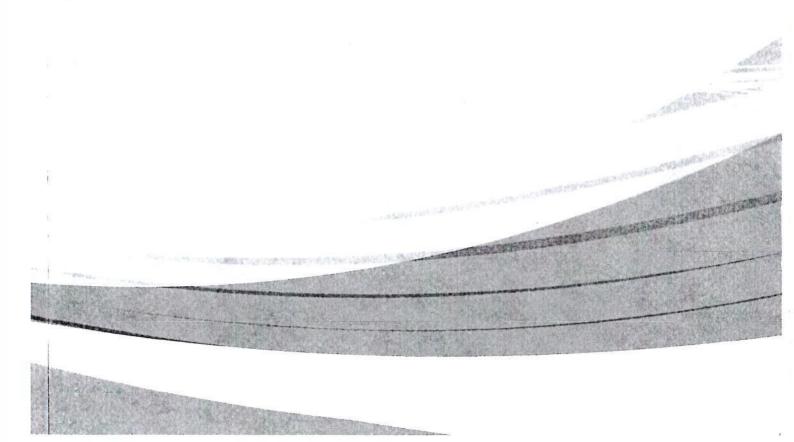


2015 CIS-Korea Conference on Science and Technology

dedicated to 25th anniversary of diplomatic relations between Russia and Korea

PROCEEDINGS



Организационный комитет:

Фортов Владимир Евгеньевич (председатель) – академик, президент Российской академии наук (РАН)

Ли Бу Соп (сопредседатель) – президент Корейской федерации по науке и технологиям «КОФСТ» (Республика Корея)

Тен Эдис Борисович (заместитель председателя) – доктор технических наук, профессор Национального исследовательского технологического университета «МИСиС», президент Ассоциации научно-технических обществ корейцев «АНТОК»

Юн Любовь Мироновна (заместитель председателя) – доктор химических наук, президент Научно-технического общества «ТИНБО» (Узбекистан)

Мун Григорий Алексеевич (заместитель председателя) – доктор химических наук, президент Научно-технического общества «КАХАК» (Казахстан)

Лим Сан Хюн (заместитель председателя) – кандидат химических наук, директор Центра сотрудничества науки и технологии Корея-Россия-СНГ «KORUSTEC» (Республика Корея)

Лагарьков Андрей Николаевич (член оргкомитета) – академик, академик-секретарь отделения энергетики, машиностроения, механики и процессов управления РАН

Сон Эдуард Евгеньевич (член оргкомитета) – член-корреспондент РАН, заместитель директора по науке ОИВТ РАН, заведующий кафедрой физической механики МФТИ, заслуженный деятель науки РФ, первый вице-президент «АНТОК»

Пак Иван Тимофеевич (член оргкомитета) – доктор технических наук, профессор, советник президента «КАХАК»

Чо Гван Чун (ответственный секретарь) – кандидат технических наук, доцент Национального исследовательского университета «МЭИ», вице-президент

K64 Конференция по науке и технологиям СНГ-Корея. Москва, 19-21 июля 2015 года: Материалы конференции / Коллектив авторов. - М. : Изд. Дом МИСиС, 2015. - 435 с.

ISBN 978-5-87623-945-7

В сборник включены материалы докладов, представленные в организационный комитет конференции в электронном виде в установленные сроки.

Материалы распределены в сборнике по тематике доклада в алфавитном порядке по фамилии авторов (соавторов)-докладчиков.

ББК 72.5л0

ISBN 978-5-87623-945-7

© Коллектив авторов, 2015

© Ассоциация научно-технических обществ корейцев, 2015

Organizing committee:

Fortov Vladimir (head) – academician, president of the Russian Academy of Sciences (RAS)

Lee Boo Sup (co-head) – president of the Korean Federation of Science and Technology "KOFST" (Republic of Korea)

Ten Edis (deputy head) – Dr.Sc. (engineering), professor of the State Technological University "Moscow Institute of Steel and Alloys", president of the Association of Korean Scientific and Technical Societies "AKSTS" (Russia)

Yun Lyubov (deputy head) – Dr.Sc. (chemistry), professor, president of president of the Korean Science and Technology Society of Uzbekistan "TINBO"

Mun Grigory (deputy head) – Dr.Sc. (chemistry), professor, president of the Korean Science and Technology Society of Kazakhstan "KAHAK"

Lim Sang Hyun (deputy head) – Ph.D. (chemistry), Director of the Korea-Russia-CIS Science and Technology Cooperation Center "KORUSTEC" (Republic of Korea)

