвергаются температурным воздействиям при влажно-тепловой обработке и обработке на швейной машине разогретой иглой.

Самую низкую термостойкость имеют хлориновые волокна. Их размягчение наблюдается при температуре 95-100°С. У полиамидных волокон размягчение может наступить при температуре 170-235° С (в зависимости от модификаций), у полиэфирных – при температуре 220-240° С. Для натуральных волокон (шерсти, шелка, хлопка, льна) наиболее характерно разложение, проявляющееся в уменьшении их прочности (для шерсти происходящее при температуре, близкой к 235°С, а для шелка – при температуре 150-170°С).

Повышенный нагрев при утюжке и прессовании материалов уменьшает их прочность, устойчивость к многократным изгибам, истиранию, изменяет цвет материала. При кратковременном нагреве процессы изменения физических свойств материалов имеют обратимый характер. Действие повышенной температуры можно регулировать уменьшением времени контакта. При длительном воздействии наблюдаются необратимые процессы теплового старения.

При стачивании текстильных материалов вследствие трения иглы о материал происходит нагрев иглы. Степень нагрева зависит от структуры, толщины, плотности, жесткости обрабатываемых материалов, скорости пошива, конфигурации иглы, чистоты обработки ее поверхности и т.п. Чем больше плотность, жесткость, толщина стачиваемых материалов, тем выше температура нагрева иглы. Игла может нагреваться до 400° С. В этом случае при стачивании материалов, содержащих химические волокна, материалы размягчаются и налипают на поверхность иглы. При использовании синтетических ниток может происходить размягчение, которое вызывает ее обрыв. Для снижения нагрева иглы при стачивании материалов рекомендуется использовать

швейные машины с принудительным охлаждением иглы и применять дополнительную обработку (смачивание) поверхности ниток кремнийорганическими препаратами.

Способность материала образовывать пространственную форму деталей одежды путем изменения геометрических размеров материала на отдельных участках и устойчиво сохранять ее называется формовочной способностью материала [12]. Формовочная способность материала характеризуется двумя стадиями: формообразованием и закреплением формы. Формообразование служит для создания в одежде складок, объемной формы полочек, рукавов, для формования воротника и других деталей. Устойчивое закрепление формы и ее сохранение – непременное условие хорошего внешнего вида изделия в процессе эксплуатации [13].

Формообразование текстильных материалов возможно благодаря тому, что в них значительный объем занимает воздух (плотность большинства видов тканей не превышает 0,5 мг/мм3, пористость около 50-80%) и имеются подвижные и устойчивые связи в структуре материала. Поэтому текстильные материалы легко поддаются различным видам деформаций (изгибу, растяжению, сжатию), определяющим его способность к формообразованию.

Формообразование тканей – следствие принудительного изменения угла между нитями основы и утка. Способность тканей к формообразованию оценивают удлинением при растяжении под действием нагрузки 1-2 даН, приложенной к пробе, выкроенной под углом 45°. При формообразовании, происходящем в результате деформаций (изгиба, растяжения, сжатия, утонения, изменения угла между нитями), нарушается равновесное состояние структуры материала. Закрепить деформацию текстильного материала можно при влажно-тепловой обработке деталей и изделия. Для устойчивого закрепления формы деталей одежды используют термоклеевые прокладочные материалы (полиэтиленовую сетку), ткани и нетканые полотна с клеевым покрытием, термоклеевые химические композиции, наносимые на ткани верха.

Для получения устойчивой формы хлопчатобумажные и вискозные ткани подвергаются предварительной обработке под названием форниз – формование несминаемых изделий. Несминаемость тканей с обработкой форниз повышается на 30-50%, возрастает устойчивость складок. Изделия из тканей, обработанных способом форниз, подвергают влажно-тепловой обработке с увлажнением при температуре не выше 140°С и времени прессования 30-40 с. Устойчивое закрепление формы изделий можно обеспечить благодаря использованию в структуре материала термопластичных волокон. При влажно-тепловой обработке волокна расправляются, фиксируя созданную форму.

