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TRUD To Publish Double Issue on Thursdays

91UN0825B Moscow TRUD in Russian 24 Jan 91 p 1

[Unattributed note: "To Our Readers"]

[Text] TRUD is being published today with eight pages. This is the first result of the struggle for survival of the most popular newspaper that the editorial office is waging together with you, our dear readers. So far, we have managed to secure a full supply of paper sufficient for six issues a week of the TRUD daily. However, newsprint is not everything, even if it is delivered smoothly. The issue of an acceptable price for newsprint remains open. Furthermore, communications personnel still refuse to distribute the newspaper on Sunday. Also, in the opinion of the editorial office, it would be better to publish a double issue toward the end of the week, for example, on Saturday, thus compensating for the absence of Sunday issues. However, as printing plant managers say, the plants are not in a position to print the newspaper on such a schedule. This situation foreordained the decision of the editorial office to publish a double issue of TRUD on Thursdays. A change in volume also imposes a change in the content of the newspaper. Our preference in "thick" issues will be for analytical materials on a broad range of topics—from serious politics to family affairs. Judge for yourselves how this worked in the first Thursday issue. We will be grateful for your remarks and suggestions, which, as always, will help to verify "the course" of our newspaper.

Editor of New Religious Journal Interviewed

91UN0735A Kiev PRAVDA UKRAINY in Russian
4 Jan 91 p 2

[Interview with Sergey Vladimirovich Deryugin, deputy editor in chief of new all-Union quarterly DISPUT, by PRAVDA UKRAINY correspondent; place and date not given: "Faith: Instead of Hand-to-Hand Combat—DISPUT"]

[Text] [Correspondent] In our country today there is an immense and genuine interest in problems of spiritual culture, the history of world religions, religious philosophy, and free-thinking. But this interest is frequently feverish while the answers in the press are self-serving and without system.

As one can see from the advertising flier, your journal DISPUT has as its main goal to fill in the gaps that have developed as a result of many years of forced and thoughtless imposition of state atheism, to provide the profoundest possible knowledge of religion and atheism, and to familiarize people with the Bible, the Koran, and various religious literature, and not through subjective and tendentious paraphrasing but through publication of the primary sources. Could you tell us something about the main sections, rubrics, and publications of DISPUT and your editorial plans for 1991?

[Deryugin] You quite correctly noted that the main goal of our journal is scholarly and educational. As we know, for many years religion, the church, and believers were subjected to wholesale criticism. Frequently atheistic propaganda was handled by extremely ignorant people who had never laid hands on either a Bible or a Koran or the works of religious thinkers. Such sorry excuses for agitators gleaned all of their knowledge from popular brochures written, frankly, on order. There is not even any need to discuss so-called atheistic education in the secondary and higher educational institutions. In classes, lectures, and seminars they affirmed the slogan "Religion is the opiate of the people" without even thinking about the meaning of Marx's formula, which was taken out of the context of all his other considerations.

But today, when a real religious boom has started in the country we are going overboard in the other direction. In the schools, tekhnikums, and VUZ's [higher educational institutions] they are hastily introducing courses in the history of religion. And the teaching of these courses is left completely up to the representatives of the clergy of one faith or another. And it is absolutely not taken into account that there can be students professing various religions, as well as atheists, in one and the same class or student group. All of them without exception are taught the history of religion through the prism of the views of some particular religious persuasion.

The situation is no better with the mass media. Sometimes the newspapers and magazines print obviously illiterate articles and commit quite unthinkable blunders. All this is partly the result of the fact that in our country there has practically never been any religious scholarship—the serious scholarly discipline to which a great deal of significance is attached in civilized countries.

Therefore, first of all I should like to emphasize that DISPUT is the first journal for religious scholarship in the USSR and it is called upon to seriously and thoroughly familiarize the reader with the history of world religions, free thinking, and atheism and to draw them into the world of the most interesting discussions by figures in science and culture, eminent theologians, and church leaders on subjects related to the spiritual life of mankind, doubts, quests, and discoveries.

Now a couple of words about our plans. We shall begin right with the first issue of 1991 to publish a new translation of the Bible with parallel commentaries from eminent scholars and theologians. Thus our regular subscribers will be able to obtain a Bible with alternative interpretations for their home libraries. These will be inserts that the readers can take out and collect, and they can have them bound if they wish.

DISPUT will offer the readers the first publication of the Sharia—rules of life and behavior of Muslims and the Muslim community. Critically topical scholarly articles and materials from discussions and roundtables on crucial problems of the history of religion, freedom of

conscience, relations between the church and state, and the secular and religious in artistic literature will be presented for the readers' judgment. Thus, for example, in the first issue we shall print: an article by A.I. Klibanov "Fools as a Phenomenon in Medieval Russian Culture," a work by V.A. Alekseyev "Has There Been a Godless Five-Year Plan in the USSR?" and an article by V.K. Kantor, "Petr Chaadayev as a Type of Free-Thinker." Our readers will learn about the life and activity of Patriarch Tikhon, the chief procurator of the Most Holy Synod, K.P. Pobedonostsev, the present Roman Pope John Paul II, and many other interesting personalities.

In one of the first issues we plan to publish an original work by M.G. Nechayev, "Bishop Andrey—Prince and Revolutionary," that discusses the spiritual quests and twists and turns in the life of one of the ideologists of Christian socialism, Andrey Ukhtomskiy, who was the head of the High Temporary Church Administration in the administration of Admiral Kolchak and then became an Old Believer. In the section called "Spiritual Legacy," we shall publish works of Martin Luther, Erasmus of Rotterdam, the religious reformers of Russia, the eminent philosopher A. Losev, and Arch Priest A. Men, who recently suffered a tragic death, and also the memoirs of unfairly forgotten thinkers and philosophers who are representatives of the Russian emigre community.

We address instructors of higher and secondary schools with a special rubric—"Lectern"—where we shall print courses in the history of world religions and free-thinking, cycles of lecture and seminars, and methodological instructions for conducting them. In the section called "Preserved for Eternity" we are printing never before published documents and materials on the subjects of the NKVD-OGPU [People's Commissariat of Internal Affairs-United State Political Administration] and the church; the 1917 revolution through the eyes of the clergy, from the personal archives of Patriarch Sergey (including letters to him from Gippius, Merezhkovskiy, and Berdyayev). A permanent section entitled "Materialism: Ammunition for a Dispute" is addressed to lecturers and propagandists and broad segments of the materialistically oriented public.

The journal will discuss new religious movements and parties in the USSR, as well as their programs and leaders. Among our authors will be such names as Metropolitan Pitirim, Cardinal Paul Pupar, philosopher and literary scholar Yu. Karyakin, and the poets A. Voznesenskiy and R. Gamzatov. I have just begun to read from DISPUT's editorial portfolio. Of course, it will also contain other interesting, sometimes sensational materials. But I do not want to give away all of our secrets yet. We shall keep something in reserve because otherwise it would not be so interesting.

[Correspondent] Sergey Vladimirovich, as you know, interchurch relations have now been aggravated in the Ukraine. Does your journal intend to cover this problem?

[Deryugin] Undoubtedly. We plan to hold a special roundtable discussion involving all interested parties and to discuss at it the problem of Greek Catholics and the Ukrainian Autocephalous Orthodox Church (UAPTs) and then to publish all the materials, and we shall try to give an objective evaluation of the state of affairs.

[Correspondent] One more question. Subscription campaigns for newspapers and journals have actually ended and you are just beginning yours. Why is that?

[Deryugin] When you say that the subscriptions have just ended you are only partially right. Basically, subscriptions have been closed for the periodicals that are distributed through Soyuzpechat. We decided to take another path. It will be possible to subscribe to DISPUT, first, in all bookstores that distribute subscription publications and, second, directly, independently. In order to subscribe independently it will be necessary to send a postal money order for 10 rubles (the price of the annual subscription) to this address: 117606, Moscow, Prospekt Vernadskogo, 84, journal DISPUT. It is absolutely necessary to give the postal code, address, surname, given name, and patronymic of the sender. It will be possible to subscribe to our journal until 1 February 1991.

[Correspondent] Sergey Vladimirovich, thank you very much for kindly agreeing to answer our questions. I would like to wish DISPUT success and that it attract readers by its innovative and objective material.

Armenian CP Congress Passes Resolution on Mass Media

91UN0782A Yerevan GOLOS ARMENII in Russian
13 Dec 90 p 1

[Unattributed report: "Resolution of the 29th Armenian Communist Party Congress on the Mass Media of the Armenian Communist Party"]

[Text] A resolution on mass media adopted by the congress notes that the crisis situation that has been created in the republic has also been reflected in the activity of the party press. There has been no decisive perestroika in the forms and methods of the work of party newspapers and journals. The work of some editorial offices is random, without clear-cut plans.

The resolution goes on to point out that the status of the party mass media is defined by the congress.

It has been deemed advisable to create a party information center for the Central Committee.

The congress expressed itself in favor of having the Armenian State Committee for Television and Radio Broadcasting organize its work with political parties and

public organizations on the basis of contractual relations. The Armenian CP Central Committee, the resolution notes, will try to create permanent cycles of television and radio broadcasts to publicize its own political aims and various spheres of activity.

It was proposed that the city and rayon committees of the Armenian Communist Party set up their own mass media on the principles of cost recovery, and the cofounders should be public and political organizations and associations.

The congress recommended that the Armenian CP Central Committee publishing house produce large print runs of the best works of Armenian, Soviet, and foreign authors, reference literature, and other output enjoying great demand.

Without laying claim to any kind of privileges of a legal or economic nature, the resolution states, at the same time the Armenian Communist Party does consider that it has a right to own and have disposal of property, including the publishing base.

The congress also deemed it necessary to further strengthen the links between party committees and the mass media. Party committees should organize their relations with the party press on the basis of mutual respect, political interaction, and creative cooperation. The Armenian CP Central Committee and local party organs should show concern for the wages of party journalists, and for improving the working and everyday conditions and social safeguards for workers in the mass media.

Tajik Draft Law on Press, Mass Media Published

Text of Draft Law

91UN0752A Dushanbe KOMMUNIST
TADZHIKISTANA in Russian 18 Nov 90 p 3

[Tajik SSR Draft Law: "On the Press and Other Mass Media"]

[Text] Chapter I: General Principles

Article 1: Freedom of the Press

The press and other mass media in the Tajik SSR are free. Every citizen of the republic has a right to free expression of his or her beliefs and opinions and the right to disseminate those beliefs and opinions in any form through the press and other mass media. Censorship of mass-oriented information is not permitted.

Monopolies on any type of mass media (press, radio, television, etc.) are not permitted.

Article 2: Mass Media

In accordance with the present law mass media are defined as newspapers, magazines, newsletters and other

periodical publications intended for public dissemination, appearing at least once every three months and having a circulation of over 1,000 copies, as well as television and radio broadcasts, movie newsreels, information agency reports and audio and audiovisual recordings and programs.

The mass media are represented by the editors of the periodical press and television and radio broadcasting (as well as information agencies and other institutions which disseminate mass-oriented information).

Article 3: Language in the Mass Media

The mass media perform their functions in the languages of the people whom they serve and whose interests they represent. The mass media also have a right to disseminate information in other languages.

The state guarantees the citizens of the Tajik SSR the right to use their native language and other languages of USSR peoples to receive and disseminate mass-oriented information in accordance with the USSR Language Law.

Article 4: Functions of the Mass Media

The editorial staff of a mass media outlet constitutes a legal entity and operates on the basis of its charter.

An editorial staff has the right to conduct production-related and commercial activities based on economic autonomy and cost accounting.

Procedures governing the granting of state subsidies to mass media outlets are to be established by the laws of the USSR and the Tajik SSR.

Article 5: Obligation To Provide Information

State, political and public organizations, movements and officials are obligated to provide necessary information to the mass media.

Article 6: The mass media may not be used to disclose information which constitutes a state secret or other secret specially protected by law, to urge the violent overthrow or replacement of the existing state and social system, to promote war, violence, cruelty or racial, ethnic or religious exclusiveness and intolerance, to disseminate pornography or to commit other criminally punishable acts.

Use of the mass media to interfere in citizens' private lives or to infringe upon their honor and dignity is forbidden and will be prosecuted to the full extent of the law.

Commercial secrets may not be disclosed without the consent of their owner.

Article 7: Tajik SSR Legislation on the Press and Other Mass Media

Tajik SSR legislation on the press and other mass media consists of the present law and other Tajik SSR legislative acts issued in accordance with it.

Chapter II: Organization of Mass Media Operations**Article 8: The Right To Establish Mass Media Outlets**

The right to establish mass media outlets belongs to soviets of people's deputies and other state organs, political parties, public organizations, mass movements, creative unions, cooperatives, religious associations and other legally established citizens' associations, labor collectives and individual citizens over the age of 18.

Article 9: Registration of Mass Media Outlets

The editorial staff of a mass media outlet performs its functions following registration of the mass media outlet in question.

Mass media are to be registered within one month from the submission of applications to state administrative organs as required by the Tajik SSR Council of Ministers.

The right to begin publication of mass-oriented information continues for a term of one year from receipt of the registration certificate. In the event that this term expires prior to publication the certificate shall be considered invalid.

The following information should be contained in a request for registration of a mass media outlet:

1. the founder;
2. the title, language (or languages) and location of the mass media outlet;
3. the target audience;
4. program goals and tasks;
5. proposed periodicity of publication, and amount and sources of financing.

Imposition of other conditions on registration is forbidden.

Article 10: Cases of Dissemination of Information Without Registration

The right to public dissemination of information without registration belongs to organs of state authority and administration and other state organs for the purpose of publishing official standardizing acts and other acts and bulletins regarding official and arbitration-related matters.

Enterprises, organizations and academic and scientific institutions have the right to create and disseminate

without registration informational materials and documents required for their operation. Also not requiring registration are activities connected with the manufacture through the use of technical means of printed, audio and audiovisual products intended for public dissemination or copied on the basis of manuscript rights.

It is not necessary to register mass media outlets which produce publications with circulations of fewer than 1,000 copies.

Article 11: Refusal To Register Mass Media Outlets

Mass media outlets may be refused registration only on the following grounds:

1. if the title of the mass media or its program goals and tasks are in violation of the principles contained in the first part of Article 6 of the present law;
2. if a registration organ has previously issued a certificate to a mass media outlet having the same title;
3. if the application has been submitted less than one year after the entry into legal validity of a decision terminating publication of the mass media outlet in question.

Refusal of registration is to be sent to the applicant in writing, indicating the grounds for the refusal as provided for by the present law.

Article 12: Registration Fee

A registration fee of an amount to be determined by Tajik SSR law is to be collected upon issuance of a registration certificate to a mass media outlet.

Article 13: Termination of Broadcast or Publication of Mass Media

Termination of the broadcast or publication of mass media is possible on the basis of a decision by the founder or the organ which registered the mass media outlet in question, or by court order.

The organ which registered the mass media outlet or a court may terminate broadcast or publication in the event of repeated violations of the first part of Article 6 of the present law within a period of one year.