Lagarkov Andrey (member) – academician, academician-secretary of the department of power industry, machine industry, mechanics and control processes of RAS

Son Eduard (member) – professor, corresponding Member of RAS, deputy director by science of JIHT RAS, head of Physical Mechanics Department MIPT, distinguished Scientist of Russia, vice-president of "AKSTS"

Pak Ivan (member) – Dr.Sc. (engineering), professor, counselor of the president of the Korean Science and Technology Society of Kazakhstan "KAHAK"

Cho Gvan Chun (executive secretary) – Ph.D. (engineering), associate professor of the National Research University "Moscow Power Engineering Institute", vice-president of "AKSTS"

2015 CIS-Korea Conference on Science and Technology. July 19–21, 2015. Moscow. Proceedings. / Composite authors. – Moscow: Publishing House of MIS&S, 2015. – 435 pp.

ISBN 978-5-87623-945-7

Collection includes proceedings, presented to organizing committee of the Conference in e-version within the prescribed deadline.

Proceedings distributed by fields in alphabetical order by the last name of authors (co-authors)-speakers.

ВВС 72.5л0

ISBN 978-5-87623-945-7

© Composite authors, 2015 © Association of Korean Scientific and Technical Societies, 2015

Conclusions:

1. Initially it was assumed that the abolition of customs privileges without a proper support of entrepreneurs would entail a decline in production and rising unemployment. Thanks to the measures that have been worked out in order to support the Kaliningrad region, it will be possible to avoid significant negative effects.

 Businesses need to use the provided incentives as an opportunity for further growth and development, the increase of competitiveness by means of improving the quality and innovations.

3. It is necessary to evaluate and develop the branches of the regional economy, which have the potential of significant growth and opportunities for success in terms of the available resources and expenses, and are strategically important for improving the competitiveness and investment attractiveness of the region and are less dependent on the benefits of the SEZ.

REFERENCE:

1. Fedorova V. A. The Ways to Improve the Legal Framework for Special Economic Zones in the Russian Federation // Bulletin of the Financial University. 2014. N4. P. 45–53.

2. Li N.O. The development of the furniture industry of Kaliningrad region after the removal of

customs benefits // Bulletin of the Financial University. 2015. N1. P 118-128.

3. Federal Law of 22.01.1996 N 13-FZ (ed. of 10.01.2006) "On the Special Economic Zone in the Kaliningrad region" (22 January 1996)

4. Federal Law of 10.01.2006 N 16-FZ "On the Special Economic Zone in the Kaliningrad Region and on amendments to some legislative acts of the Russian Federation" (10.01.2006)

- 5. Dyhanov G.Y. Experience in the use of the SEZ in the Kaliningrad region: proceedings of the conference on entrepreneurship development of the Kaliningrad region, Kaliningrad, December 16, 2014.
- 6. 700 favorites: who and how to budget money because of the "problem-2016" [Electronic resource] // New Kaliningrad.Ru the leading regional online portal of the Kaliningrad region and the city of Kaliningrad. URL: https://www.newkaliningrad.ru/news/economy/4626870-700-izbrannykh-kto-i-kak-poluchit-byudzhetnye-dengi-izza-problemy2016.html (up to date: 06/19/2015)

7. Kaliningrad business hiding in the shadow [electronic resource] // News agency "Rosbalt". URL: http://www.rosbalt.ru/kaliningrad/2015/04/06/1385772.html (up to date: 19/06/2015)

8. The customs regime in the Kaliningrad region will be simplified [electronic resource] // Group of companies "Expert Status." URL: http://www.statusexpert.ru/novost/news-of-the-sez/?ELEMENT_ID=3109 (up to date: 06/19/2015)

СОВРЕМЕННАЯ ПОЛИТИКА КАЗАХСТАНА НА КОРЕЙСКОМ ПОЛУОСТРОВЕ

Д.В. Мен

Казахский национальный университет им. Аль-фараби, Алма-Ата, Казахстан

В статье рассмотрены политические аспекты международных отношений между Казахстаном и Республикой Корея. Дан анализ новых тенденции политического сотрудничества Астаной и Сеулом на современном этапе. Выработан политический подход во взанимоотношениях между двумя странами. Раскрыты долгосрочные перспективы и динамика развития политического сотрудничества между двумя странами.