В процессе влажно-тепловой обработки в результате действия влаги, пара, повышенной температуры могут изменяться линейные размеры текстильных материалов. Изменение линейных размеров – усадка текстильных химических материалов происходит при воздействии на материал влаги и температуры, близкой к температуре термофиксации. Повышенная тепловая усадка материалов, появляющаяся в результате влажно-тепловой обработки, усложняет технологический процесс, увеличивает трудозатраты и материалоемкость при изготовлении изделий. Усадка более 2% приводит к переводу изделий в меньшие размеры. Тепловая усадка возрастает с увеличением количества тепловых воздействий на материал. С увеличением числа обработок от одной до семи усадка материалов может увеличиваться в 1,4-6 раз.

Предельные режимы влажно-тепловой обработки устанавливают в зависимости от вида ткани и технологической операции. Превышение установленных параметров режима приводит к появлению лас, пятен, опалов, тепловой усадки. Для отдельных материалов, например, синтетических, трикотажных и нетканых полотен, следует по возможности исключать влажно-тепловую обработку для получения объемной формы деталей. Объемная форма деталей должна создаваться путем конструкторских решений.

С целью уменьшения усадки материалов в текстильной промышленности в процессе отделки проводятся ширение, декатировка, обработка на специальных усадочных машинах, противоусадочное пропитывание, термофиксация тканей из синтетических волокон и смешанных тканей, содержащих синтетические волокна. В швейном производстве для придания усадки всему полотну производится декатировка.

Выводы.

Таким образом, при подборе материалов в пакет для корсетно-бельевых изделий [14] следует руководствоваться следующими принципами:

1. Использование материалов с одинаковой степенью растяжимости материала (настрачивание эластичного кружева на трикотаж или тканей со вставкой эластомерных нитей).
2. Использование материалов равных по поверхностной плотности (основной, подкладочный и прокладочный материалы).

3. Использование материалов равных по толщине (основной, подкладочный и прокладочный материалы).
4. Использование материалов равных по жесткости (основной, подкладочный и прокладочный материалы).
5. Использование материалов равных по степени усадки (основной, подкладочный и прокладочный материалы).
6. Использование высокоэластичных скрепляющих материалов (текстурированые нити) в местах, где изделие наиболее подвергается растяжению при эксплуатации.

С другой стороны, в процессе эксплуатации корсетно-бельевых изделий швы и строчки [15] подвергаются действию растягивающих и изгибающих сил, прикладываемых однократно и многократно и направленных вдоль и поперек швов. Из условий эксплуатации вытекают требования, предъявляемые к швам при пошиве изделий из эластичных материалов. Одним из основных требований, предъявляемых к швам [11] изделий, является их достаточная растяжимость. Растяжимость швов должна соответствовать тем деформациям, которые изделия испытывают в носке. Швы должны быть достаточно прочными при растяжении их как вдоль строчки, так и поперек нее. Стежки и строчки должны обеспечивать не только соединение деталей изделия, но оплетение срезов с целью их предохранения от осыпания и распускания трикотажа [16, 17].

Указанным выше требованиям в большей степени отвечают швы и строчки, выполняемые цепными стежками. Растяжимость и прочность строчек и швов зависят от вида стежков, из которых они образованы, структуры стежка, то есть степени затягивания швейных ниток в стежке, а также частоты строчки, ширины шва и растяжимости и прочности швейных ниток. Прочность строчки и шва также зависит от соответствия растяжимости строчки с растяжимостью материала.

Прочность швов, выполненных челночными стежками, при растяжении вдоль строчки зависит от прочности швейных ниток, структуры стежков и растяжимости материала. Удлинение швов, выполненных челночными стежками, составляет 10-15%.

Строчки и швы, образованные однониточными и двухниточными цепными стежками, растягиваются в продольном направлении до 30-35% без разрыва строчки. Предел прочности на разрыв в продольном направлении соединительного шва, выполненного двухниточной цепной строчкой, приблизительно в 2 раза больше, чем такого же шва, выполненного челночной строчкой, а при растяжении в поперечном направлении – в 2,3 раза.