If a mass media outlet has not published for over a year a new registration certificate must be issued before it may resume publication.

In the event that the founder decides to terminate the broadcast or publication of a mass media outlet the labor collective of its editorial staff or its editor (chief editor) has the priority right to establish a mass media outlet using the same name.

Article 14: Procedures for Appealing Refusal To Register a Mass Media Outlet or Decisions To Terminate Mass Media Operations

Refusal to register a mass media outlet or violation by a state organ of the one-month term for registration, as well as decisions to terminate the operations of a mass media outlet, may be appealed in court by the founder or editorial staff and will be considered by a court, including property disputes, according to procedures to be established by the Tajik SSR Civil Judicial Code.

Recognition of refusal to register a mass media outlet or a decision to terminate its activities as being in violation of the law will result in the overturning of the decisions appealed. Overturning of a decision to terminate the operations of a mass media outlet requires compensation for losses suffered by the founders, editorial staff or publisher, including loss of income.

Article 15: The Founder, Editor, Editorial Staff and Publisher of a Mass Media Outlet

The founder approves a program (basic principles) to govern the operations of a mass media outlet. The editorial staff or other institution which produces mass-oriented information realizes that program on a basis of professional independence.

The editor (chief editor) is appointed and released by the founder of a mass media outlet or else elected and released according to a procedure established by the editorial charter. The editor (chief editor) directs the work of the editorial board and the editorial staff of a mass media outlet and represents it in relations with the founders, publishers, authors, state organs, public organizations, other citizens' associations and individual citizens, as well as in court.

The editor (chief editor) bears responsibility for compliance with the requirements applied to the operations of a mass media outlet on the basis of the present law and other legislative acts.

The editorial board is to be formed according to a procedure outlined in the editorial charter. The editor (chief editor) serves as chairman of the editorial board.

The publisher of a mass media outlet may be its founder, a publishing house or any other legal entity which carries out the physical tasks (printing and circulation) involved in dissemination of mass-oriented information.

Article 16: The Editorial Charter of a Mass Media Outlet

The editorial charter of a mass media outlet is to be adopted at a general meeting of the editorial staff's journalistic collective by a majority vote with no fewer than two-thirds of its staff in attendance, and is to be approved by the founder.

An editorial charter regulates relations between the founder, editor (chief editor) and editorial staff and the

powers of the journalistic collective. A charter includes statements regarding procedures for the distribution and use of income received from the operations of the mass media outlet and other statements. An editorial charter must not be in violation of Tajik SSR legislation.

Article 17: Production-Related, Property and Financial Relations Between the Editorial Staff, Founder and Publisher of a Mass Media Outlet

Production-related, property and financial relations between the editorial staff, the founder and the publisher of a mass media outlet are regulated by existing laws and contracts.

Contracts define:

1. funds for support of the editorial staff;
2. the portion of income (profits) received from the mass media outlet's operations accruing to the editorial staff, founder and publisher;
3. the obligations of the founder and the publisher in regard to provision of appropriate production-related, social and working conditions for editorial staff members.

Article 18: The Mass Media and Copyright

When using published or broadcast materials the mass media are obligated to comply with laws and international standards regarding copyright.

Article 19: Publication Data

Each issue of a periodical publication should contain the following information:

1. the publication title;
2. the founder;
3. the name and initials of the editor (chief editor);
4. the serial number of the issue and its publication date for periodical publications, as well as press time for newspapers;
5. an index number for periodical publications disseminated via communications enterprises;
6. circulation size;
7. price (in the case of commercially distributed publications);
8. the addresses of the editorial staff, publisher and printing plant.

During each broadcast (or in the case of continuous broadcasting not less than four times a day) the editorial staff of television and radio broadcasts are obligated to state the name of the television or radio editorial staff.

Article 20: Monitoring Copies and Mandatory Copies

Free monitoring copies of periodical publications are to be sent immediately upon publication to the All-Union Book Chamber, the USSR State Library imeni V. I. Lenin, the State Public Library imeni M. Ye. Saltykov-Shchedrin, the republic book chamber, the Library imeni Firdousi, the founder and the organ which issued the registration certificate to the printed publication in question.

Monitoring and mandatory copies of printed publications are also to be sent to other institutions and organizations according to procedures established by the Tajik SSR Council of Ministers.

Article 21: Dissemination of the Mass Media

Dissemination of mass media product is carried out by the publisher directly or on a contractual or other legitimate basis by communications enterprises, other organizations or individual citizens.

It is forbidden to disseminate mass media product which does not indicate its publication data.

Prevention of the legal dissemination of mass media output, including by means of confiscation of a press run or a portion thereof, is not permitted except by legally valid court order.

Organizations which distribute the press do not have a right to refuse to conclude distribution contracts on political grounds.

Article 22: Preservation of Published Information and Television and Radio Broadcast Materials

The publisher should preserve manuscripts and copies of publications for at least one year from the start of their distribution.

The editorial staffs of television and radio broadcasts are obligated to preserve broadcasts materials for one month after broadcast and to keep a broadcasting log of live broadcasts, noting the subject of each broadcasts, the data and its beginning and ending times and the first and last names of its host. This log should be preserved for a period of one year from the date of the final entry in it.

Article 23: The Right To Refuse To Answer

A citizen or organization has a right to demand retraction by mass media editorial staff of published information which is not true or which infringes upon the honor and dignity of the individual or organization in question.

A citizen or organization regarding which information has been published by the mass media has a right, if that information infringes upon the rights or legitimate interests of the individual or organization in question, to rebut the information via the same mass media outlet.

Retractions and rebuttals are to be published in a special section or in the same column and under the same

heading as the report being retracted; this is to be done by newspapers no later than one month after receipt of the request, and by other periodical publications in the next published issue.

Retractions and rebuttals are to be read by a radio or television announcer on the same program or series and at the same time period no later than one month after receipt of a request to do so. The right to make a rebuttal may be granted directly to the citizen or organization requesting that a response be aired.

The editorial staff is required to publish a rebuttal of up to one standard typewritten page in length. Editing of the text of rebuttals is not permitted.

Article 24: Secrecy of Information Sources

The mass media are not required to name their sources of information. An individual who provides information has the right to request that his or her name not be made public. This request is binding on the editorial staff.

An information source is to be indicated only if necessary and at the request of investigative organs or a court in the event that this is pertinent to the investigation or consideration of a case.

Article 25: Official Reports

Mass media outlets founded by organs of state authority and administration are obligated to publish the official reports of those organs.

The editorial staff is obligated to publish free of charge and within a set period of time a legally valid court decision or decision by a state arbitration organ which stipulates that the decision in question is to be made public via a specific mass media outlet.

Chapter III: Relations Between the Mass Media and Citizens**Article 26: The Right To Obtain Information Through the Mass Media**

Citizens have the right to obtain in a timely manner reliable information through the mass media concerning the functioning of state organs, public associations and officials.

The mass media have the right to receive this type of information from state organs, public associations and officials. State organs, public associations and officials are to offer the mass media information in their possession as well as an opportunity to examine documents.

State, political and public organizations and movements and officials may refuse to give information only if such information is not subject to publication according to Article 6 of the present law.

Complaints regarding refusal to provide requested information may be made by representatives of the mass media to a higher-level organ or official and then in court

according to procedures established by the law on complaints concerning illegal acts by organs of state administration and officials who infringe upon citizens' rights.

Article 27: Use of Copyrighted Materials and Letters

Use of journalistic, literary, artistic or scientific works by the mass media is permitted so long as copyright laws are observed.

No one has the right to require a mass media outlet to publish materials rejected by the editorial staff unless such action is required by law.

Readers' letters may be published in abridged and edited form, so long as the letters' intent is not distorted. Materials reprinted from other mass media may not be distorted.

Article 28: Special Cases of Nondisclosure of Information

The editorial staff of a mass media outlet or an individual journalist has no right:

1. to name an individual who gives information on the condition that his or her name not be revealed, except when doing so is ordered by a court;
2. to disclose data from a preliminary investigation without the written consent of the procurator, investigator or individual conducting the inquiry; to make public any information which could lead to identification of an underage lawbreaker without his or her consent or the consent of his or her legitimate representative;
3. to predict in their reports the outcome of specific court cases or in any other way influence the court before such time as a decision or sentence assumes legal force.

Chapter IV: Journalists' Rights and Obligations

Article 29: A Journalist

The present law defines a journalist as an individual engaged in the collection, creation, editing or preparation of materials for a mass media outlet and connected with it by labor contracts or other contractual agreements or in any other way empowered to perform such activities.

Article 30: Rights of a Journalist

A journalist has the right:

1. to seek out, obtain and disseminate information;
2. to be received by an official in connection with the performance of his or her professional journalistic duties;
3. to make any type of recording, including recordings involving the use of audiovisual equipment, movies and photographs, with the exception of certain cases defined by law;

4. to visit areas of natural disasters and attend rallies and demonstrations upon presentation of identification verifying his or her status as a journalist;

5. to consult specialists in order to verify facts and circumstances connected with materials received;

6. to refuse to sign any material which violates his or her principles;

7. to remove his or her signature from any material the content of which, in his or her opinion, was distorted in the process of editorial preparation;

8. to stipulate secrecy of authorship.

A journalist also possesses other rights granted to him or her in accordance with the present law.

Article 31: Obligations of a Journalist

A journalist is obligated:

1. to carry out the program of the mass media outlet with which he or she is connected in a working relationship and to be guided by its editorial charter;
2. to verify the truthfulness of the information he or she reports;
3. to honor the requests of individuals who give information and ask that they be noted as the source, if the information is being made public for the first time;
4. to refuse any assignment from an editor (chief editor) or the editorial staff if it involves violation of the law;
5. to respect citizens' rights, legitimate interests and ethnic dignity and organizations' rights and legitimate interests.

A journalist also has other obligations stemming from the present law.

Article 32: Accreditation

The mass media may, by agreement with state, political and public organizations and movements, accredit journalists with those bodies.

An accredited journalist has the right to attend meetings and other events sponsored by the organization with which he or she holds accreditation, and he or she is to be provided with stenographic accounts, minutes and other documents according to procedures to be established by the organization in question.

The accreditation of foreign journalists can be revoked by the Tajik SSR Ministry of Foreign Affairs if they violate the Constitution and other laws of the Tajik SSR or systematically prepare and disseminate disinformation regarding the Tajik SSR's domestic or foreign policy to the detriment of its interests.

Chapter V: Responsibility for Violation of Legislation on the Press and Other Mass Media**Article 33: Basis for Responsibility**

Individuals found guilty of revealing confidential sources of information, abusing freedom of speech, refusing to provide journalists with information without cause, or disseminating information which is untrue or infringes upon individuals' honor and dignity can be held accountable for their actions in accordance with Tajik SSR legislation.

Article 34: Grounds for Exemption From Responsibility for Dissemination of Untrue Information

An editor (or chief editor), and likewise a journalist, does not bear responsibility for dissemination of untrue information through the mass media:

1. if the information in question is contained in official reports;
2. if it was obtained from the information agencies or press services of state and public organs;
3. if it is a verbatim account of speeches by people's deputies at congresses and soviet sessions or delegates to congresses, conferences and plenums of public organizations, as well as official speeches by officials of state and public organs;
4. if it is contained in original live broadcasts or in texts which are not subject to editing in accordance with the present law.

Article 35: Impermissibility of Interference in Mass Media Operations

Efforts by officials of state and public organizations to hamper journalists' legitimate professional activities or to force journalists either to disseminate or refuse to disseminate information constitute a criminal offense and are punishable by a fine of up to R500 (rubles).

Article 36: Responsibility for the Illegal Manufacture and Distribution of Mass-Oriented Information

The manufacture and distribution of mass media products without registration of the mass media outlet in accordance with the present law or following a decision to terminate its broadcasting or publishing activities constitute a civil offense punishable by a fine of up to R500, to be imposed by a people's judge, plus confiscation of the printed matter or other materials in question.

Repeated violations over a period of one year as described in the first part of the present article will result in criminal prosecution and are punishable by a fine of up to R1,000, either with or without confiscation of equipment belonging to the guilty party and used to manufacture or distribute information.

Article 37: Compensation for Moral Damages

Moral (non-property) damages suffered by citizens as a result of the dissemination by the mass media of untrue information or information which infringes upon a citizen's honor and dignity or causes him or her other non-property harm is by court order to be compensated for by the mass media as well as by the responsible officials and citizens. The sum of compensation for moral (non-property) damages is to be determined by the court.

Article 38: International Contracts and Agreements

International cooperation among the mass media is regulated by contracts and agreements concluded by the supreme organs of republic state authority and administration, the mass media themselves, journalists' professional organizations or other creative unions in accordance with international legal standards and the laws of the Tajik SSR.

If an international contract or agreement establishes different rules than those contained in the present law, then the rules contained in the international contract or agreement will be accepted.

Proposed Amendments

*91UN0752B Dushanbe KOMMUNIST
TADZHIKISTANA in Russian 18 Dec 90 p 2*

[Speech by D. Ashurov, chairman of Tajik SSR Supreme Soviet Committee on Development of Culture, Language, National Traditions and Preservation of Historical Heritage: "4th Tajik SSR Supreme Soviet Session: On the Press and Other Mass Media"]

[Text] Esteemed people's deputies!

As you are aware, on 18 November of this year the draft Tajik SSR Law "On the Press and Other Mass Media," prepared by the republic Council of Ministers, was published in the republic press for the purpose of public discussion. For the past three weeks our committee has been receiving numerous suggestions and comments regarding various aspects of this draft. After thorough study and analysis of these the members of our committee have come to the following conclusion: the greater portion of these suggestions are worthy of support and may be accepted.

On 30 November the newspaper DZHAVONONI TOCHIKISTON published an alternative version of the draft written by Dzhumal Davlat, a correspondent for that publication, some sections of which were also taken into consideration following study and discussion. I should note that the content of many articles of the alternative draft were reflected in various forms in the articles of the original draft. All totalled, during the discussion period our committee received over 60 suggestions and comments on the draft law.

Ibrokhim Usmon, a member of the USSR Journalists' Union, a docent in the Journalism Department of Tajikistan State University imeni Lenin and the dean of its Philosophy Department, rightly noted on the television show "Akhbor" that the appearance of a draft law "On the Press and Other Mass Media" is a good start, though this law is being passed much too late.

Bikhodzhal Rakhimova, Tajik CP Central Committee secretary, Usmatullo Rakhim, head of the Literary and Dramatic Radio Broadcasting Department, I. Turakhodzhaev, Leninabad city procurator, the staff of the State Committee on the Press, the staff of republic newspapers, Muso Mavlavi, secretary of the journalists' organization of the newspaper TODZHIKISTONI SOVETI, Khikmat Rakhmat, department head at the weekly OMUZGOR, M. Mansurkhodzhaev, candidate of historical sciences, and others expressed their worthy proposals regarding the draft law, for which we are grateful to them.

A few days ago a committee session was held; it was attended by newspaper and magazine editors-in-chief. The results of the discussion were presented at that session. Those attending approved the draft law.