В этом 2015 году исполнилось 23 года с момента установления дипломатических отношений между Республикой Казахстана и Республикой Корея. Став суверенным государством после распада Советского Союза, Казахстан столкнулся с геополитическими реалиями, которые сделали доминирующей в его внешнеполитической стратегии задачу сбалансиро-

ют градус напряженности, осуществляя запуски ракет малой и средней дальности, угрожая провести новой ядерное испытание» [5].

Как представляется, такой путь вряд ли может привести к решению ядерной и других проблем Корейского полуострова. Исходя из этого, что дальнейшая затяжка с переговорами только усугубляет ситуацию, казахстанская сторона продолжает прилагать усилия, направленные на то, чтобы найти выход из создавшегося положения и перезапустить переговорный процесс. Астана крайне заинтересована в положительном решении проблемы денуклеаризации.

Таким образом, из всего сказанного можно сделать вывод – внешняя политика Казахстана по отношению к Корейскому полуострову нацелена на содействие укреплению всеобщей безопасности стабильности, развитию взаимовыгодной интеграции. Активными дипломатическими усилиями создать благоприятные внешние условия для достижения стоящих перед обеими государствами стратегических целей. Можно с удовлетворением констатировать, дружественные отношения без ущерба собственным национальным интересам, проявят себя ответственными партнерами по основным международным проблемам.

ЛИТЕРАТУРА:

- Ким Г.Н. Казахстан Южная Корея: на пути стратегического партнерства: монография. – В двух книгах. Книга 1. Этапы партнерства и сотрудничества. – Алматы: КИСИ при Президенте РК, 2012. - С. 71.
- 2. Подписано Совместное Заявление Республики Казахстан и Республики Корея //
- 3. Титаренко М.Л. Предисловие. Россия и Корея в меняющемся мире. М.: ИДВ РАН, Казинформ. – 2004. – 20 сентября.
- 4. Титаренко М.Л. Предисловие. Россия и Корея в меняющемся мире. М.: ИДВ РАН, 2014. - C. 12.
- 5. Мацегора А.И.Современная политика России на Корейском полуострове // Россия и 2014. - C. 11. Корея в меняющемся мире. – М.: ИДВ РАН, 2014. – С. 14–15.

THE CURRENT POLICY OF KAZAKHSTAN ON THE KOREAN PENINSULA

D.V. Men

Al-Farabi Kazakh National University, Almaty, Kazakhstan

The article deals with the political aspects of international relations between Kazakhstan and the Republic of Korea. Thenew trends in political cooperation of Astana and Seoul at the present stagewere analyzed. Author developed a political approach in the relations between the two countries. The long-term prospects and the dynamics of the political cooperation between the two countries was disclosed

It is been 23 years since the establishment of diplomatic relations between the Republic of Kazakhstan and the Republic of Korea. Having become a sovereign nation after the collapse of the Soviet Union, Kazakhstan faced the geopolitical realities that made dominant in its foreign policy strategy the problem of balanced development of relations with the outside world. Have correctly assessed them, the country continues to claim as an independent subject of international law, builds its international relations on the basis of the equality, mutual respect

The foreign policy is based on an open market economy and a democratic political and mutual benefit. system, internal stability and interethnic accord. The basic principles of Kazakhstan's foreign policy remain unchanged; the principles are an activism, balance, pragmatism, constructive dialogue and multilateral cooperation. The priorities of Kazakhstan's foreign policy aimed at the development of allied relations and mutually beneficial cooperation with other countries. In addition, Kazakhstan is developing friendly political relationship with Asian countries, one of which is the Republic of Korea.

Kazakhstan to the Republic of Korea is very promising and dynamically developing country with rich natural resources and a large transit-transport potential. The recent events have demonstrated the interest of the developed countries in cooperation with Kazakhstan. Theincreased economic and political capabilities allow Kazakhstan to play a more active and important role in the regional integration processes. Thus, Kazakhstan has already become an important subject of modern geopolitics of Seoul.

Taking into account the high levels of socio-economic development, the available investment opportunities in Kazakhstan are ready to contribute to speeding up cooperation with the Republic of Korea, actively participate in the reform of the common market, to support all areas of integration – the creation of industry consortia, joint holdings and investment structures.

The activity of Kazakhstan in the field of Central Asian cooperation with the Republic of Korea, the willingness to accept the duties and responsibilities are dictated by a sincere desire to exploit the potential of Kazakhstan to the benefit of both countries. Astana and Seoul, united on the basis of common civilized, historical features of Asian States, expand its relations not only with each other but at the same time this impulse creates a favorable political atmosphere in the Asian continent.