Строчки, выполненные плоскими цепными трехниточными, четырехниточными, пятиниточными, шестиниточными и девятиниточными стежками, обладают достаточной растяжимостью и прочностью для выполнения подшивочных, накладных и стачных швов. Строчки и швы, образованные краеобметочными стежками, обладают наиболее высокой по сравнению с другими видами цепных стежков растяжимостью вдоль строчки. Величина этой растяжимости достигает 40% и выше. Прочность швов также вполне достаточная.

Растяжимость и прочность строчек и швов зависят от частоты строчки. Частотой строчки называется количество стежков, приходящихся на 50 мм ее длины. Слишком малое число стежков вызывает обрыв швейных ниток при максимальном растяжении материала. Когда плотность стежков слишком высока, это сдерживает эластичность материала и снижается прочность шва в поперечном направлении. Оптимальное число стежков в строчке с учетом специфики изделия и свойств материала может быть определено экспериментально, то есть путем выполнения нескольких видов швов с последующим их растяжением по длине. Рекомендуемая частота строчек представлена в таблице 1.

Таблица 1. Рекомендуемая частота строчки при пошиве корсетно-бельевых изделий из полотен различных видов.

Вид шва	Вид стежка	Вид материала	Частота строчки на 5 см, не менее
Соединительный	Краеобметочный трехниточный	Из любого сырья, кроме капроновых нитей	22
	То же	Из капроновых нитей	25
	Плоский цепной четырехниточный и пятиниточный	Из любого сырья	22

	Зигзагообразный цепной	Из любого сырья	35
Краевой подшивочный	Плоский цепной трехниточный	Из любого сырья, кроме капроновых нитей	22
	То же	Из капроновых нитей	25
	Краеобметочный двухниточный	Из любого сырья	22
Распошивочный	Плоский цепной трехниточный	Из любого сырья	21

Прочность любого соединительного шва зависит также от его ширины. Особенно большое влияние на прочность шва, а, следовательно, и на его качество оказывает ширина шва, выполненного краеобметочными стежками. При недостаточной ширине шва возможны разрыв нитей, их выползание из шва и распускание петель трикотажа. Ширина шва должна быть такой, чтобы шов предохранял нити материала от разрыва и выползания. Но, с другой стороны, необходимо иметь в виду, что излишняя ширина шва делает его грубым [18, 19].

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THE PLACE OF ACTS REGARDING TO GENETIC ENGINEERING IN THE SYSTEM OF LEGAL REGULATION (LEGAL ANALYSIS)

Abstract: *Being a legal state, the Republic of Kazakhstan is obliged first of all to consider all functioning segments from the position of legal analysis. Genetic engineering is also no exception. Designating the position of Kazakhstani legislation on the concept of human genetic material, it is equally important to designate the degree of maneuverability, the coefficient of elasticity of consideration of the human genome in the system of normative legal acts. Consideration of such in civil law is impossible due to the lack of elaboration of the provisions. Nevertheless, in criminal law there are two distinctions between "person and citizen" and "owner and donor", which should be considered together in relation to the human genetic material in the context of considering human tissues. The present was taken as a basis because of the lack of regulation of the concept of genetic material in the system of current legislation, giving preference to organs and tissues.*

Key words: *human genetic material, biological samples, serums, human tissues, human cells, intercellular substance, biomedical law, biomedical criminology, genetic forensics.*

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Introduction

In accordance with the Constitution of the Republic of Kazakhstan, motives of origin are not grounds for discrimination against anyone (1). Consequently, at the legislative level it is wrong to separate the notion of a person and a citizen from the position of oppression of genetic rights to biological material. So in the criminal law there is a normative element regarding the coercion to seize or unlawfully seize the organs and tissues of a person, in which such is punished and implies criminal liability, while not separating the victim from the concepts of citizen and person (2). This shows that criminal law does not divide a person into citizens. This criminal law also

presupposes a regulatory element singled out as "trafficking in persons", which also suggests criminal liability measures in cases of trafficking in persons for entities trading in such persons, also without assuming a separation between a person and a citizen (3). Another regulatory element of criminal law also regulates a certain degree of criminal responsibility in cases of violation of the equality of rights of a person and a citizen, directly or indirectly, where the concept of "by motive of origin" is in the first place (4). This also treats the unimportance of the appearance of a person into the world naturally or artificially, giving preference to his human essence, in which he in principle does not even have to be a citizen, as evidenced by the normative emphasis, in which exactly the term "citizen" is indicated in brackets, not the other way around. At the same time, the main emphasis is also placed on human organs and tissues. In the legislation of the Republic of Kazakhstan "on public health and the health care system," human tissue has been designated as a collection of cells and an intercellular substance that have the same structure, function, and origin (5).