After studying the suggestions received concerning certain articles of the draft law "On the Press and Other Mass Media" which had been submitted for public discussion changes were made in the draft. With your permission I would like to comment on some of those changes.

Article 2 is to become Article 1, and its second paragraph will be placed first.

The words "...with a weekly circulation of over 1,000 copies" will be removed from Article 2, "Mass Media."

The third paragraph is to be dropped from Article 6, as it is in violation of Article 1 of the law.

Article 9 will be amended to include the following statement: "Mass media published within the territory of Tajikistan or outside its borders, the founders of which are political parties, public organizations, mass movements, creative unions, cooperatives, religious organizations and other citizens' associations, labor collectives or individual citizens of the Tajik SSR, may commence operations only after they have registered with state organs in Tajikistan."

Article 9 will be amended to include a new point: the obligation not to publish materials which promote immorality and prostitution. In our opinion this is a fundamentally important principle, because recently materials of this nature have frequently appeared in the press.

The final paragraph of Article 11 will be changed to read thus: "Refusal to register is to be sent to the applicant in writing, indicating the grounds for refusal as set forth in the present law."

The first paragraph of Article 13 will be amended as follows: "Broadcast or publication of mass media output may be terminated by a decision of the founder, or the organ which registered the founder, or a court."

To Article 18 after the first sentence the following new sentence will be added: "In the event that a violation of copyright law (plagiarism) is committed the guilty parties will be prosecuted on the basis of legislation."

Point 1 in Article 24, which is titled "Secrecy of Information Sources," has been removed from the law. Why? Because this point opens up a loophole for subjective information and does not correspond to the principles of glasnost. Furthermore, under the law anonymous letters and statements are not supposed to be considered. I should add that all this is covered in detail in Article 28.

I ask that you read the second part of Article 25 in the following wording: "The editorial staff is obligated to publish free of charge and within an established time limit legally valid orders by a court or State Arbitration organ which stipulate that those orders are to be made public via a specific mass media outlet."

Point 2 in Article 30 will be changed to read: "To be received by an official in connection with the performance of professional journalistic duties."

The following sentence should be added to the final paragraph in Article 32: "The mass media and their founders may with the permission of official organs have correspondent in foreign countries."

We have brought Article 33 into line with Article 35 of the USSR Law "On the Press and Other Mass Media," which reads as follows: "Abuse of freedom of speech, dissemination of untrue information which infringes upon the honor and dignity of a citizen or organization, or attempts by journalists to influence a court will result in criminal and civil penalties in accordance with the laws of the USSR and the Tajik SSR."

"Responsibility for violation of legislation concerning the press and other mass media will be borne by guilty parties among the officials of state and public organs, as well as the editorial staff and editor (chief editor) of a mass media outlet and the authors of the reports and materials disseminated."

The draft has added an Article 26, which is as follows:

"Article 26: Consideration by a Court of Statements Regarding Publication of Retractions and Rebuttals"

"In the event that a mass media outlet refuses to publish a retraction or rebuttal or violates the one-month time limit established for publication of these items the citizen or organization concerned has the right to take the matter to court within one year of publication."

"Statements regarding an article or a refusal by a mass media outlet are to be considered by the court in accordance with the Civil Judicial Code."

I also ask the esteemed deputies to read Article 32, which is titled "Accreditation," in the following wording at the request of the Ministry of Foreign Affairs:

"Accreditation of foreign journalists is carried out by the Ministry of Foreign Affairs and revoked by that ministry if the foreign journalists violate the Tajik SSR Constitution or the Tajik SSR Law on the Press."

That is a brief overview of the suggestions and comments received by our committee. I ask you, esteemed deputies, to participate more actively in discussion of this draft law and our conclusions so that we can pass a worthy law on the press and other mass media.

FRG Delegation, New Association Meet To Discuss Environmental Technology*91WN0224A Moscow RABOCHAYA TRIBUNA in Russian 22 Jan 91 p 4*

[Report by Vladimir Lagovskiy: "Ecology and Market"]

[Text] Recently created by the USSR State Committee on Nature and the USSR Chamber for Trade and Industry, the Association for Business Cooperation With Foreign Countries in Environmental Protection is taking its first steps.

On the invitation of the association, a delegation of representatives of FRG business circles visited our country. They are solid partners. After all, as is known, the FRG has declared its intention to enter the 21st century as the most ecologically clean country. There is much we can learn from it. Our Western colleagues' interest in our country is understandable, too. The USSR is a practically bottomless market for technology and research and development in environmental protection. But is there an opportunity for trade in this market?

"Yes, there is," says Dr. K. Flakenstein, head of the department for economic development and environmental policy of the FRG Chamber for Trade and Industry.

First, he said, enterprise directors are well aware of ecological problems their industries are responsible for; they know what to do, and they do not sit idle. Second, they themselves have some excellent research and development results in the area of environmental protection. In other words, there is something to sell, and something to buy.

The doctor was concerned about just one issue: Would our enterprises be permitted to trade on their own?

"The association will undertake this task for them," assured General Director I. Norko. "We will help the enterprises to enter foreign markets."

Our newspaper also offered help—we invited both sides to participate in RABOCHAYA TRIBUNA "Ideas Exchange." Both agreed. Now we are waiting for new ecological ideas.

Plan for State Environmental Protection Funding Proposed*91WN0194B Moscow IZVESTIYA in Russian 9 Jan 91 Union Edition p 2*

[Article by Professor K. Gofman, department head, Central Economic-Mathematics Institute, USSR Academy of Sciences: "Where To Get the Billions To Save Nature"]

[Text] It is no longer a secret that the ecological situation in our country is significantly worse than that in countries with a developed market economy—with lower per

capita volumes of useful production and per hectare of economically assimilated territory. The market mechanism of price formation is incompatible with the artificial "cheapness" of natural resources. But according to the "laws" of administrative price formation, the price of ten pairs of panty hose is about the same price of a metric ton of the raw petroleum material of which they are made. Quite different proportions are characteristic of a market economy.

Does this mean that the transition to a market will ensure the solution of our ecological problems in and of itself? Of course not.

What must we do in order to achieve ecological recovery even during the transition to a market economy?

First of all, the time has come to reject utopian, hence dangerous, methods of assessing ecological safety. We have just single sanitary-hygienic norms for the entire country, supposedly guaranteeing the safety of the environment for people. Practically nowhere are these norms being met completely. However, in some cases, we may speak of levels exceeding norms two-three-fold, and in other cases, tens- to hundred-fold. We will be realists; a simultaneous and immediate ecological recovery for the entire country is impossible, and a gradation of levels of ecological danger throughout the territory of the country is needed, beginning with conditions absolutely impermissible even today (ecological disaster zones). Single minimum ecological safety standards must be established and guaranteed on an all-union level, becoming more stringent with time. Each republic must set for itself even stricter standards than the all-union ones, but their oversight must be provided by the republics' own resources, with complete compensation for possible economic losses in other republics (for example, in the event of cessation of inter-republic deliveries in light of shutting down ecologically harmful enterprises).

The transition to a market will include a wide-scale diversion of economic resources to the use to production lines working directly for man. Yet somehow the manufacture of environment-conserving equipment, materials, reagents and means of controlling the environment and ecological services of construction do not fall into the spectrum of such production lines, ranging from agriculture to consumer electronics. But surely it is the lack of such equipment today that limits ecological recovery.

If, during the transition to a market, the designated allocation of resources for environmental protection needs is not ensured (tripled in the next two-three years, as a minimum), all other stipulated measures of social defense (in the area of the subsistence minimum, guaranteed employment, etc.) will prove fruitless. A reminder that according to the data from a sociological opinion poll of the RSFSR urban population in 1989, 52 percent of those polled gave priority to ecological problems, 42 percent to the housing problem, and 38 percent to the quality of medical services. Only the shortages of

consumer goods and the growth of prices worry people more than ecological problems.

Our country's existing system of state control and standardization of the state of the environment has not justified itself, despite the attempts to reorganize it over many years. And here it is not only a matter so much of poor technological provision, and duplicating the functions of various departments, which is usually stressed. The lessons of Chernobyl, and not it alone, indicate that state control over economic activity cannot be objective (and accordingly, effective) when this activity is itself monopolized by the state. And here our system of state ecological control gets a truly unique chance for self-rehabilitation, on the basis of the denationalization of economic activity. Yet in our opinion, it is necessary even today to implement a range of measures to strengthen the social status and independence of workers in ecological control, standardization, and examination. Among these measures is increasing payment for their work to the level of the leading personnel of the military industrial complex and state security.

In accordance with a decision by the USSR Council of Ministers State Commission for Economic Reform, in 1990 an economic experiment of introducing a system of payment by enterprises for polluting the air, water, and stored wastes was conducted in 49 regions (cities, oblasts, and autonomous republics). The purpose of this system, developed by the USSR State Committee for Environmental Protection and the USSR Academy of Sciences in conjunction with a number of other departments, is to ensure enterprises' economic interest in environmental protection activity and to regulate the sources of its financing.

Payments for polluting the environment are one form of recompense for enterprises' utilization of inherently limited natural resources. Other forms of payment are envisioned as well, for land, its mineral wealth, water, etc. However, according to the Law on Taxes, these forms of compensation must be included in the cost price of production, while payment for pollution is taken from the enterprises' profit. This is hardly a inoffensive distinction for environmental protection. The revenues from payments calculated as cost price do not depend upon the enterprise's profitability. State budget organizations will be maintained on these revenues—geological exploration, land reclamation, and the suchlike. Approximately R6 billion annually is planned for collection in the form of payments for the needs of geological exploration, twice as much as during the "pre-reform" time. How can the temptation to explore deposits that the economy will need in the middle of the next century be avoided here?

The matter of forming the financial resources for environmental protection will be completely the opposite. According to the Law on Taxes, the resources will be limited by the size of the enterprises' profit, the maximum amount of the tax deduction from this profit. Thus, already programmed into the law is a deficit of

centralized financial resources for the purposes of ecological recovery, as well as insurance against ecological accidents. Nor is reserving these resources at the enterprise level stipulated. As a result, the rights and responsibilities of the republics and regions for the ecological situation remain unsupported by funding.

The authors of the new tax system were also stingy with creating financial advantages for environmental protection activity. Instead of the complete exemption from taxation for profits used by enterprises for environmental protection needs, only a 30 percent reduction is stipulated. Advantageous taxation of profit from the utilization of production wastes is for some reason permitted only for consumer cooperative enterprises. They say that broader-scale tax advantages for environmental protection activity will break the bank. But after all, concurrent with such advantages is also proposed the imposition of an ecological tax within the cost of ecologically harmful products (for example, highly toxic pesticides, agricultural equipment that destroys the soil) and products made with ecologically harmful technology (open-hearth steel). The imposition of such a tax would promote the exclusion from the market of ecologically harmful goods and simultaneously compensate the budgetary losses from the tax advantages for environmental protection activity.

As global experience indicates, the tax system combined with strict penalty sanctions for violating environmental protection norms is capable of providing a powerful stimulus for the formation of a market of environmental services, from the market for environmental protection equipment to a market for quotas (limits) for polluting the natural environment. The latter form of market of environmental services is just getting started in the world practice of ecological-economic regulation, and seems extremely promising for reducing public expenditures for ecological recovery. Recently 11 American scientists, winners of the Nobel Prize for economics, appealed to the U.S. Congress to support the Government's plan to establish this form of market for ecological services.

And seen in the long term are the formation of international markets of ecological services, the creation of international ecological banks and insurance institutions, and the coordination of national systems of ecological taxation.

We can and must become active participants in the formation of an economic basis for international ecological safety.

Deputy Minister Reviews Soviet Position on Global Ecology Concerns

91WN0210A Moscow NEDELYA in Russian No 2, 7-13 Jan 91 pp 4-5

[Interview with V. Petrovskiy, USSR deputy minister of foreign affairs and chairman of an interdepartmental commission for foreign policy and legal problems of cooperation in the area of protection of the environment,

under the rubric: "Timely Interview"; place and date not given: "Diplomacy and the Ecology"]

[Text] In the last two or three years the leadership of the country and the USSR Ministry of Foreign Affairs have paid noticeably more attention to elevating the question of the environment to an international level. An interdepartmental commission for foreign policy and legal problems of cooperation in the area of protection of the environment that has been created in the country has been summoned to contribute to improvement of the environment. The chairman of the commission is Vladimir Petrovskiy, USSR deputy minister of foreign affairs.

[NEDELYA] Vladimir Fedorovich, one may probably speak of ecological diplomacy to some degree. What does it mean at the present stage?

[Petrovskiy] To be brief, ecological diplomacy is called upon to provide the proper conditions for consistent and unhindered development of international environmental cooperation and for an energetic union of the efforts of the countries and peoples of the world in the interests of preserving the environment. At the present stage of development of this relatively new and quite intensive realm of international activity, it is a question of adopting concrete measures to correct the unfavorable ecological situation on the planet, in particular regions, and in individual countries. From declarations to practical actions—that is how I would formulate the credo of ecological diplomacy today. It is applicable to all levels of environmental work—global, regional, and national.

[NEDELYA] Speaking about a global level of ecological interaction, it is probably worth touching upon the activities that the United Nations is implementing toward this goal. In December of last year, M. Tolba, executive director of the UN Environment Program (UNEP), was in Moscow on an official visit. What do you believe was the significance of this visit for the development of diplomatic activity in an ecological direction?

[Petrovskiy] Our contacts with UNEP, as the leading environmental component of the UN system, are becoming more regular in recent years and are becoming more concrete. This is the fifth visit of the leader of UNEP to our country. In the course of negotiations between M. Tolba and leaders of the parliaments, the governments, and the environmental departments of the USSR and the RSFSR [Russian Soviet Federated Socialist Republic], as well as the USSR Ministry of Foreign Affairs, a wide circle of questions concerning international ecological cooperation and USSR participation in the activities of UNEP were discussed. A meeting with the Soviet "Green" community was held for the first time.

Today, when the question of preservation of the environment is one of the priorities of our state policy, the significance of cooperation with UNEP is increasing.

Created in 1972 by decision of the Stockholm Conference on Human Environment, UNEP is the central link and coordinator of international environmental activity.

This organization, with its headquarters in Nairobi (Kenya), has branches in all parts of the world today. At the present time, UNEP is involved in implementing about 1,000 projects and programs affecting the entire ecology of the planet. Functioning within the framework of UNEP are such major environmental programs as the Global Environmental Monitoring System, the Global Resource Information Data Base, the Global Information Network on the Environment, and the International Register of Potentially Toxic Chemicals... Being carried out under the guidance of UNEP are a UN Plan of Action To Fight Desertification, a Program of Regional Seas, a Global Plan of Action To Preserve Sea Mammals, a Plan of Action for Tropic Forests, a Program of Ecologically Rational Use of Inland Waters, and a Worldwide Policy Regarding Soils. Jointly with other organizations of the UN system, UNEP takes part in the execution of a Worldwide Climate Program, an International Geosphere-Biosphere Program "Global Changes," an International Program for Chemical Safety, an International Program for Education in the Realm of the Environment, and a program to help developing countries resolve environmental tasks. In recent years UNEP has acted as initiator in the adoption of such important environmental documents as the Vienna convention on preservation of the ozone layer, the Montreal protocol on substances that break down the ozone layer, and the Basel convention on monitoring the cross-border transfer of wastes and their removal, and under the aegis of that organization a global convention is being developed at the present time for preserving the planet's biological variety. Such rich opportunities with UNEP and its valuable accumulated scientific and practical experience in environmental work deserve the closest attention on our part, especially with the goal of resolving urgent ecological problems on the territory of the USSR.