Thus, since the establishment of diplomatic relations between Kazakhstan and South Korea begin the process of active mutual understanding and rapprochement between the two friendly countries. Despite the differences in the historical past, which concerned virtually the entire spectrum of political, economic. social and cultural life of the two countries, the absence of any contact for a long period, the progress occurred very rapidly in terms of development of friendly relationship [1].

One of the significant events was the state visit of the President of the Republic of Korea Roh Moo-hyun to Astana due to the invitation of the President of Kazakhstan, N.A. Nazarbayev in September 2004. It was the first official visit of leadership of the Republic of Korea to our country since the establishment of diplomatic relations.

The two presidents held talks to discuss a wide range of issues concerning bilateral cooperation and international issues. As a result of the talks, there was signed a Joint Statement of the Republic of Kazakhstan and the Republic of Korea, which refers to the need for further strengthening of bilateral relations in the spirit of friendship and cooperation, the concept to a higher level of practical cooperation in trade, energy, mineral resources, science and technology [2].

Taking into account the current international situation, the main focus of Kazakhstan's foreign policy strategy is made on security in Central Asia, an effective security system, aimed at preventing non-traditional threats and challenges of international terrorism, religious extremism, drug trafficking, illegal migration emanating now from Afghanistan and other neighboring region countries. The growing economic importance of Asia-Pacific countries, the deepening of partnership with the Republic of Korea is one of great interest for Kazakhstan.

South Korean President Park GeunHye continues its course in a difficult environment where leftists perceive her only as a shadow of her father Park Chung Hee, as well as the representatives of right-wing conservative direction put a spoke in her wheel with no less enthusiasm. Park GeunHye has not yet managed to fulfill her promises to the socio-economic sphere, but her course to restore confidence in inter-Korean relations began to give the first positive results. There was held inter-Korean consultations at high-level, the separated families could meet, the Kaesong industrial complex had started to work. Seoul hopes that Pak GeunHye will not follow the example of Lee Myung-Bak, who showed himself as president of the economic, but turned into ultra-conservative and rigid conductor of provocative policy toward the North. [3]

The policy of Astana and Seoul are found on the common values based on the principles of democracy and market economy. The two countries hold common or similar goals of almost

all the major issues of international relations, including the ones that are related to the area of strengthening the regime of nuclear non-proliferation, the fight against international terrorism and religious extremism, religious conflict settlement. Kazakhstan expresses its support for the policy of peace and prosperity, conducted by the Republic of Korea and directed to the consolidation of peace on the Korean Peninsula, as well as supports the position in the peaceful settlement of the North Korean nuclear issue through dialogue.

A significant role in the development of bilateral relations have played official visit of President of the Republic of Korea Roh Moo-hyunto Kazakhstan (2004), Lee Myung-bak (2010 and 2011)., Park Geun-Hye (2014), as well as the visit of President of the Republic of Kazakhstan N.A. Nazarbayev to Seoul, where they discussed issues of bilateral cooperation and international issues, in particular, the expansion of trade and investment cooperation, joint development of Caspian energy resources, activation of direct links between small and medium-sized businesses, joint ventures, specializing in the production of building materials and component parts for the oil and gas industry and processing of agricultural products.

In the course of bilateral visits there was signed a number of intergovernmental documents on the peaceful use of nuclear energy, cooperation in the field of information and communication, understanding and cooperation in the field of energy and mineral resources. As a result of the talks, the Joint Statement of the Republic of Kazakhstan and the Republic of Korea was signed, which emphasized the need for further strengthening of bilateral relations in the spirit of friendship and cooperation, as well as the transition to a higher level of practical cooperation in trade, energy, mineral resources, science and technology.

The relationship with Seoul in view of its economic and political potential, as well as the scale of presence in the domestic economy for Astana turned into a strategic partnership. Particularly, the experience of socio-economic transformation in Korea is valuable for Kazakhstan. Using the Korean experience can be a valuable tool, which will stimulate development of the Kazakhstan economy. The increase in the volume of bilateral trade could have a positive impact on the overall

situation and the living standards of the population.

In turn, Seoul is interested in the access to the natural resources of Kazakhstan and its sales of Korean industrial goods. In Kazakhstan, there are more than 300 enterprises with Korean capital, of which 48 joint ventures and 62 representative offices. In sector-wise, it's IT sector, the production of buses and equipment for oil and gas, chemical industry, household appliances and others.

The volume of trade turnover between Kazakhstan and Korea is increasing from year to year. If in 2003 the volume was \$ 170 million, then in 2014 it was about \$ 1.5 billion. The main items of exports from Kazakhstan to the Republic of Korea are the raw materials: carbon ferrochrome, ferrosilicon, uranium concentrate, steel, rolled metal, gold, silver, sodium compounds and other chemical raw materials.