Materials and Methods

Kazakhstan studies in this direction have deepened when designating the legal status of tissues in the system of regulatory and legal elements, in which it was indicated that human tissues, being an integral component, imply thorough and detailed identification of each cell and substance in its components (6). At the same time, by detailing the present up to the level of the cell, it was determined that the cell also has a certain legal status of a legal entity when it is illegally used or illegally withdrawn without the consent of the holder (7). Focusing on the notion of "owner of cells and intercellular substance", an analogy with the concept of "donor of cells and intercellular substance" was proposed, in which the owner and donor were asked by the same person (8). Logically going through the regulations in this logically, the level of manipulation was suggested, where, with the voluntary withdrawal, the "owner of the cells and the intercellular substance" can be classified as a donor, and in the case of elimination or illegal withdrawal remains the owner (9). Thus, it was found that if the disputes about the identification of the owner and the donor take place in the system of regulatory acts as subjects, then the objects must be identified in detail, which are human tissues with all its components (10).

Russian legislation means its advanced technologies in the field of genetic engineering by means of a completely new area of jurisprudence, medicine, biology, genetics and biotechnology and, in general, biomedical law (11). In accordance with this direction, the lion's share of the legal designations that make up the human genome, due to the impossibility of studying this in the normative channel, was identified in the direction of Russian biocryminology, where alternative forensic scenarios were played out allowing the investigative experiment (12). After a thorough analysis, this direction of biomedical law was compared with the direction of forensic science abroad, which, by analogy, found a number of precedents that helped identify the components of human tissues in the system of legal acts (13). Thus, the present allowed the identification and possibility in the Russian Federation of citizens, if necessary and with the appropriate expression of will, to consider cells as part of themselves and operate with them using specialized contract manufacturing (14). Consequently, being a donor, the present involves the provision of cells voluntarily, as an object of trafficking, as well as theft with involuntary seizure (15).

American studies have reacted differently to the question of considering acts in the field of genetic engineering in the legal regulation system, denoting cases in the case-law system of continental American law, in which objects of genetic engineering are not an exception (16). So by virtue of the emergence of necessity and with a sufficient basis of previously conducted precedents, human cells can even be considered in a certain form of ownership, which can be subject to commercialization and be considered respectively in the system of current legislation (17). Therefore, by giving rise to a precedent of law in the field of genetic engineering, the legal criteria for manipulation can be sufficiently elastic in the field of professional operating (18). This factor is quite positive for the development of genetic engineering in this legal space of the state territorial unit as it eliminates the bureaucratic factor as an obstacle (19). Nevertheless, the ethical side of genetic engineering is a sufficient reason to substantiate the legal position in the field of manipulation in genetic engineering (20).

Conclusion

Thus, as a conclusion, it can be stated that the system of regulatory acts of the Republic of Kazakhstan does not provide for a provision regarding the consideration of genetic material in general, which implies the need to consider it in the system of legal regulation of operations related to maneuvers over the genome detailing it to the cell and intercellular substances.

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QR – Issue **QR – Article**

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SYSTEM OF LEGAL REGULATION OF OPERATIONS RELATED TO GENOME MANEUVERS

Abstract: *Today, surgery on the human genome is not uncommon. Genetic engineering works quite actively today in the field of elimination of human body deficiencies in the field of oncology, leukology, embryology and other priority areas. Consequently, it is important to designate the correctness of the legal classification, operations carried out on the human genome from the position of legal efficacy. In this context, it will be correct to designate the term "regulation", which is considered to be correct from the point of view of civil legislation in the complex of existing normative acts in aggregate, which can be designated as a system.*

Key words: *system of normative legal acts, complex of measures, embryology, neonotology, genetics, consistency, copying, evyhenia.*

Language: *English*

Citation: Nartai, A., Shalkharov, Y. S., & Bitemirov, K. T. (2018). System of legal regulation of operations related to genome maneuvers. *ISJ Theoretical & Applied Science, 12 (68),* 376-378.