Speaking about the recent visit of the executive director of UNEP to the USSR, I will note that he is making new opportunities available for translating our cooperation with that organization into the realm of practical resolution of ecological problems on the territory of our country. An example of this is the agreement on UNEP's participation in activities to clean up the Chernobyl disaster and in international projects to study and preserve Lake Baykal, as well as the agreement to give new content to the ongoing project under the aegis of UNEP to restore the Aral Sea. We also talked about preserving the Black Sea and the upper reaches of the Ob River. We discussed ways and means of promoting the idea of a Center for Emergency Ecological Aid and questions connected with preparations for the 1992 conference.

[NEDELYA] It is apparent that global ecological problems require long-term scenarios for their solution, but each day of delay may play a fatal role. Could you

demonstrate what kind of ecological tasks can be accomplished today on the basis of international cooperation?

[Petrovskiy] Indeed, we must immediately begin correcting the unfavorable—and in many regions disastrous—ecological situation that exists on the planet, first and foremost by taking those measures that are ripe for implementation. One of them is the idea put forward by the Supreme Soviet of creating under the United Nations a Center for Emergency Ecological Aid. Its activity could consist of regulation of planetary cooperation in ecological situations of crisis proportions. Such a center, after approval of minimal funds from the budget of the United Nations and of lodgings for a data base and with the agreement of governments to finance trips of their experts to regions of ecological disasters, could begin to function immediately. We also proposed creating a similar organ for the European Continent. Simultaneously it would be possible to begin making up a register of the most dangerous industries and enterprises functioning in the various countries.

Another possibility is the regulation of an international system for monitoring the ecology of Earth from space. We believe that the numerous flight vehicles of the different countries moving through outer space with their unique equipment on board could be used more appropriately for ecological goals. In particular, the Soviet Union has expressed its readiness to cooperate in the creation of a space laboratory or a piloted orbital station that would be exclusively involved in monitoring the state of the environment. The Soviet Union has proposed that the projects "Priroda" and "Almaz," being carried out in the USSR, be put to this use. It could be a question of launching, perhaps in 1992, the specialized module "Priroda," which is equipped with an array of the necessary scientific apparatus, and joining it to the orbital piloted station "Mir." A Soviet space station of the "Almaz" series could also serve as a good base for monitoring the environment and studying the natural resources of Earth.

I would especially like to point out the opportunity opening up for environmental cooperation in conjunction with disarmament, reduction of military budgets, and conversion. The scientific and technological potential are very great here, and their use toward creative goals in the protection of the environment is an important, urgent task.

On the whole, any area of environmental work, even if it is directed at the distant future, will also result in certain benefits and practical achievements today that should be developed and encouraged. Anyway, the main thing in my opinion is for everyone to put his own house in ecological order: After all, global solutions, like global problems do not exist independently, but are made up of national, regional, and subregional components.

[NEDELYA] I would like to hear how domestic and international efforts can supplement each other in the resolution of ecological problems in our country.

[Petrovskiy] I will cite several examples of how they compliment one another. The most apparent of them is international cooperation in the matter of cleaning up the disaster at the Chernobyl nuclear power plant. Not long ago the General Assembly at the United Nations adopted with the general support of all of its members a special resolution that poses the task of mobilizing international aid and stipulates a whole range of measures in that area. The resolution, which was coauthored by 120 member-states of the United Nations, is a unique document that for the first time in the history of the United Nations calls upon all the organizations that are part of its system to respond to our national tragedy.

Another illustration is the implementation of a USSR-UNEP international project to render aid in the preparation of a plan of action to restore the Aral Sea. An international examination that is being conducted of the ecological and socioeconomic situation in the Aral region with the participation of leading Soviet and foreign specialists is expected to provide a basis for concrete recommendations for the restoration and life of that region.

The Baykal international center of ecological research, officially opened at the beginning of last December in Irkutsk, deserves special mention. The center, which is an international voluntary, nongovernmental organization, was created on the basis of the Limnological Institute of the Siberian branch of the USSR Academy of Sciences with the goal of uniting the efforts of Soviet and foreign scholars in the study and preservation of the unique ecosystem of Lake Baykal and in the comparative study of other major water ecosystems. The center was opened to unite all interested national and international organizations and foreign scholars.

I also stress such long-term trends in ecological cooperation as preserving the ecosystem of the Black Sea. This year we expect the signing of an international convention to preserve this very major water basin from pollution. The Soviet Union, taking part in devising this document, is very directly interested in increasing cooperation in the area of the Black Sea. It is also closely tied with protecting the Mediterranean Sea from pollution.

[NEDELYA] As you know, the UN Conference on Environment and Development is taking place in 1992 in Brazil. What can your country expect from this major ecological forum?

[Petrovskiy] We intend to take a very serious part in preparing for and conducting this conference, seeing it as the main event in international environmental cooperation in the closing century. Our country was guided by these considerations when it proposed that the Brazil forum be conducted at the highest political level. The course of preparations for the conference are even now oriented toward weighty results and decisions that will lay the foundation for the stable and ecologically safe development of mankind. In particular, the understanding is forming that the conference should end with

the adoption of such fundamental documents as a Global Strategy of International Environmental Cooperation under the name "Agenda for the 21st Century," a document on the foundation of an ecological ethic and global conventions on climate and on preservation of biological variety. It is proposed that all these documents be accompanied by concrete measures of support in financial and organizational aspects. Naturally, the decisions that are made will put strict obligations on all countries, including the Soviet Union. The 1992 conference is able to stimulate environmental efforts inside our country and orient us toward the kinds of models of ecological development that will guarantee a cautious attitude toward the environment.

[NEDELYA] The "Green" movement, a large nongovernmental ecological organization, plays a traditionally active role in environmental activity. What can you say about the influence of environmental movements on ecological diplomacy today?

[Petrovskiy] I am convinced that domestic policy in the realm of preservation of the environment today, as never before, is in need of society's contributions. Let us say candidly that, to a great degree, the insistent calls to action of ecologists have served as the decisive trigger to renewed environmental action in our country, including participation in international ecological cooperation. The need of a dialogue with nongovernmental organizations is today an indispensable characteristic of any international measure in the area of the environment. In truth, society is now changing from a partner in the grand policy to its creator. The most important landmark in this direction is the final document of the Sofia conference on protection of the environment of member-states of the all-European process, which established the inalienable right of individuals, groups, and organizations involved in problems of the environment to freely express their opinion and to receive, disseminate, and openly discuss materials concerning environmental problems. These ideas received further reinforcement in the recently signed Parisian Charter for Europe. It is also necessary to note the European regional conference on the environment and stable development conducted in May 1990 in Bergen—at its first stage society took part on an equal level with state delegations.

A large program for nongovernmental organizations and so-called "independent" sectors is envisaged by the preparatory process of the 1992 conference, and we are counting on the active participation of Soviet society in the enactments of that program.

UNEP Director Tolba Views Soviet Ecology Concerns

91WN0194A Moscow PRAVDA in Russian 26 Dec 90
Second Edition p 5

[Interview with UNEP Executive Director Mostafa Kamal Tolba by PRAVDA Correspondent R. Fedorov: "All the Colors of Life"; date, place not specified]

[Text] Mostafa Kamal Tolba is the executive director of the UN program for the environment, abbreviated UNEP. This organization, the central link of environmental protection work within the UN system, was created in 1972 to develop the foundation of the comprehensive scientific management of the biosphere's resources, to preserve it from destructive influences, and to disseminate ecological knowledge. Since 1976, the activity of UNEP has been headed by M. Tolba, a citizen of the Arab Republic of Egypt, a prominent scholar known for a number of works on plant diseases and the physiology of microorganisms who has continually shown an interest in ecological problems. At the invitation of the USSR MVD [Ministry of Internal Affairs], he was recently in our country for a regular visit.

"As always with Soviet scientists, as well as with official figures, we conversed in the same language, finding complete mutual understanding," he said, sharing at a meeting with journalists his impressions of his conversations in the Soviet Union.

PRAVDA Correspondent R. Fedorov asked UNEP Executive Director M. Tolba to respond to certain questions on the current international cooperation in solving ecological problems.

[Fedorov] In your speech to journalists, you said that not one of the ecological problems in our country is unique. Apparently, contacts and efforts through UNEP can be all the more effective. The international project for the restoration of the Aral Sea is being implemented under its auspices; within the framework of this project an international group of experts conducted a field expedition in the Aral area last fall, and the international symposium: "The Aral Sea Crisis: the causes of its origin and paths to a solution" was held. Yet the Aral Sea is not our only hot spot. There is one no less painful—Chernobyl. There is the problem of Lake Baykal, the problem of the Black Sea, encompassing an enormous region and the vital interests not only of our country alone, but those of a number of other countries as well. What are the prospects for development of international joint action in solving these problems?

[Tolba] As far as Chernobyl is concerned, then perhaps here we should speak not of prospects, but of deeds accomplished. There has been created the International Committee for Chernobyl Issues, and, I think, the entire UN system is prepared to participate in attempting to render the appropriate assistance. Here the plans for further activity should be divided into short-term and long-term plans. Among the former, the main task remains the establishment of the maximum boundaries of the regions for occupation in those oblasts contiguous with the site of the accident; the maximum permissible levels of radiation under which the population could stay in place and continue agricultural activity should be determined.

Concerning Lake Baykal. I would like to note that the Baykal International Center for Ecological Research has

already been created. We are now trying to determine what direct role UNEP could play in its activity. We have agreed that the appropriate Soviet organs will inform us of what they would like that role to be by the middle of next year.

By the very nature of its geography, the problems of the Black sea are international. The preparation of the Convention for cooperation of the Black Sea countries resolving these problems is now drawing to a close. It is expected to be signed in early 1991. It will be supplemented by three protocols on cooperation. Immediately after the signing of these important documents, UNEP intends to get involved in implementing the plan of concrete actions for preserving the Black Sea.

[Fedorov] The first question concerned the ecological problems of the Soviet Union and UNEP's participation in solving them. Yet, first of all, these problems, as you have already noted, are not unique. Secondly, there are global problems. What contribution to the cause of preserving the environment of the entire planet could Soviet scientists make? In which fields of science and in which regions of the Earth can their knowledge and experience be used for the greatest return?

[Tolba] There are very, very many areas of science in whose development Soviet scientists can assist the international community. I can cite the following off the top of my head: atmospheric research, problems of climatic change, global warming, the depletion of the atmosphere's ozone layer, work in protecting the ocean. There is the problem of defining the interconnections existing between the atmosphere and the Earth; you have first-rate scientists in this area. Another problem is the preservation of the planet's biological diversity. I met with State Environmental Protection Commission Chairmen N.N. Vorontsov, a scientist himself, and I was convinced that he will lend great support to work in this area.

Additionally, I would like to cite the global problem of desertification. Your scientists are not merely making a scientific contribution in this area. Over the course of many years, they have lent invaluable assistance in training specialists from developing countries.

And more. I met with Academician N.P. Laverov, deputy chairman of the USSR Council of Ministers and chairman of the State Committee for Science and Technology. We discussed issues such as the creation of ecologically safe technologies, new ecological types of transportation, new materials, and the search for ecologically clean types of energy. In all this, the participation of Soviet scientists and their aid to the world community may be quite ponderable.

[Fedorov] In general, the planet's ecological problems are known; solving them requires both deep study and effective, ceaseless efforts taken on its basis. Yet there exist and may appear regions of ecological disasters of a catastrophic nature, in which immediate reaction is needed. In the UN General Assembly in December 1988,

M.S. Gorbachev proposed the creation of a center for emergency ecological aid under the UN. What is being done to realize this proposal?

[Tolba] In 1989, the UNEP Board of Managers asked me to learn the opinions of the governments and organizations of the UN system regarding the idea of such a center. We were convinced that the proposal is very widely supported. Nevertheless, a fairly large number of differing opinions are being expressed as to how this center should be created, what its activity must be. There is a need to recall that there is also a Regional European Center for Emergency Ecological Aid being created at the initiative of the Soviet Union. Here we are also taking part in that. We hope that in the near future concrete plans for the creation and functioning of these centers will be developed, with consideration for what Soviet President M.S. Gorbachev has proposed. I intend to present these plans at the upcoming session of the UNEP Board of Managers in May 1991.

[Fedorov] An event important to the fate of the planet is not so far off: The convocation of the UN Conference on the Environment and Development is planned for May 1992 in Brasilia. In particular, proposed for the conference is the adoption of an international convention on the preservation of biological diversity in nature—all the currently existing species of living organisms. What is UNEP's role in preparing for it and what principles must be laid in the foundation of such a draft law? After all, if you look through the pessimist's eyes, there is no room for wild animals—the world's population is growing, demanding ever greater areas for agricultural land, cities, industrial hubs, and transport communications.

[Tolba] A great deal has been done within the framework of UNEP in the process of preparing for the most important 1992 conference. In particular, as early as February 1991 we plan to begin negotiations on the defense of biological diversity. We hope that there will be prepared by June 1992 a quite well-grounded document that will permit governments to agree to the list of measures mandatory for all to preserve the diversity of the living inhabitants of the planet, and ensure the allocation of the financial resources necessary for this.

Now concerning the actual problem of protecting all biological resources. Is it possible to preserve the biological diversity of the Earth? I consider this a problem that can be solved. Of course, it is hardly expedient to speak of protecting all regions with genetic resources or of the universal preservation of all living species. I think that it is important to set aside and protect a sufficient quantity of areas of the planet in which dwell the maximum number of diverse species, in which the planet's genetic resources are represented as richly as possible. Having solved that problem, we will manage to preserve the living polychromatic nature of the Earth.

Official Describes New 'Ekolas' Ecological Association*91WN0219C Moscow TRUD in Russian 18 Jan 91 p 4*

[Interview with Professor V. Akovetskiy by V. Karpov: "Clean Air—A Reality"]

[Text] "Ekolas," a new ecological association, has been created. It was founded by 35 of the country's leading enterprises and organizations. Still, we have already witnessed the birth and rapid extinction of such firms. What could yet another one offer us? We asked this question of the vice president of "Ekolas," Professor V. Akovetskiy.

[Akovetskiy] It is true that there are many ecological associations. But is also true that the problem of nature protection is an urgent one. We intend to do what the USSR State Committee for Protection of the Environment, which in contrast to us possesses no productive capacities, cannot do. "Ekolas" operates on the basis of full cost accounting, you see—it hasn't taken a kopeck from the state, and it won't. Our principle of operation is based on signing contracts and carrying out our assignments.

[Karpov] And what specific projects have you carried out, or are now carrying out?