The structure of the Kazakh imports include electronics, including audio and video equipment, televisions, digital computing equipment and components, polyester and related petrochemical materials, telecommunications equipment, air conditioners, window glass, and textile and paper products, pharmaceutical and food products, various consumer goods.

The fact that Kazakhstan always has a vital interests of the Republic of Korea is now virtually unquestioned. Nowadays, at the time of acceleration of globalization and the rapid growth of the Land of Morning Calm, to which most experts predict the role of "engine" of global development in

xxI century, this axiom is particularly relevant.

At the same time it is crucial that not only Kazakhstan needs an economically mobile and stable Republic of Korea, but also the Republic of Korea needs a strong prosperous Kazakhstan. The new economic and political uniting the Republic of Korea is an indispensable potentially powerful factor in the economic development of Kazakhstan. The key issues of bilateral economic and trade were discussed during the June 2014 visit to Astana by the President of the Republic of Korea, Park GeunHye. The results of the negotiations will be the basis for further economic and political development between Kazakhstan and Korea.

A powerful impetus to the development of economic and cultural contacts between the two countries was the removal of visa requirements for mutual trips of citizens in February 2015. According to available information, during the period from the beginning of the abolition of visathe stream of Kazakh citizens traveling to the Republic of Korea increased as well as the number of people from Korea visiting our country is also growing.

The situation on the Korean peninsula in recent years has less trouble than a year or a few years ago, so it causing a certain satisfaction. This applies, above all, to inter-Korean relations.

North Korea led by Kim Jong-unis confident enough to follow a course in which some changes are viewed. Firstly, the young manager showing a strong character, and some of his actions recall not even Kim Jong II but Kim II Sung. He makes it clear that he is an independent politician who sets the rules by himself, but not under some one's control. Secondly, he believes that taking by him a course on construction of economy and the nuclear forces can protect the North Korea from trials of changing the regime as it happened in Iraq and Libya. Unable to catch up with their opponents in conventional weapons, North Korea relies on asymmetric response to a nuclear weapon that allows to direct part of the resources of the state in the development of the civil sector of the economy [4].Kazakhstan has good relationship with both the South and the North of the Korean Peninsula, despite the political differences between Seoul and Pyongyang.

At the same time Kazakhstan is not indifferent to what happening on the Korean peninsula in recent years. As you know, in the past few years on the Korean peninsula have been an eventful confrontation between North and South Korea. The situation was full of dynamics of the opposing sides.

Nowadays, Seoul and Pyongyang reached a difficult situation; there are another recurrent tensions. Kazakhstan calls on all parties to show restraint, refraining from action that could further aggravate and exacerbate the situation. "South Korea and the United States, despite official assurances sounded earlier including the promises have not reduced the scope of their joint exercises, but attracted to the activities of the these maneuvers strategic the bombers and nuclear submarines, launched a rehearsal of landing operations in unambiguous and highly provocative way – "the capture of the administrative center of the neighboring state. "It is clear that North Korea perceive these actions as preparations for an invasion and in turn increases the degree of tension, launching the short- and medium-range missiles, threatening to conduct a new nuclear test "[5].

It appears that such a path is unlikely to lead to resolving the nuclear and other issues of the Korean Peninsula. Based on this, that further delay in the negotiations only aggravates the situation, while the Kazakhstan side is continuing its efforts to try to find a way out of the situation and restart the negotiation process. Astana is extremely interested in the positive solution of the problem of denuclearization.

Thus, all of the above we can conclude – Kazakhstan's foreign policy towards the Korean Peninsula is aimed at promoting global security stability, the development of mutually beneficial integration, the creation of favorable external conditions for the fulfillment of strategic objectives in both countries by active diplomatic efforts. It is notable that the friendly relations without compromising its national interests can manifest themselves as responsible partners on major international issues.

REFERENCE:

- 1. Kim GN Kazakhstan South Korea: towards a strategic partnership: Monograph in two books. Book 1. Stages of partnership and co-OPERATION. Almaty: KISR under the President of the Republic of Kazakhstan, 2012. 71 p.
- Joint declaration of the Republic of Kazakhstan and the Republic of Korea // Kazinform2004, 20thSeptember.
 - 3. ML Titarenko Preface. Russia and Korea in the changing world. M.: ИДВ РАН, 2014. C. 12.
 - 4. ML Titarenko Preface. Russia and Korea in the changing world. M.: ИДВ РАН, 2014. С. 11.
- 5. Matsegora A.I. Sovremennaya Russian policy on the Korean Peninsula // Russia and Korea in a changing world. М .: ИДВ РАН, 2014 14–15 р.