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Introduction

Defining the specificity and legal nature of the definition of legal regulation in general, it is important to note its belonging to the civil law direction in which such elements as action and inaction take place. In the context of the interpretation of operations related to maneuvers over the human genome, such elements can be classified in the following order in accordance with the empirical data of international studies.

Materials and Methods

In the Kazakhstan Republic, actions carried out in operations related to genome maneuvers were classified by researchers in the jurisprudence department of the social sciences faculty of the Kh.A. Yasavi International Kazakh-Turkish University in the alternative to the deal institute (1). In accordance with this institution, in this transaction one can consider several elements, which include actions and inactions, subjects expressed as citizens

and organizations, as well as a range of actions designated as establishing, changing and terminating rights and obligations (2). Thus, in accordance with the aforementioned hypothesis, it can be hypothetically determined that by starting a genome maneuver, researchers characterized as laboratory staff (individuals) establish rights and obligations by their actions governing the beginning of maneuvers (3). With the help of pilot experiments and fixing standardized protocols, they change the rights and obligations of the subjects participating in the experiment (4). As well as completing the experiment and coming to a specific consensus, they cease rights and obligations, regardless of whether the experiment was successful or not (5). The present classifies the system of legal regulation of operations related to maneuvers on the human genome from the position of a transaction institution regulated by the civil legislation of the Republic of Kazakhstan.

In the Russian Federation, a different approach to operations related to maneuvers over the human genome was analyzed, in which any manipulations under a certain neck are of a secret nature, in which its results may not even be covered (6). However, given the specific political regime and status of the operation, the results of such research may not even consider the institution of causing harm to health, giving the prerogative to the mass benefits of such (7). Nevertheless, assuming a certain level of involvement of the population in such, it can be indicated that Russian legislation also provides for such in the administrative and legal direction, with the help of state regulation (8). Consequently, such maneuver operations on the human genome can be regulated only with the participation of the public sector (9). Thus, it can be determined that the administrative and legal direction of the Russian Federation is most adapted to the legal regulation of genetic operations carried out in genetic engineering as a whole (10).

American researchers have differently identified the issues of legal regulation of the system of operations related to maneuvers over the human genome, introducing them to precedents (11). Thus, as an alternative, it was assumed that large companies that achieved certain results could determine the legality of the system of maneuvers conducted over the human genome from the position of the highest good based on the precedents (12). Moreover, the essence of such precedents must be interpreted as the highest benefit brought to the nation (13). After such, the results of such operations associated with maneuvers over the human genome may even be patented and have a commercial nature in accordance with the regulations of the United States regarding trade operations and monopolistic actions (14). Thus, it can be stated that the case-law approach of the American regulatory system is most convenient for standardizing, fixing and systematizing the results of experiments conducted in the system of legal regulation of operations related to maneuvers on the human genome (15).

Conclusion

For a certain kind of fixation and standardization of the issues of legal regulation of operations related to the maneuvers over the genome, it is not enough to systematize the regulatory legal acts in a certain order. This kind of fixation should be carried out, starting from genetic material and to the full appearance of a functioning organism with the help of existing legal tools on the example of mechanisms for classifying the nature of genomic research that should be introduced into the prosecution authorities, since they perform the functions of legal statistics and special accounting of violations in this area, which in turn represents a specific control function.

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IN RETROSPECT, A HISTORICAL LOOK TO THE BASICS OF COOPERATION PEOPLES OF UZBEKISTAN AND FRANCE

Abstract: *In this article the author tells about the development of international economic and trade in Uzbekistan and France. Also it is based on the laws of main Government and Ministry of justice about development of international economics. Trade is of the most profit and intensive development branch. So one of the importance facts of economical growth is national economic and integration of the country is development of trade.*

And the facts show the history of the past, for centuries was an active process of diplomatic, economic, trade and cultural exchanges between the East and West. There mostly directed cotton, silk waste and some other industrial goods. For example, industrial enterprises in Uzbekistan, began to deliver to France, textile machinery, excavators, silk fabrics, scrawl. In one of the busiest streets in Paris opened a general store "Bukhara", where was a large variety of goods and Uzbek national souvenirs.