[Akovetskiy] As an example we drew up the "Ecologically Clean Region" program and submitted it to the Moscow City Soviet and the Moscow City Executive Committee. Or another example: We developed equipment that could reveal radioactively dangerous products at meat packing plants. Our first order is being filled for Mogilev. In the very near future we will conduct an expedition aboard the scientific research vessel "Akademik Krylov" on the Black and Mediterranean seas. To put it simply, we will make observations of the water and air with the assistance of the satellite Resurs-01.

[Karpov] As I understand it, you intend to make use of the capabilities of defense industry and of enterprises undergoing conversion.

[Akovetskiy] Yes. Unique ecological equipment is operating at a number of defense plants. More of it must be made—then both the air and the sky will be clean. This is an extremely complex task. And we will also be counting on help from foreign companies.

Institute Director Examines Environmental Degradation in Northern Siberia*91WN0213A Moscow SOYUZ in Russian No 49, Dec 90 p 14*

[Article by V. Kotlyakov, director of the Institute of Geography of the USSR Academy of Sciences and USSR people's deputy: "There Is No Retreat—Behind Us Is the North Pole"]

[Text] The Arctic and the North are the last major reserve of territory and resources in our hemisphere and in our country. Here, over an area comprising almost half of the Soviet Union, less than 12 million people live presently; but already visible here are also alarming gaps and defects in the policy and practice of economic, social, and cultural development.

Each year prospectors and drilling technicians in the north of Western Siberia abandon more than 1,500 so-called pits, that is, exhausted bore holes. In the south, perhaps, nature would somehow heal itself of these wounds. But in the tundra they remain for many years as monuments to ecological savagery. The disorderly movement of tractors and off-road vehicles, especially in the summer, is similar barbarity.

The time has come to seriously review our plans: Are we so in need of the resources of the North, and is there no alternative to them?

At the same time the northern environment is in need of a package of specific legislative acts and administrative regulations. We need a special normative environmental base—in particular, stricter rules on allowable concentrations of pollutants and rules on allowable volumes for their disposal. Technologies that produce little or no wastes and cleaning equipment should be introduced here sooner than to other less ecologically vulnerable places. At present the reverse is taking place.

For example the Norilsk mining and smelting plant, releasing into the atmosphere about 2.2 million tons of sulfur oxide annually, is in need of immediate, emergency measures. After all, the self-cleaning action of the air works very slowly here inasmuch as stagnant anticyclonic processes predominate in the atmosphere. The processing of the waste sulfurous gas into sulfuric acid, widely practiced at mining and smelting plants in Canada, is being introduced extremely slowly here.

As a result it is very difficult to breathe in Norilsk, and for a radius of 200-250 km the sparse forest has almost completely died off and will require 150-200 years to renew itself. In the currents of the general circulation of the atmosphere the sulfurous gas reaches the Scandinavian countries, giving rise to serious complaints on their part. This, incidentally, has been worsened by the ecologically ignorant, purely parochial decision to build a very high chimney, of several hundreds of meters, for exhausting gases. This did not improve the situation in Norilsk significantly, and abroad the construction of "super-chimneys" was understood as a desire to send wastes to our neighbors.

The ecological imperative also dictates far lower threshold criteria for the concentration of industry than in regions in the middle latitudes. The northern environment does not tolerate the kind of gigantic territorial and production complexes of which we were recently so proud. One does not need to go far for examples—there are the Kola Peninsula, the north of Western Siberia, and Taymyr. The tendency toward decentralization of the

economy is paving a road for itself all over the world, but in the North it is most appropriate and timely. However, the mania for size in the development of the northern territories continues to flourish. It is enough to point out the gigantic facilities of the natural gas and chemical plants in the north of Western Siberia and the Turukhanskii hydroelectric station, with a reservoir 800-1,000 km in length.

The methods of evaluating and calculating the damage caused to the northern environment by economic activity do not correspond to today's realities at all. According to the figures of the managing departments here, which are based on immediate pragmatic advantage, the resources of the North as well as of all the local environment are worth little. For example, the damage from the destruction of a hectare of tundra, calculated only according to losses to the hunting and fur industry and to reindeer breeding activities, is evaluated at no more than 50-100 rubles [R] whereas, for example, destruction of a hectare of Kursk forest and steppe land costs R15,000-20,000.

More often than not the figures are clearly arbitrary. The value of all the renewable resources over the 21 million hectares of the Yamal Peninsula that have been to one or another degree destroyed in the development of the oil and gas producing territory is determined by planners at R10.9 billion. That is practically R500 for a hectare. At the same time the total damage to the environment of the peninsula up to the year 2010 is calculated by the same people at R313 billion—only R15 per hectare! Meanwhile N. Vorontsov, chairman of the USSR Goskompriroda [State Committee for the Protection of Nature] writes in the newspaper SOVETSKAYA KULTURA that today alone, never mind up to the year 2010, 6 million hectares of reindeer pastures have been ruined in the north of Western Siberia at a cost of R60 billion. That is, a hectare of tundra is now valued at R1,000. No one knows the real price of the northern territories in regard to their role in the global equilibrium of the climate and their influence on the temperature and quality of the natural waters and air. One thing is certain: It is much higher than all the estimates cited above.

The ministries developing Yamal are not planning to spend more than five percent of the R40-50 billion of all capital investments on environmental measures. World-wide experience shows something quite different: On the Alaskan oil fields and pipeline that figure was 20-25 percent.

It is long past time to change the existing approach to the evaluation of resources, which contributes to the loss of the northern environment. Evaluation of the damage should be conducted according to the cost of restoring the environment. And this is very costly, long-term, and labor-intensive. The biotechnics of the recultivation of tundra vegetation are still very poorly developed, and this means that we must develop the North twice as cautiously.

The environment's poor ability to reestablish itself in the North and especially in the Arctic demands a high ratio of protected territories: Preserves, national parks, etc. In Alaska, for instance, more than 30 percent of the territory is specially protected. In our North, such regions comprise only a few percent.

It must not be said that the need for a special ecological and economical approach to the development of the North has not been recognized. Moreover, it has even been decreed. Let us recall the quite satisfactory decree of the USSR Supreme Soviet Presidium of 26 November 1984 on improving environmental protection of the Far North. But it turned out to be completely ineffective, and it is simply unknown or ignored in economic activity. To a great degree this is because, in accordance with existing legislative practice in this country, the Supreme Soviet only determines the basic trends of the law, and the specific forms of its implementation are established by so-called "legally binding acts" which are worked out by the Union and republic councils of ministers, but primarily by ministries and departments. And, of course, the geological, oil, and gas ministries are not at all in a hurry to draw up regulations, for example, on strict limitations stipulated by law on the movement of off-road equipment across the tundra.

Has not the time come, if only in such important spheres as protection of the environment, to ensure that acts which are adopted by the USSR Supreme Soviet have not only moral and legislative force but also final and judicial force? It is done that way in the United States, where environmental laws adopted by the Congress have a supplement—a list of concrete measures which are binding on departments, companies, and individual people.

Strategic questions of economic policy in the North demand a special approach. We need financial and economic protection of the northern territories and a very careful attitude toward self-financing, cost recovery, and regional economic accountability. We need to increase the share of deductions to the local budget from the profits of enterprises under Union jurisdiction and from the turnover tax. This tax is small at present, which reduces the opportunity for socioeconomic development of the territory and presents cause for accusations of the colonial nature of relations between the "center" and the "outlying areas." Indeed, up to 70-80 percent of the taxes from oil industry companies go into the treasury of the state of Alaska, while in Yakutiya only 30 percent to a maximum of 40 percent of the profits of mining enterprises go to the budget of the republic.

In any case, under the special natural and economic conditions of the North and even more of the Arctic, it is extremely dangerous to insist on stereotypes of economic reform that are appropriate to long-developed regions in the middle latitudes. A new economic policy in the North should be conducted with respect for the stage and degree of development of the territory, its geographic conditions, and the management structure of the sector.

And that requires due legal formulation. Otherwise the resources and environment of the country's last ecological reserve will be lost over a matter of several years.

It is time to make up an ecological and geographic register of the northern territories and work out a regional policy on the basis of it. Regions with very difficult and demanding natural and economic conditions should be left "in reserve" until reliable engineering and technology appropriate to those conditions are developed. And alternatives should be sought. For example, a proposal to leave Yamal in peace for the time being and direct our efforts toward increasing extraction of natural gas in the Nadym-Pur-Tasovskiy region deserves attention.

The complex and very large problems of the northern peoples demands especial concern. The basic misfortunes of the indigenous population of the North are well known.

Unfortunately, ethnographic, sociological, and economic sciences have not offered a uniform answer to the question of the roads for development of the sparse peoples of the North. These peoples, of course, will choose their life's path themselves. But they need help. First and foremost they themselves and their territories need to be securely protected from the press of industrial development which, in essence, has become the basic cause of their misfortunes. Apparently we need to set off certain regions that industry is forbidden to enter, or at least ensure that the activities of the ministries and departments are put under the full control of the local ethnic soviets.

In this respect as well, the experience of Alaska is again quite instructive. The Eskimos and Indians were paid enormous monetary compensation (billions of dollars during 1971-1990), and significant territories were allotted for their absolute control. The same practice is being carried out in the Canadian North as well. But simple monetary compensation, which our ministries are prepared to undertake and which at first may prove attractive to the local residents, does not resolve the problems in the social, ethnic-cultural, and demographic spheres. It is better to count on social and ecological protection of regions where the indigenous population lives.

Our opponents frighten us with the picture of Indian reservations, which propaganda has painted in gloomy colors that rarely correspond to reality. "Reserve" in English means a preserve, and the goal of a reservation is to limit not the rights of the people living on it but the rights of corporations aspiring to that land. Our North also needs autonomous territories with special rights for the local peoples. In accordance with the example of

international practice we should strictly codify the exclusive rights of the indigenous residents to hunt and trap in these regions, because this is their sole means of existence. Mass unorganized hunting or, more accurately, poaching, should be halted there.

History shows that protection of the indigenous population from an alien culture or, more properly, wise limitation of its influence, should not be looked upon negatively.

It is necessary to take into account the significant difference in the levels of social development, which demands an extremely cautious "entry" by the indigenous peoples into modern civilization. Over the course of more than two centuries of Danish colonialism the Eskimos of Greenland were strictly isolated from the Danes and their work at the enterprises was specially monitored. As a result, the ethnicity of the Greenland Eskimos was preserved on the whole better than in Canada and Alaska, where such a policy did not exist for a long time. Moreover, in 1979 Greenland became the first autonomous northern state within the framework of the Kingdom of Denmark. Real priority of the Eskimos over Danes in all spheres of public life and even in some aspects of foreign policy was established there.

Establishment of ethnic and territorial autonomy in the North is a worldwide tendency, and it is not passing us by. Legislators should look ahead and attentively familiarize themselves with what our neighbors around the Arctic are doing. In general we send out many delegations, representing individual sectors of science and the economy or individual regions, for this sort of thing. But is it not time to think about a comprehensive exchange? Comprehensive delegations of the USSR Council of Ministers State Commission for Arctic Matters on one side and, for example, an American Interdepartmental Agency for Policy on Arctic Research on the other or specialized parliamentary delegations could discuss key problems in research and development of the North.

If we do not fundamentally change the way we act in the North in the near future, we will simply lose that region by destroying its environment and leading the Northern peoples to complete degradation. Yes, salvation of the Arctic demands not only changes in policy but also substantial money. In this context the following thesis is especially apt: Today's expenditures are far smaller than the direct and indirect losses from the loss of the whole region. The Arctic may become a good model for a new ecological and economic approach to the development of territory.

But for that we need broad discussion in the commissions and committees of the USSR Supreme Soviet with the goal of preparing a package of parliamentary and governmental solutions concerning the North and the Arctic that touch first and foremost upon ethnic, socioeconomic, and ecological aspects.

Residents Ask RSFSR To Investigate Defense Activity Safety in Maritime Kray

91WN0219D Moscow OGONEK in Russian No 52,
22-29 Dec 90 p 4

[Letter to the Editor]

[Text] We are residents of the settlement of Shkotovo-22 (Dunay Settlement), Maritime Kray.

On the night of 30-31 August of this year there was a fire at naval artillery dumps located not far from the settlement, as a result of which ammunition stored there began to explode. The bursts scattered artillery projectiles over the entire district, and they even fell in the settlement. There were cases where dwellings, garages, a schoolyard, children's day care centers and other buildings were hit. The settlement's inhabitants hid all night in a bomb shelter, in basements, behind the walls of houses, and behind bayshore cliffs. Luckily for us, most of the projectiles did not explode when they fell.

The same sort of fire occurred at the same dumps in 1978. The command of the Pacific Fleet did not reach the right conclusions and did not implement the right measures, as a result of which a second incident occurred, presenting a danger to the inhabitants of territory on which naval facilities are located.

In 1985 the nuclear reactor of a submarine standing in our bay for repairs exploded. As the newspaper ARGUMENTY I FAKTY recently reported, the Gulf of Amur was recently contaminated. You could imagine, then, what happened in our locale. All of these incidents are still being concealed from the public. We are certain that every effort is being taken to cover up this last incident as well.

There are still many dumps containing ammunition of various types, radioactive waste and rocket fuel burial grounds and other naval facilities just around our settlement alone. Given the present situation in the country and in the navy, accidents of even greater horror can be anticipated. The inhabitants of the territory are hostages of the navy. All of this is happening because the land on which we live belongs for practical purposes to the USSR Ministry of Defense; the local soviets have no real power here, and public organs are not maintaining any sort of surveillance over naval activities.

We would very much like the RSFSR Supreme Soviet to send a commission here to investigate the accidents and the navy's activities in Maritime Kray in general. And also to examine the question as to returning all land on which the USSR Ministry of Defense is conducting its business to its real owner—the local soviets—together with all ensuing rights.

Inhabitants of the settlement of Shkotovo-22 (Dunay Settlement), 116 signatures

Bank for Ecological Funding Formed in Tatarstan

91WN0219A Moscow PRAVDA in Russian 15 Jan 91
Second Edition p 3

[Article by Yu. Balashov: "'Green' Rubles"]

[Text] The country's first Ecological Bank has been created in Tatarstan with charter capital totaling 24 million rubles. Besides "ecologically clean" organizations such as the republic's Committee for Protection of the Environment and Kazan University's ecological faculty, the founders of this new type of credit institution include, of all things, certain enterprises of Kazan known to be evil violators of nature protection laws. But the contradiction here is only an apparent one: The violators know that only by uniting their resources will they be able to make their way out of today's crisis. The Ecobank will provide money primarily to those who are ready to invest it into construction of nature protection facilities, and it will simultaneously have a fiscal impact upon violators, who will begin paying fines as of January of this year.

Moldovan Ecological Movement Established in Kishinev

91WN0219B Kishinev SOVETSKAYA MOLDOVA
in Russian 20 Nov 90 p 4

[Article from Moldova-Pres: "'Ecological Movement' Association Created"]

[Text] The constituent congress of the association: "Ecological Movement of the Moldovan SSR" was held in Kishinev on 15 November.