	MONTHS IN THE PROPERTIES OF THE	
МОДЕЛИ	A.N. Mikov, I.M. Fedorova, N.N. Potapieva, E.E. Maleeva, E.V. Bocharov, T.N. Bozin, D.A. Altukhov, A.V. Lipkin, S.A. Kozlov, D.B. Tikhonov, E.V. Grishin 5. TRUCTURAL FEATURES AND ACTIVITY-INDISPENSABLE RESIDUES OF A NEW PEPTIDE WHICH TARGETS INSECT CALCIUM CHANNELS LEADING TO PARALYSIS AND DEATH	93
CIC		
SIS	5DБЩЕСТВЕННЫЕ НАУКИ (секция В)	95
⊣KA	.59 І.А. Бархатова ІРОЕКТ «РОБОТАНКОВЫЙ БИАТЛОН» КАК ТЕХНОЛОГИЯ ОБРАЗОВАНИЯ БУДУЩЕГО	95
	A. Barkhatova PROJECT «ROBOTANK BIATHLON» AS EDUCATINAL TECHNOLOGY OF THE FUTURE	97
1Я	64) Х. Ким, М.С. Ким, М.В. Ким ОПЫТ ИСПОЛЬЗОВАНИЯ ПРОГРАММНОГО КОМПЛЕКСА MIDAS GTS NX В ОБУЧЕНИИ СТУДЕНТОВ ТРОИТЕЛЬНОГО ПРОФИЛЯ	98
	V.H. Kim, M.S. Kim, M.V. Kim I XPERIENCE USE SOFTWARE SYSTEM MIDAS GTS NX TEACHING STUDENTS 69 OF THE CIVIL ENGINEERING SPECIALTY	
	72 Ким Ен Сун МЕХАНИЗМЫ ФИНАНСОВОЙ И ОРГАНИЗАЦИОННОЙ ПОДДЕРЖКИ ПРОДВИЖЕНИЯ ИННОВАЦИОННЫХ ПРОЕКТОВ	
•••••	75 Kim Yen Sun 100LS OF FINANCIAL AND ORGANIZATIONAL SUPPORT FOR INNOVATION PROJECTS PROMOTE	107
	75 И Д КИМ МЕТОДИКА ФОРМИРОВАНИЯ МЕНЮ СЕТЕВОЙ КОМПАНИИ ЯПОНСКОЙ КУХНИ ПОСРЕДСТВОМ 76 МНОГОМЕРНОГО АВС-АНАЛИЗА	110
	11D Kim 80 MI THOD OF MENU DEVELOPING OF FEDERAL COMPANY THROUGH MULTIVARIATE ABC-ANALYSIS	114
***************************************	И А КИМ 83 КОРГ САРАМ ЮГА РОССИИ В СВЕТЕ СОЦИОЛОГИЧЕСКИХ ИССЛЕДОВАНИЙ	
	KORYO SARAM SOUTH OF RUSSIA IN THE LIGHT OF SOCIAL RESEARCH	120
	НО ЛИ ОСОБАЯ ЭКОНОМИЧЕСКАЯ ЗОНА В КАЛИНИНГРАДСКОЙ ОБЛАСТИ:	124
.TH	86 HISTORY AND DEVELOPMENT PERSPECTIVES	127
	37 Д.Н. Мен СОВРЕМЕННАЯ ПОЛИТИКА КАЗАХСТАНА НА КОРЕЙСКОМ ПОЛУОСТРОВЕ	129
	РЕАЛИЗАЦИЯ ПОЛИТИКИ «МЯГКОЙ СИЛЫ» РЕСПУБЛИКИ КОРЕЯ МА ПРИМЕРЕ «КОРЕЙСКОЙ ВОЛНЫ» В РОССИЙСКОЙ ФЕДЕРАЦИИ	137
;	WA Nepomnyashchaya HERURLIC OF KOREA SOFT POWER POLICY IMPLEMENTATION OH THE EXAMPLE OF THE KOREAN WAVE IN THE RUSSIAN FEDERATION	
9	HIN The MORE THAN THE THE THAN THE	140
ATIVE9	2 THE PAR TON OF INFORMATION COMMUNICATIONS IN THE INFORMATION MODEL OF THINKING	14