And only with the political independence to the people of Uzbekistan opened opportunities for conducting large-scale dialogue with the states of the international community. Uzbekistan actually became a full participant in the development of modern international relations. Against this background, and began to take shape as a new interstate relation between Uzbekistan and France.

Key words: *Stockholder, association, market economy, currency, haberdashery, investation, company, concern.*

Language: *English*

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Introduction

Political independence of the Republic of Uzbekistan, was an important event in the long history of the Uzbek people and statehood. This gave ample opportunity and the right to self-determination of their own destiny, and become a true master of his own land and all its riches.

However, the history of the Uzbek people and statehood with centuries of history, has experienced periods of growth and decline in its political and socio-economic development. A notable feature is that at different stages of Uzbek statehood, he became also a member of the diplomatic and international relations. In particular, such a relationship between the peoples of Central Asia and European countries have deep roots that go back to antiquity, when the foundations were laid for contact between civilizations. And the facts show the history of the past, for centuries was an active process of diplomatic, economic, trade and cultural exchanges between the East and West.

Materials and Methods

As you know, the Great Silk Road for centuries was instrumental in establishing fruitful contacts between the most distant countries of Western Europe and East Asia. And ancient Uzbekistan was on the way central link, active contact bridge between East and West, Islam and Christianity, the interaction of Eastern and Western cultures. In this story remembered many glorious pages of relations between the peoples of Uzbekistan and France in the mists of time. One of the clearest evidence that can serve as the correspondence of the great ancestor of the Uzbek people of Amir Temur and the French king Charles VI, which are still on the verge of XIV and XV centuries were unanimous on the need to maintain strong political, economic and cultural ties between the two countries. On the basis of the unity

of views and positions of the great leaders of the two states, the relationships between them are reflected in subsequent periods of historical development [1.p. 69-70].

Especially dramatic in this regard during the Soviet reality. This period is characterized with the domination of the command-administrative system of government, lack of democratic principles of government, as well as a flagrant violation of the constitutional rights of the union republics. This situation is the former state union that led to Uzbekistan, as well as other former Soviet republics had his complete dependence on central authorities.

In order to strengthen the centralized management of the country, the Soviet leadership was not considered the interests and capabilities of the Union republics.

In such atmosphere, Uzbekistan, despite the sufficient force development is located on its own economy with a wide network infrastructure, was forced to submit to a single installation of the union leadership. Plans to create a single national economic complex of the country adversely affected the overall socio-economic condition of the USSR. Planned distribution character and preservation of extensive methods in economic development led to its grossest strain. Under these conditions, Uzbekistan has been turned into a raw material Appendage-Union economy. And exaggerated, one-sided republic's economy was built on the monopoly of cotton production and uncontrolled, predatory use of the richest mineral resources rightfully belonging to the people of Uzbekistan. In addition, forced lopsided development of Uzbekistan's economy, accompanied by the planting of primitive plants for the primary processing of raw materials. However, this led to its complete dependence on technological equipment and components from outside the country.

Feature of the Soviet system was the development of the economy and that of the republic for peanuts exported in large quantities all cotton produced volume and revenue from production and sales of gold and other strategic materials are in high demand in the global market, has been received into the treasury of Uzbekistan. And all this happened at a time when "as noted by First President Islam Karimov in the country does not address the acute social and economic problems, when the population was growing rapidly in terms of living in one of the last places in the former USSR" [2, p.4].

A similar pattern existed in the cultural and spiritual life of the peoples of the former USSR. Under the banner of forming a unified socialist culture, ideological machine of the Communist Party of the country were subjected to ill-infringement, and sometimes destruction of centuries of history, culture and spiritual traditions of the people. All of this suggests that Uzbekistan, like other Soviet republics during the Soviet reality was in semi-colonial state with a one-sided, completely dependent on the center of the deformed economy and culture strangulated. This situation had a negative impact on the centuries-old contacts of Uzbek people with world civilization.