A particular objective of the program of the new formation, which brings together all of the republic's organizations of this profile, is to summarize the immediate ecological problems and issues encountered in the cities and rayons, and to organize a mass campaign having the purpose of persuading the government to proclaim the territory of the Moldovan SSR an "ecological disaster zone." This would facilitate development and financing of major ecological programs such as "Dnestr," "Budzhak" and "Prut." Another objective is to develop the conception behind a unique "survival program" called upon to concretely influence economic factors with the goal of reducing pollution of the environment, improving the ecological balance of geosystems and upgrading the people's living conditions.

The idea that the "Ecological Movement" also presupposes peaceful conflicts is quite clearly evident in the program adopted by the association as well. In other words the association's members are taking a political stand in favor of demilitarizing both banks of the Prut, and a social stand in favor of replacing all production processes which are destructive to nature, irrespective of the sphere of activity.

Moldovan Ecological Movement Holds Founding Congress

Meeting Summarized

91WN0198A Kishinev MOLDOVA SUVERANA
in Russian 24 Nov 90 p 7

[Report by G. Lupushor: "Moldova, Ecological Disaster Area: Where Is the Danger Coming From?"]

[Text] Moldova is on the threshold of destruction. One or two more hasty steps and it will cease to exist not only as a sovereign and integral state structure, but as a community of people who live, work, and create together and ensure the continuity of the people on this land, formerly a corner of paradise. The threat stems not only from the separatist ambitions of the Tiraspol and Komrat leaders, but from our society as well (regardless of nationality, faith, residence, or political convictions), an indifferent attitude toward all surroundings, toward nature, Mother Earth, the water we drink, the air we breathe, and toward ourselves as well. Danger threatens us all, and no one will come from another country or another planet to save us and our descendants. The only way out of the situation is for us to set aside groundless political ambitions and to move all together against the ecological disaster that already actually threatens us.

It was under just such a slogan that the founding congress of the new public organization uniting all the ecological forces of the republic opened its work. This proposal was expressed by Professor Ion Dedyu, doctor of sciences, chairman of the SSR Moldova State Department for Environmental Protection, and George Malarchuk, writer, cinematographer, and publicist, chairman of the ecological movement AVE [Aktsiunya verde] of Moldova; they informed delegates gathered at the congress of the ecological situation in the republic.

Heated debates unfolded over certain articles of the new organization's draft charter, particularly those that concerned finances. The thing is that certain functionaries of the former society for environmental protection proposed reducing the portion of the dues that must be transferred to the centralized fund of the new organization. A decision was adopted after repeated balloting: One-half of the income from the primary organizations will remain at their disposal, and the other half will comprise the society's centralized fund.

Certain delegates expressed the opinion that the new ecological organization does not need significant numbers of passive members who do nothing to promote the ecological movement other than paying membership dues. The society may have fewer members, but they should be dedicated body and soul to their sacred cause, struggling furiously for a "clean person in a clean country, in a clean world," as specified in the slogan of the Ecological Movement of Moldova [EDM]. It was also proposed that the future membership dues be set at 50 kopecks or even 1 ruble annually. Unfortunately, this proposal was not adopted. The functionaries of that

same society for environmental protection rejected it, probably feeling that their duty is simply to collect dues. For, as some of them asserted, it is very hard to wheedle 30 kopecks out of the average person's pockets, but it would be even harder to get a whole ruble out of him.

Thus, in accordance with the resolution of the congress, joined with EDM were the society for environmental protection, the AVE ecological movement, the society for animal protection, the ecological sections of the Journalists Union and the Cinematographers Union, the "EKO" Club, as well as other republic and rayon societies of the corresponding profile.

The congress elected a leading organ headed by George Malarchuk, as well as a review commission. The congress delegates appealed to the republic parliament and government with a demand to declare Moldova an "Ecological Disaster Area," and appealed to the entire population of SSR Moldova.

Thus, a new ecological organization has been formed. It is still young, but its members' desire to act decisively and sternly can be felt. We will hope that the Ecological Movement of Moldova will enjoy the support of the parliament and the government, and that it will not suffer the fate of the former voluntary society for environmental protection fulfilling a Cinderella role, or that of a fifth wheel on the cart of reckless technological progress.

Address by Ecological Activist

91WN0198B Kishinev MOLDOVA SUVERANA
in Russian 24 Nov 90 p 8

[Address of George Malarchuk to the founding congress of the Ecological Movement of Moldova: "...We Must Sound the Alarm!"]

[Text] Esteemed colleagues!

Your knowledge of the state of affairs here in Moldova spares me the need to present you with an extensive panorama of the our ecological problems at this moment. We all know what we have happening in this or that rayon, and even in our villages. There is illness, infection, asthma and heart diseases everywhere; there are ever more children with mutations, deteriorating kidneys, and cancer. Moldova holds last place in the country for average life expectancy, and in the Slobozyskiy Rayon, for example, the morbidity, disability, and mortality rate is two-three times higher than the republic average.

The "Aktsiunya verde" ecological movement arose in June 1983 as a section of the republic Journalists Union. In February of last year, we attempted to turn the section into a movement, but we did not succeed; bureaucratic forces stood in the way of our initiative. And in October, after certain shifts in the republic leadership, we were formed as the republic ecological movement.

Our activity after that was hardly a victory parade: an intentionally slowed process of getting official status, and our resulting exclusion from the pre-election campaign; we obtained our own bank account with great difficulty, and again, with delay. However, we are not offended. And not because we lack a sense of our own worth or we are forgoing our own honor, but because we know that the ecology is a conflicting problem in and of itself. Defending nature means seeking out those who scoff at it. And otherwise, why protect it? And someone determined in this noble cause must be either a little touched, or a true citizen.

In the year since our founding, we got more than cuts and bruises. Our colleagues took an active part in the Dnestr expedition, and particularly in the "Prut-90" expedition. The popular television program "Ave natura" is aired regularly. The newspaper NATURA has been already published for a year, with two issues per month. We are actively promoting the establishment of a state department for environmental protection, subordinate to the parliament. We have achieved the creation of two student-ecologist groups at the technical school in Tsaul and support re-profiling the Kishinev Industrial-Pedagogical College into an ecological educational institution. The important documents addressed to parliament, Marshal Akhromeyev, and to other offices were approved at the meeting of 8 April of this year.

Certain of our proposals have been implemented; we return to others again and again. When Ukrainian colleagues appealed to us to support their activities for closing down the Khmelnitskaya AES [nuclear electric power station], we mounted an active campaign to collect signatures in support of the appeal. This is how we understand internationalism...

Today, after more than seven years of unselfish labor in the field of ecology, I am emboldened to utter two or three thoughts, perhaps axioms.

First of all, idle talk and demagoguery are the most awful polluters of nature and man, even more dangerous than all known chemical compounds, and more terrifying than the Chernobyl disaster.

Even in the decree of the SSR Moldova Supreme Soviet adopted 31 July 1987 I read with naive satisfaction: "To begin the publication of a popular-science magazine NATURA MOLDOVEY starting in 1988." 1989 passed; 1990 is drawing to a close. All the administrators covered their heads in mounds of paper, but the ecology got a leaflet with one foot in the grave. The promises of the Council of Ministers and the city soviet about our being granted some sort of building for work remain unfulfilled. Cooperatives, clubs, casinos, and many dubious societies have found shelter. They are already saying that great buildings are being presented to the embassies of some countries, and the black marketeers and speculators have occupied the best rooms in hotels. Buildings have been found for everyone, but not for "Aktsiunya verde."

They are already saying that the agrarians from parliament have formed a common front against the ecologists. This should not surprise anyone. They seek supporters in chemicalization, specialization, concentration and in many other ill-considered initiatives that have brought our country to the wooden plow.

At the last republic writers' congress, Ion Drutse proposed bringing criminal charges against those who made possible the stagnation in Moldova and those who support it now. I think that it is our duty that the names of all the barbarians who destroyed and poisoned our land, our waters, who feed our people nitrates, and who sell the Dnestr, along with the gravel dredged from its bed to anyone should ring out at that trial.

"The muses are silent when weapons clang," they said in olden days. The nymphs and spirits of nature are silent along with the muses. Sense and everything that constitutes the beauty of this world is also silent... Nor can they sing in a house engulfed in flames. They can only call for help from there. But if the neighbors' houses are burning too, who can help them?

The word "eko" means "house," "household" in translation from the Greek. It is impossible to extinguish the fire in one room when the flames are consuming the entire house. That is what we have today in our Moldova. We have a big fire and it must be extinguished as quickly as possible by the common efforts of all its occupants.

After all, it is impossible to maintain the purity of the Dnestr waters just to the middle of the current, for one bank to be clean and for the other to be polluted, for the water at one river bank to be pure, and for the water at the opposite bank to be polluted. We cannot place a barrier around the air we breathe. The ecology has no boundaries. It is a single faith for all, like a religion: The clergy prays in the name of the salvation of the souls of the faithful and the unbelievers alike, the healthy and the ill. Our colleagues and I struggle from all corners for overall health, even the health of those whose vision is clouded by hostility.

Good reviews are coming in about the Transdnestr ecologists, about our colleagues from the south of the republic. Many of them are in this hall with us today. And I want to say to them, "Welcome, brothers and sisters!" Human folly is transitory, but the air, water, and earth are eternal. The concerns that united and brought us here demand of us pure hearts, clean hands and genuine wisdom. Our slogan is "a clean person in a clean country, in a clean world." Our movement does not recognize force in any form. Our work methods are conviction, propaganda of ecological ideas, appealing to the masses to get involved in common causes, to reveal and peacefully roll back the ecological threat. For over seven years, we, the AVE movement, have worked completely unselfishly, often spending the resources of children and grandchildren to cover the expenses of our

activity. But nevertheless, we want our society to also have at its disposal some sort of funds to do good deeds in the name of Moldova.

And if today we strive for unification, we are doing so only in the name of joint actions, in the name of the struggle of an entire people against the common ecological danger that threatens Moldova, the whole world. Acid rains, ozone holes, the Chernobyl sarcophagus, these are just a few of the aspects of ecological disaster.

The recent sad news about Chernobyl is that the bottom of the sarcophagus is disintegrating and the radiation is penetrating the bed of underground waters, perhaps even deeper, causing a new, enormous danger for all of Europe. And mankind does not yet have any methods to eliminate the results of nuclear disasters.

In August we learned that in Sverdlovsk Oblast many students and trainees who came for farm work were poisoned, as it turned out, by chemicals from the soil. Recall as well the terrible virus in the Tashkent metro... Recall the wells of Teleneshkiy Rayon, two-thirds of which are contaminated with ammonol. This rayon was recently declared an "ecological disaster zone."

I think we have sufficient grounds to assert that we are dealing with a real, burgeoning, cruel genocide. The methodical bark-stripping of trees in the Dnestr valley, the expansion of tobacco farms on chernozem, stock breeding complexes that have filled even people's souls with filth. Not to mention the brilliant epopee of chemicalization, the preoccupation with the gargantuan—all this and much more cruelty has struck the vital points of our organism and our souls, of our entire people. We stand today before the catastrophe that until quite recently was pompously entitled the "bright future."

We have data showing that by March of this year 331 ecological movements and organizations had been registered. Of course, since that time, their number has grown even more. Yet instead of receding, the ecological threat has become even more visible.

Based upon the principle that the world is one and indivisible for all living on the Earth, we note that growth of a tendency toward cooperation, toward the unification of all forces pursuing one and the same goal. There is even talk of the need to create a "Green International."

Very many times before, we Moldovans, true to our autochthonous axiom, "the quieter you go the further you get," have not been in much of a hurry. Now we are required to be Europeans and to work more intensively than those 330 other possible competitors. We have no more time to "go slow."

It is for this reason that I consider it necessary to propose to parliament that it declare the entire territory of the Moldova republic an "ecological disaster area." This would not only attract attention to the state we are in, but would become a condition for the allocation of

special financial resources, new human, technological, and scientific means to provide a way out of the ecological impasse. Under these conditions, it would be possible to develop a broad program entitled the "Survival Program." A necessary and natural consequence would be the firm demand for the demilitarization of both banks of the Prut, that is, cleaning from our land the harmful elements that are unavoidably discharged into the environment by military bases, modern technology, and weapons. The "Dnestr," the "Budzhak, and possibly even the "Prut" could become other concrete projects.

For example, the Dnestr gives life to 10 million people living on both its banks; only 4 million of these are citizens of Moldova. The terrible catastrophe at the Shtebnitskiy potassium plant happened beyond the borders of our republic in 1983, in Lvov Oblast. Now the Khmel'nitskaya AES is threatening our river. I want to say to everyone that all 10 million people would have to participate proportionally to save the Dnestr. This would be the brotherly, just way.

The new, restructured, fortified ecological movement could mobilize public opinion, the head and heart of the people to solve the everyday problems of concrete life, rather than mutter pseudo-scientific truths. Truly the peel of bells does not put out fires; it tears people from their warm beds and saves their lives. And we leave it to ourselves to sound the alarm!

Appeal to Citizenry

91WN0198C Kishinev MOLDOVA SUVERANA
in Russian 24 Nov 90 p 8

[Report of the Founding Conference of the Ecological Movement of Moldova: "We Breathe the Same Air: An Appeal to All Moldovan Citizens of Good Will"]

[Text] Kishinev, 15 November 1990. Esteemed fellow citizens!

Adventurers are attempting to recarve our small, much-suffering, oft-recarved country. All 4 million inhabitants of our republic have been drawn into political discussions and numerous anti-constitutional actions. All of this is being done in order to distract Moldovans, Ukrainians, Russians, Bulgarians, and Gagauz from solving economic and ecological problems. We feel that the time has come to return to work places, to get to work, to get to solving the problems that SSR Moldova is coming up against today.

The catastrophic situation in which the environment has found itself toward the end of this century urgently demands the unification of all forces and all human efforts in the name of saving nature in Moldova. We appeal to all republic citizens, regardless of their nationality, to bring their heads and hearts back to the important problem of the entire planet, all human civilization. Our very life, especially that of our descendants, has been threatened. Interethnic discord, as well as discord

of another type, accompanied by political ambitions, worsens even more the ecological situation of the Moldovan land.

We must be aware that water, air, and all of nature know no boundaries. Whatever happens in the political sphere, we all, regardless of national or social affiliation, will breathe the same air, drink the same water, and live on the same earth. Illness and death, the cause of which is the sick environment, do not distinguish people by national affiliation.

The republic's ecologists appeal to all people of good will to unite in a single front for saving nature in Moldova, for creating the conditions for life together in peace and harmony on the principle of "a clean person in a clean country, in a clean world."

Draft Azerbaijan Plan for Environmental Action Projected to Year 2005

91WN0193A Baku BAKINSKIY RABOCHIY
in Russian 14 Oct 90 pp 1-2

[Draft: "Long-Term State Program for Environmental Protection and Optimal Utilization of Natural Resources of the Azerbaijan SSR During the 13th Five-Year Plan and Until the Year 2005 (Basic Positions)"]

[Text]

I. The Present-Day Ecological Situation

The Azerbaijan SS, which is a modest-sized republic having a territory of 86,400 square kilometers and a population of 7.3 million persons (data as of the end of 1988), may be characterized as a region with a high degree of industrial concentration and a well-developed territory. Complexes of ecological problems have evolved here historically. With regard to origin, as well as the level of consequences for the national economy and public health, many of these problems are of an interrepublic and All-Union nature and acuteness, and, in part, the condition of the Caspian ecosystem is international in its nature.