In other words, she was deprived of the opportunity independently, based on their own interests, pursue a foreign policy by enabling exercise has been for many centuries the tradition of economic, trade and cultural relations with foreign nations. This was a flagrant violation of the constitutional rights of the Union republics, in which they actually had the right to exercise and development of international relations. In view of the circumstances Uzbekistan did not had their foreign political state institutions did not have the right to set their own external relations. International contacts are made with the approval and under the tight control of the central authorities of the former USSR. This led to the fact that the external relations of the republic if manifested, in limited areas, different class-ideological orientation and the initial deformation. For this reason, Uzbekistan experienced considerable isolation from the outside world and could not fully realize its full potential in the system of international relations.

But, despite the difficult situation generated by the Soviet regime, the Uzbek people eager to express themselves in the international arena. This process takes place only through the participation of Uzbekistan in the framework of international cooperation of the former USSR. It is observed that, as the Uzbek people contributed trade-economic, scientific-technical and cultural cooperation union state with foreign countries. Only by such a form of international activity, Uzbekistan could maintain contact with the outside world.

First contacts with the outside world of Uzbekistan in the USSR accounted for years of Stalinism. But at that period they did not had a regular character. Nevertheless, international activities in Uzbekistan in the economic sphere defined the role of raw materials appendage. She was a supplier for export commodities such as cotton, silk, doodle, gold, and etc. The situation changes after the Second World War, when on the one hand there is a growth of productive capacities in Uzbekistan with the increase of industrial production, and on the other form a stable external economic cooperation with the countries of the former Soviet Union embarked on the path of socialist development. While the share of Uzbekistan's participation in the international cooperation of the union state, begins to gradually grow. So, for example, if in 1958, our country has supplied goods of own production to 32 countries, in 1963- 46, 1966 -70 and 1970 in -76 states [3].

In the nomenclature of exports already means sets of machines for cotton ginning and textile industry, large hydraulic structures, cranes,

refrigeration units, cinema projection equipment, diesel engines, pumps, cotton and silk fabrics, medicines and other products. However, with all the expansion of the list of supplied products abroad, mainly exported from Uzbekistan continued to be cotton fiber. In this a large part of them went to the countries of the socialist camp [4, p.144].

As changes in foreign policy toward the former Soviet Union easing tensions with the western world, there is an increasing trend to expand them with trade and economic cooperation. Of course, the Soviet-made products could not be fully competitive, not inferior in quality to world standards, but nevertheless, a fact testified to establish a dialogue between the countries of the Eastern and Western world. In this process, and was the share of Uzbekistan, comes in economically developed countries are interested in their national economies products. Among the countries of the Western world, receiving the products produced in our country, and was France. There mostly directed cotton, silk waste and some other industrial goods. For example, industrial enterprises in Uzbekistan, began to deliver to France, textile machinery, excavators, silk fabrics, scrawl. In one of the busiest streets in Paris opened a general store "Bukhara", where was a large variety of goods and Uzbek national souvenirs.

Another striking evidence of the desire of France to expand contacts with Uzbekistan, is the fact that in 1988 in our country there is a commercial delegation of the Association "France-USSR" and the delegation headed by the director of procurement trade unification of the "Printemps" [5].

It is important to note also that in the Soviet period, the economy experienced a sharp foreign product on various technologies and consumer products. In this connection, a meeting of the export flow was impressive and a flood of imports. Uzbekistan among other Soviet Republics is the consumer of imported products. However, a centralized management system in the allocation of import receipts did not consider the needs of the union republics. In this regard, despite the fact that Uzbekistan was one of the suppliers of export products of the Soviet state, the republic imported application met the minimum level. This adversely affected the condition of industrial production in Uzbekistan, in need of radical technical modernization based on advanced foreign technology.

In the present as in the USSR as a whole, and in particular the situation in Uzbekistan, France was among the countries stretching a helping hand. At the same time, a significant contribution was made by the French company in the supply of standard equipment for some industrial enterprises in Uzbekistan, such as Tashkent building factory, perfume factory, Republican telecentre and many other factories.

So, the experience of the past and present shows that during the period of Soviet reality, Uzbekistan has the productive forces, sufficient for an independent economic existence, and as independent of foreign economic policy. However, the centralized organization of the economy of the former Soviet Union, in conjunction with the planning and distribution practices, led to the deformation of the national economy of Uzbekistan, turning it into a raw materials Appendage-Union economy.

As the history of international relations, the development of a civilized, equal cooperation of different countries in the political, economic and humanitarian spheres special role belongs to the cultural and spiritual ties. This area of cooperation contributes to the mutual enrichment of people's achievements of world science and culture. And this in turn contributes to the strengthening of peace and understanding between peoples and the progressive integration of the world community.

However, under the Soviet system of government the peoples of the former USSR were limited in a broad dialogue with the outside world. In particular, the people of Uzbekistan, as well as other Soviet republics, experienced difficulties in implementing the requirements of initiation to the universal values of culture. By virtue of the prerogatives of the central management system, the Soviet republics, including Uzbekistan, have been deprived of the right to self-determination and the development of international cooperation in the sphere of culture.

But it should be noted that the long history of Uzbekistan with a unique spiritual heritage of a great past, has always attracted and attracts the attention of representatives of science and culture in foreign countries. They showed a great desire to expand the diverse forms of cultural dialogue with the Uzbek people. Such a desire is expressed the European states also, particularly France, behind which long history with a rich spiritual and cultural heritage. Life itself is a form of communication and civilized peoples demanded rapprochement and mutual cultural spiritual values.

Monitoring the development of cultural ties spiritual peoples of Uzbekistan and France during the period of Soviet reality shows that, although they were limited, but still found to exist. It was mainly through various forms of cultural activities. For example, in 1978, took place in Uzbekistan days of France, among participants who were famous French figures Gi Desson, Mark Raymond, Max Paul Foucher, Rose Guerin,Paul Devilet, Raymond Russia, artist Paul Girman and others.

A year later, in 1979 in France, the Days of Uzbekistan. Within days in Paris, in the House of the Society "France - Uzbekistan" with exhibitions of

folk arts and crafts of Uzbekistan and Uzbek artists painting.

With the huge success of the performances of the ensemble "Bahor", which held 20 concerts in the cities of Amiens, Sartvil, Lyon, Nice, Clermont-Ferrand, Nantes, Agen, Bordeaux and others [6].

Holding Days of France in Uzbekistan and Uzbekistan to France, as well as other cultural events contributed to the strengthening of friendship between the two peoples and mutual enrichment of cultural spiritual values. However, during the period of Soviet reality questions of foreign policy and bilateral relations were considered strictly from the class positions. Communication in the cultural sphere of the spiritual with the countries of the Western world was assessed as convenient for them to penetrate the case of bourgeois culture and lifestyle in order to undermine the foundations of socialism. Therefore, ideological machine of the Soviet state kept strictly within our field of view this area of mutual cooperation of the peoples that did not allow them to realize their full spiritual potential in engaging the world culture.

Conclusion

So, the facts show, the Uzbek people with a long history of statehood for centuries in a state of close contact with the peoples of other countries and in particular France. Pursuing an independent foreign policy, he was highly interested in establishing an open dialogue and the development of bilateral trade and economic and cultural ties. However, these qualities are inherent in the Uzbek people were subjected to stringent testing during the period of the Soviet model of government. National republics, being deprived of their constitutional rights to self-determination and self-management of foreign policy were limited in the forms of international communication, which in no way could meet the needs of modern times.

And only with the political independence to the people of Uzbekistan opened opportunities for conducting large-scale dialogue with the states of the international community. The Republic of Uzbekistan, as a new independent state, formed in the post-Soviet space, its steady position towards the principles of democracy, could take a worthy place in the modern world order. At the same time, from the initial years of independence, one of the central places in the domestic policy of the country was occupied with the question of interests and human rights. This issue was fully reflected in the Constitution of the Republic of Uzbekistan. In particular, Article 13 states that: "Democracy in the Republic of Uzbekistan is based on universal principles, according to which the highest value is a person, his life, freedom, honor, dignity and other inalienable rights. Democratic rights and freedoms are protected by the Constitution and law" [7, p.5].

As, Uzbekistan actually became a full participant in the development of modern international relations. Against this background, and began to take shape as a new interstate relation between Uzbekistan and France.

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