From the viewpoint of environmental conditions, the most unfavorable parts are the following:

- the Apsheron region, which includes the Baku and Sumgait industrial regions with their high concentrations of oil-drilling, oil-refining and chemical sectors, along with metallurgy and the construction industry, all of which pollute the environment. And this is accompanied by a tangible worsening of the public health;
- the aquatorium of the Caspian Sea in the regions of offshore oil drilling, which has an overall effect on the condition of the water resources and the sea's living organisms;
- the Bolshaya Kura Basin, where pollution and exhaustion of the water resources is taking place, along with a reduction of the areas of the large forests

along the Kura River, and there is a negative influence of hydroelectric-power engineering on fish stocks;

- regions of intensive cotton growing and other monocultures, i.e., one-crop systems, where the lands have become considerably degraded, and the excessive application of chemical herbicides and pesticides, as well as mineral fertilizers, has led to various types of diseases among the population;
- the cities of Gyandzha, Mingechaur, and Ali-Bayramly, which have been characterized by the unsatisfactory condition of the air basin;
- the Yalama-Nabran recreational zone, which is of All-Union importance, and where a violation of the ecological equilibrium has occurred;
- this republic's western regions, which have experienced most strongly the effect of the polluted transit rivers from the territories of the Georgian SSR and the Armenian SSR.

Recently, as a result of intensifying our environmental protection work, we have succeeded in achieving a stabilization and reduction of the negative, anthropogenic influence on the natural environment. Emissions of harmful substances into the atmosphere have been reduced by 80,000 tons a year, and discharges of polluted wastewater or sewage into natural bodies of water have been reduced by 50 million cubic meters a year. Some 3,520.4 hectares of lands have been recultivated and returned to the national-economic budget. By-products and secondary resources have been drawn into production more actively. For the first time, the area under forest has begun to increase. A number of rare and previously threatened animal species, recorded in the "Red Book of the Azerbaijan SSR," have been restored.

Safeguarded on reservation territories are representatives of 97 species of mammals, 350 species of birds, eight species of amphibians, 40 species of reptiles, 90 species of fish, and more than 3,000 species of plants.

The annual number of young fish [fry] released into bodies of water by fish hatcheries amounts to more than 400 million.

Nevertheless, there has been no radical turnabout in matters in the field of environmental protection, and the situation remains tense.

The qualitative condition of the land resources is unsatisfactory. As much as 40 percent of the territories has been subjected to water or wind erosion; 1,190,000 ha [hectares] (13 percent of the total area) has been salinized; 17,000 ha of lands, including 7,400 ha of lands on the Apsheron Peninsula, have been ruined as a result of oil drilling and refining; and 11.6 percent are dangerously wind-eroded. As a result of washouts and wind erosion, the annual losses of fertile top-soil layers in this republic amounts to as much as 100 tons per hectare. Of 1,350,000 ha of lands being irrigated, 18 percent require reconstruction and modernization of their irrigational,

collecting, and drainage networks, while 8.5 percent require major planning and laying out.

The large industrial complexes (Baku, Sumgait, Gyandzha, Ali-Bayramly, Mingechaur, and others) are marked by flooding of their territories. Azerbaijan's portion of the Caspian Sea's coastal zone has suffered destruction along a length of 250 km; and in connection with this, some 3500 ha of fertile lands have dropped out of circulation.

The annual damage inflicted on this republic by mud-laden torrents amounts to approximately 17 million rubles. The excessive application of chemical preparations and the insufficient use of biological methods for protecting plants have led to the accumulation of high concentrations of toxic substances in the soils.

Serious problems remain in the area of utilizing and safeguarding water resources. Being located in an arid zone, Azerbaijan is one of the most water-short republics in the entire country. The average annual water flow does not exceed 29 cubic km, including the merely 10 cubic km which is formed on this republic's territory. On a per capita basis, our own river waters are less than the country as a whole by a factor of 9.6, less than those in Georgia by a factor of 6, and less than those in Armenia by a factor of 7.7. The operational reserve supplies of underground fresh water amount to 4.4 cubic km and are distributed very unevenly as to territory.

With the total annual water resources amounting to 33 cubic km, the maximum, ecologically allowable intake of water from surface sources, according to the estimates, is no more than 20 billion cubic meters a year, while the ecologically allowable intake of underground water is 4 billion cubic meters a year.

According to calculations, at the present time the actual intake of water from surface sources amounts to 15.3 billion cubic meters, while that from underground sources comes to 1.47 billion cubic meters a year.

The volume of polluted wastewater discharged into bodies of water, according to accounting data, amounts to 351.7 million cubic meters a year, not counting cooling flows and highly mineralized drainage water.

The principal sources of polluting bodies of water are the municipal systems of Baku and other cities—80 percent of the total discharge of wastewater—the Azneftkhim, Khimprom, Aztsvetmet, Sintezkauchuk, Azneft, Azeriyprom, Baku Iodine, Neftechalinsk Iodine-Bromine, Sumgait Superphosphate and Pipe-Rolling plants, Gosagroprom [State Agroindustrial Committee] enterprises, and others. Great harm has been inflicted on the Caspian Sea as a result of failure to observe the regulations concerning the exploration for and exploitation of oil-and-gas fields by the facilities of Kaspimorneftegaz. Considerable pollutants have been poured into the sea along with the drainage flow.

As a result of the still-existing discharges into this republic's bodies of water, the condition of many of them is unsatisfactory. The amounts of petroleum products and phenols exceed the PDK [maximum allowable concentration] in Baku Bay by factors of 18 and three respectively, and in the coastal waters off Sumgait—by factors of three and 11 respectively. The concentration of pollutants in the water of several other sections of the Caspian aquatorium also remains above the appropriate norms. The Kura and Araks rivers, as well as several of their tributaries, are polluted. So too are other inter-republic rivers which flow onto Azerbaijan's territory—the Okhchuchay, Akstafachay, Tazuchay, and others. A tendency of the quality of underground water to become worse has been observed.

A tense, i.e., stressful, situation has evolved in the polluted part of the atmospheric basin. Last year stationary sources of pollution emitted 0.8 million tons of pollutants, including 0.21 million tons of solids as well as 0.6 million tons of gaseous and liquid pollutants. The principal pollutants were as follows: sulfurous anhydride (16 percent), nitric acids (nine percent), hydrocarbons (35 percent), and carbon monoxide (12 percent). Their largest amounts occur at enterprises of the metallurgical industry (7 percent), natural gas and petroleum (25 percent), power engineering (16 percent), chemical and petrochemical (18.3 percent), and building materials (25 percent) industries.

Motor-vehicle emissions are estimated at 1.2 million tons, i.e., they constitute approximately 57 percent of the total volume of emissions.

The highest level of atmospheric pollution is to be observed in Baku, Gyandzha, Sumgait, Mingechaur, and Ali-Bayramly.

Noted in Baku has been an increased level of atmospheric pollution by sulfurous anhydride, nitrogen peroxide, soot, i.e., carbon black, formaldehyde, and hydrogen sulfide; in Sumgait—by sulfur dioxide, nitrogen peroxide, hydrogen sulfide, dust, benzopyrene, and chlorine; in Mingechaur—by formaldehyde, phenol, carbon monoxide, and nitric acid; in Ali-Bayramly—by sulfurous anhydride and nitric acid.

The utilization of mineral resources has not remained at the level that it should. This republic now has 51 oil-and-gas fields in operation. There are reserves of iron ore, limestone, and clay, as well as deposits of nonferrous metals and chemical raw materials. The distribution of mineral resources is favorable for developing subsectors of the building materials industry.

Nevertheless, at the present time almost 60 percent of the non-ore raw material being extracted proceeds to various dumps. In extracting and enriching iron ore, the losses have reached 35-38 percent. Every year at enterprises engaged in metallurgical processing approximately 360,000-420,000 tons of by-products are formed—

by-products which remain virtually unused. Even rare-earth elements are thrown onto the dumps as by-products. The utilization of by-products does not exceed 8-10 percent.

The use of mineral-water reserves for health-care needs does not amount to more than seven percent, and for the food industry it is only 1.5 percent of the known or confirmed reserves.

The condition of our forests is unsatisfactory. Forests cover only 11.2 percent of the territory, but we should take into account the fact that forests perform water-preserving, protective, sanitary-hygienic, and health-restoring functions, and they belong to the first group. The low-growth forests are gradually being cut down; the tugaic forests along the Kura River have been almost completely destroyed. On a per capita basis, there is 0.19 ha covered by forest and 18.9 cubic meters of timber.

On an annual average, reforestation is carried out on an area amounting to only 6,000-6,500 ha, and protecting forests from harmful pests and diseases by biological methods comprises only one-fifth of the total volume of extermination work.

Insufficient use is being made of resources from the animal world. The product yield from 1,000 ha of land suitable for hunting amounts to only slightly more than 100 rubles. We need further development of specially safeguarded territories, which at present comprise 2 percent of this republic's territory.

II. Measures for Restoring the Health of the Ecological Situation and Improving the Use of Nature

The principal goals which must be gradually achieved as a result of environmental protection work in this republic during the 1991-2005 period are as follows:

- reducing atmospheric pollution to an allowable level according to sanitary norms in the cities of Baku, Sumgait, Kirovabad, Ali-Bayramly, and Mingachaur by the year 2000;
- reducing by 60 percent by 1996, by 95 percent by 2000, and completely stopping by 2005 the discharge of polluted industrial and municipal wastewater, i.e., sewage, into surface-type bodies of water, ensuring the restoration of normative levels of water purity in rivers, lakes, and other bodies of water, as well as the waters along the seacoast, and providing for a beneficial hydro system for small rivers by the year 2005;
- a gradual or stage-by-stage reduction of the specific water consumption used for industrial, municipal-everyday, and agricultural needs, ensuring stabilization by the year 2005 with regard to the intake of fresh water from natural sources at a level below the maximum, ecologically allowable amount;
- ensuring the complete elimination by the year 2005 of the degradation of agricultural lands, the loss of their characteristic features, and the reduction of their areas, the restoration of the fertility and hydrophysical (hydrogeological) soil characteristics;

- preserving the general fund, increasing the forestation of the territory, particularly in the forest-steppe and steppe regions, restoring the tugaic forests in the Kura River region, as well as the resources of commercially profitable animals;
- increasing the degree of extracting minerals from mineral resources;
- adopting all measures to implement the policy of resource conservation, introducing small-scale, by-product technologies and creating waste-free, territorial, industrial complexes, making maximum use of by-products.

Environmental-protection measures have been specified on the basis of the: "Comprehensive Scheme for the Environmental Protection of the Azerbaijan SSR for the Period Until the Year 2005," which was developed in this republic, in tandem with the Concept of Economic and Social Development and the General Scheme for the Development and Deployment of This Republic's Production Forces During the 13th Five-Year Plan and Until the Year 2005, and by proceeding on the assumption that the newly created enterprises, as well as those to be expanded and modernized, must fully implement the environmental-protection measures, introduce resource-conserving, small-scale, by-product, and wastefree engineering processes and production facilities.

Land Resources

Particular attention must be paid to increasing the productivity of lands, expanding the stocks of suitable and convenient lands by means of recultivation, reclamation, building anti-erosion, hydraulic-engineering, anti-mudslide, anti-creep, and shore-reinforcement structures, creating protective forest plantings, including field-protection plantings, and other measures.

The Gosagroprom [State Agroindustrial Committee], Ministry of Land Reclamation and Water Resources, SSO [Student Construction Detachment], Azervodstroy, and the Ministry of Housing and Municipal Services must carry out the construction of anti-erosion, hydraulic-engineering, anti-mudslide, anti-creep, and shore-reinforcement facilities in an amount worth 568 million rubles. From these funds the above-mentioned organizations, along with the executive committees of the Soviets of People's Deputies of the appropriate rayons must ensure that projects are carried out on reinforcing the shores of the Caspian Sea in the regions of the Lenkorano-Astarinsk Zone—projects which will cost 60 million rubles, whereas the Baku City Gorispolkom is to spend 50 million rubles for analogous purposes in the city of Baku.

The creation of protective forest plantings must be carried out on an area of 24,500 ha, including an area of 18,200 ha by the Gosagroprom in order to protect agricultural lands from erosion, an area of 450 ha along highways and railroads by the Ministry of Highway

Construction and the Azerbaijan Railroad Administration, and an area of 4,700 ha along irrigation canals by the Ministry of Land Reclamation and Water Resources.

The recultivation of lands must be accomplished on an area of more than 17,000 ha. Special efforts are required for recultivation projects on the Apsheron Peninsula. Azneft will have to restore 1500 ha and return them to the national economy, the Baku Gorispolkom—1,000 ha, the Azerbaijan SSR Ministry of Building Materials—375 ha, Kaspmoreftegaz—275 ha, and Avtodor—70 ha.

By the year 2005 the Gosagroprom and Azerselkhozkhimiya will have to bring up to 700,000 ha the area for protecting farm crops from pests and diseases by the biological method. This amounts to approximately 50 percent of all lands being irrigated and under farm crops.

For measures to protect and make optimal use of lands we must allocate 1514.7 million rubles, including 994.9 million rubles of capital investments. Of these amounts, 474 million rubles and 326 million rubles respectively must be earmarked for the 1991-1995 period.

Water Resources

In order to protect and make optimal use of this republic's water resources, we must do the following:

in industry primarily cover the increase in water consumption by means of increasing the volume of circulated water and bring the level of the circulated water supply by the year 2005 up to 82-85 percent (without power engineering or thermal engineering); increase the volume of utilizing seawater, mineralized (stratal, drainage, and other water), as well as purified, municipal wastewater, for cooling heat exchangers and for other needs; reduce the specific consumption of fresh water per unit of output by 1995 by 18-20 percent, and subsequently—by five-six percent for each five-year plan;

The Azerbaijan SSR Ministry of Land Reclamation and Water Resources, Gosagroprom, and Azervodstroy must carry out by the year 2005 the comprehensive modernization of irrigation systems on an area of about 800,000 ha, construct and lay out a collecting-and-draining network on an area of 500,000 ha, complete by 1995 the reconstruction of the Main Shirvanskiy and Main Milsko-Muganskiy collectors; they must achieve an efficiency of the irrigation systems of 0.64 by 1995, 0.69 by the year 2000, and 0.74 by the year 2005, by means of reconstructing the irrigation systems, reduce the specific expenditure of water per ha of area to be irrigated by 20-25 percent, including by 13 percent by 1995;

The Ministry of Housing and Municipal Services, along with the ispolkoms of the urban and rayon Soviets of People's Deputies, must carry out by the year 2005 construction of systems of centralized water supply and sewerage in all cities and urban-type settlements; by the year 2005 they must provide this republic's rural population with potable water, construct 8,400 km of main

water pipelines, bring the level of centralized water supply up to 85 percent, and, by means of upgrading the engineering level of operating the water-supply systems, as well as by outfitting them with progressive types of equipment, reduce the specific water consumption within the municipal and communal systems by 15 percent.

The Caspian Sea Basin

Here we must put a complete stop to the discharge of untreated, unpurified wastewater into the Caspian Sea and the bodies of water in its basin by the year 2005, including work on the principal sources of pollution—by the year 2000.

With these goals in mind we must accomplish the following tasks:

- the Baku Gorispolkom must complete by the end of 1992 construction of the Gousaninskiy purification facilities to have a capacity for treating 840,000 cubic meters a day with a deep-sea discharge outlet. It must also accomplish during the 13th Five-Year Plan creation of the southwestern purification facilities for the city of Baku, shore-reinforcement projects in Baku Bay, and the purification, level regulation, and comprehensive utilization of the lakes located on the Apsheron Peninsula.

Prior to the year 2000 all the populated points of the Apsheron must have sewer systems installed, including the resort area, with the creation of a collecting and autonomous purification facilities. A regional drainage system must be installed on this peninsula, and other measures should be taken to lower the groundwater level;

- the Azneftkhim Production Association must speed up the retooling of the oil refineries and eliminate all obsolete and physically worn-out production units. By the year 1993 it must introduce Phase II of the integrated, biological purification facilities at Zykha, with a complete cessation of wastewater discharges into Baku Bay and their utilization in plant circulating systems;
- the Azneft Association must carry out the reconstruction of the systems used for collecting and utilizing stratal water and wastewater with a complete cessation of their discharge into the sea and lakes. It must convert through its system to enclosed methods of drilling, extracting, collecting, storing, and transporting petroleum so as to prevent the washout of pollutants from this territory. It must also eliminate 2000 flooded, technically unsuitable wells in order to reduce the amount of wastewater being formed;
- the Baku Iodine Plant must convert to the wastefree, non-drainage method of extracting iodine from stratal water, which involves pumping such water back into the underground levels;
- the Sumgait Gorispolkom, along with the associations and enterprises of the Sumgait industrial complex,

must ensure by 1995 the expansion and modernization of the Sumgait rayon purification facilities, utilizing the purified wastewater for this industrial region's technical needs and for irrigating the plantings of greenery;

- the Khimprom, Sintezkauchuk, Orgsintez, and Sumgaitbytkhim associations, along with the superphosphate, pipe-rolling, and aluminum plants, must implement water-conservation measures with regard to building and ensuring the normal operation of purification facilities and water-circulation systems; they must also put an end to the discharge of polluted wastewater and production by-products into the sea and the Sumgaitchay River;
- the Ministry of Land Reclamation and Water Resources, plus enterprises and organizations, must eliminate the sources of polluting the mainline drainage canals for industrial, municipal, and communal wastewater and pesticides in order to prevent them from flowing into the sea;
- Kaspromneftegaz must radically upgrade its standards for developing, drilling for, and extracting oil and gas in the Caspian Sea. It must prevent accidents in and oil leaks from its offshore facilities. For this purpose, we must allocate as much as one-third of this sector's capital investments for reconstructing the offshore oil fields. We must fully outfit the wells in order to prevent oil discharges under unforeseen circumstances. A precise schedule must be kept for hauling away to the shore those waste products which form during the drilling process.

The services must be fully equipped with up-to-date means for eliminating grifa [?], for effectively localizing and collecting oil pollution from the surface, for dismantling technically unsuitable and nonoperating foundations and towers. By 1995 they should completely clear this aquatorium from such foundations and towers;

- Kaspar must ensure the constant readiness on the special basin service for eliminating accidental oil spills into the sea. By 1992 the construction of a shore base for this service should be completed. The State Committee for Environmental Protection and Kaspar must implement the "Basin Plan for Eliminating Oil Spills in the Caspian" and draw up a map which would divide into ecological regions the Azerbaijan portion of the Caspian Sea aquatorium.

We need to examine and consider the matter of further improving the basin's emergency service, of transforming it into a "rapid reaction force" in case of ecological disasters in the Caspian;

- this republic's Academy of Sciences should set up a Caspian Sea Institute along scientific and practical lines; such an institute would encompass all aspects of environmental protection and economic activity on the sea and along its shoreline.

The Bolshaya Kura River Basin

We must prevent any increase in polluting the waters of the Kura, the Araks, and their tributaries. And we must see to it that the river again plays the role of Transcaucasia's main water artery, as well as a body of water for use by the fishing industry.

We would stipulate the following as top-priority measures:

- During the 13th Five-Year Plan the Ministry of Housing and Municipal Services, along with the appropriate ispolkoms of urban and rayon Soviets of People's Deputies, must construct sewer systems and municipal purification facilities in the cities of Nakhichevan, Stepanakert, Shusha, Gyandzha, Mingechaur, Ali-Bayramly, Taz, Sabirabad, Udzhary, Zardob, Dashkesan, Barda, Kubatly, Saatly, Kakhi, Kutkashen, Fizuli, Agdzhabedy, Agdam, Geokchay, Zangelan, and several others. And during the 14th Five-Year Plan they must complete sewer systems and provide purification facilities for all cities, rayon centers, and other populated points situated in the Bolshaya Kura River Basin;
- the Ministry of Housing and Municipal Services, Gosagroprom, the institutes of Azgiprovodkhoz, AzNIIGiM [Azerbaijan Scientific Research Institute for Hydraulic Engineering and Land Reclamation], water problems, and other concerned organizations must develop the scientific groundwork and carry out, wherever possible, measures for utilizing purified, i.e., treated, municipal wastewater to irrigate farm crops;
- by 1995 the Aztsvetmet Association must modernize and "seal off" the rear-line storage dumps of mining enterprises located along the rivers which are tributaries of the Kura and the Araks. This must be done in order to completely halt the partial dumping and filtration of wastes into the Arpachey, Paragachay, etc.;
- no later than 1991 Azerriybprom must complete and put into operation the purification facilities of the fishing combine in the city of Neftechala;
- no later than 1995 Azneft, Azenergo, the Ministry of Light Industry, Azrezinotekhnika, and other associations operating in the basin of the Kura and its tributaries must outfit their facilities with purification structures and circulation systems. And they must carry out other measures to eliminate or prevent the flow of industrial pollutants into bodies of water;
- in order to prevent the inadmissible flow of pesticides into the Kura by 1995, Gosagroprom must prevent the use of chemical means for protecting plants within the bounds of reservoir zones along the rivers. In other places their utilization is to be gradually reduced. By 1995 the use of airplanes for the above-indicated purposes will have to be abandoned in the Kura Basin. Measures must be taken to prohibit the discharge into rivers of wastewater and by-products from livestock-raising complexes, canneries, and wineries; such enterprises will have to be provided with efficient purification facilities.

In toto, this republic's ministries, departments, associations, enterprises, and organizations will require about 2.1 billion rubles to protect and make optimal use of water resources for the three five-year plans involved. In certain cases the Union will need to earmark centralized capital investments.

Air in the Atmosphere

Restoring the health of the air basin where this republic's industrial centers are located must be predetermined by reducing the emissions of pollutants at enterprises of the petrochemical, oil-and-gas extraction, and metallurgical sectors, as well as those of the power-engineering and construction industries. Lowering the level of atmospheric pollution by means of reducing emissions to the maximum allowable values must be accomplished by removing from operation those production units which are too old, obsolete, or physically worn and by introducing resource-conserving and low-waste technologies, as well as by constructing scrubbers, i.e., gas-purifying and dust-catching units.

By the end of the 13th Five-Year Plan emissions of pollutants from stationary sources must be reduced to 0.6 million tons per year; and by the end of the 15th Five-Year Plan they are scheduled to be reduced to 0.33 million tons per year. This includes a reduction in the emissions of nitrogen peroxide by a factor of two; by the end of the 13th Five-Year Plan they should be 62,500 tons per year, by the end of the 14th Five-Year Plan—34,000 tons per year, and by the end of 2005—32,000 tons per year.

Emissions of carbon monoxide must be reduced by a factor of 1.6—to a level of 82,000 tons per year by the end of the 13th Five-Year Plan, to 69,000 tons per year by the end of the 14th Five-Year Plan, and to 59,000 tons per year by the end of 2005.

Provisions have been made to reduce the emissions of sulfur dioxide by a factor of 2.3 to a level of 124,000 tons per year by the end of the 13th Five-Year Plan, to 83,000 tons per year by the end of the 14th Five-Year Plan, and to 54,000 tons per year by the end of 2005.

Emissions of solids must be reduced by the end of the 13th Five-Year Plan to 137,000 tons per year, by the end of the 14th Five-Year Plan—to 97,000 tons per year, and by the end of 2005—to 33,000 tons per year, thus achieving a reduction by a factor of virtually seven as compared with the level of emissions in 1986.

Emissions of hydrocarbons must be reduced by a factor of three—to a level of 147,000 by the end of the 13th Five-Year Plan, to 126,000 tons per year by the end of the 14th Five-Year Plan, and to 102,000 tons per year by the end of 2005.

The normative volume of emissions of pollutants into the atmosphere must be attained by 1995 by 301 enterprises (88 percent of the total volume of emissions for this republic), by the year 2000—by 560 enterprises (91

percent of the total volume of emissions), and by the year 2005—by all enterprises emitting pollutants into the atmosphere.

The amount of capital investments in air-protection measures will total 315 million rubles, including 132 million rubles in the 13th Five-Year Plan, 113 million rubles in the 14th Five-Year Plan, and 70 million rubles in the 15th Five-Year Plan.

The City of Baku

The following tasks must be accomplished here:

- over a period of two or three years the Azneftekhim Production Association, by means of reconstructing the flare-torch units, eliminating the catalytic cracking units, sulfuric-acid alkylation, and other elements at the NBNZ [New Baku Oil Refinery] imeni Vladimir Ilich, replacing obsolete and worn-out equipment, and withdrawing several units from the BNZ [Baku Oil Refinery] imeni 22nd CPSU Congress, must reduce emissions of hydrocarbons and other harmful substances by 25-30 percent. It must gradually reduce or phase out—with complete elimination by the period 1994-1995—the processing of sulfurous petroleum at its oil refineries. In conjunction with the Baku Gorispolkom, it must begin during the 13th Five-Year Plan the practical creation of sanitary-protective zones around the plants, and during the 14th Five-Year Plan it should proceed to promulgate a complex of measures for the phased relocation of the oil refineries beyond the limits of the city of Baku's densely populated [?] zone;
- we must carry out the renovation of the production facilities and equip with high-efficiency filters the sources of pollution at the Karadagskiy Cement Plant; by this means we will be able to reduce the plant's presently existing emissions by a factor of at least 3. At the same time we must solve the problem of building a plant at a new site, distant from populated area, and shutting down the old production line;
- by the beginning of the 13th Five-Year Plan the Baku Tire Plant must complete the transfer of its preparatory production facility at the Karadagskiy site and the shutdown of its old shop in the Narimanovskiy Rayon;
- not later than 1992-1993 the Bakneftemash Association, plus the associations and enterprises of the electric-equipment industry and other sectors which have made "contributions" to the pollution of the air basin, must outfit their sources of emissions with scrubbers, i.e., gas-and-dust-catching units.

The City of Sumgait

Here the following tasks must be carried out:

- by the end of 1991 the Sintezkauchuk PO [Production Association] must complete the renovation of its butadiene-styrol-rubber production facility with a

reduction of emissions to the PDV [Maximum Allowable Emission] norms. It must introduce the technology of using ethylene, which is now emitted to the flare-torches. They must take isopropyl alcohol and styrol out of production;

- by the beginning of the 13th Five-Year Plan the Khimprom PO must carry out measures to stabilize the operation of producing chlorine and caustic soda, and during the course of the five-year plan it must convert it to the ecologically "clean," i.e., pure, membrane-type technology. It must cease operating the production lines turning out chloroparaffin [?], Phase I sulfanols, and sulfurous anhydride;
- the Orgsintez PO must shut down its harmful production lines turning out divinyl and propylene oxide. The shop must be equipped with milk of lime in order to prevent dust;
- the Sumgaitbytkhim PO must complete retooling the SMS-30 with an improved technology and the replacement of the scrubbing equipment; it must also take other measures to reduce dust emissions into the atmosphere;
- in 1994 the Sumgait Superphosphate Plant must convert its production of granulized superphosphate to the chamber-assembly-line method;
- at the Sumgait Aluminum Plant they must renovate the electrolytic production line with a conversion to calcined anodes. Other environmental-protection measures must also be taken;
- at the Azerbayzhansk Pipe-Rolling Plant imeni V.I. Lenin they must construct a scrubber, i.e., gas purifier, behind the open-hearth furnaces and carry out a number of other measures which are supposed to reduce emissions by at least 8,000 tons a year.

Moreover, measures to reduce emissions into the atmosphere must also be conducted at other enterprises in this city.

The City of Gyandzha

Here the aluminum combine must renovate the three presently operating lines of the sulfuric-acid shop, converting them to a double-contact scheme and absorption, which is supposed to noticeably reduce emissions. A great deal depends upon the production standards at this enterprise. Air-protection measures will likewise be undertaken at the Gyandzha TETs [Heat and Power Station], as well as at combines producing building materials, bakery products, and at other facilities in this city.

The Cities of Mingechaur and Ali-Bayramly

Here the problem of reducing emissions into the atmosphere will be solved primarily by converting the power-engineering facilities located here to an ecologically "clean" fuel—natural gas, as well as by observing the schedule for fuel combustion and implementing measures to increase smokestack height (for the city of Ali-Bayramly). Air-protection measures must also be

implemented at the fiberglass plants and at Azerelektroizolit in Mingechaur and at certain enterprises in Ali-Bayramly.

* * *

A great deal of work remains to be done in the field of reducing the harmful effect of motor-vehicle transport on the environment. With the considerable increase of the motor-vehicle fleet (to an average Union level of sufficiency) we must stabilize the emissions of pollutants by motor-vehicles at the level of 1995 [sic]. The Ministry of Motor-Vehicle Transportation, Azneft, Kasporneftegaz, Gosagroprom, and other organizations having transport subdivisions must adopt measures to outfit them with diagnostic posts or stations; they must not allow poorly adjusted, badly tuned vehicles to go out onto the road. The Baku, Sumgait, Gyandzha, and other gorispolkoms must improve the distribution of transportation flows and improve the network of highways and roads.

It will be necessary to maintain the position already achieved in this republic, when the overwhelming majority of motor vehicles begin using high-octane, unleaded gasolines.

Protecting Our Interior and the Optimal Utilization of Our Mineral Resources

At the present stage the raw-material sectors will remain an important base in the cause of restoring the health of and developing this republic's economy. Moreover, the basic directions for protecting and optimally utilizing the mineral and raw material resources in our republic will be to improve the equipment and technology for extracting minerals, reducing their losses during the processes of mining, enrichment, and processing, the comprehensive utilization of mineral raw materials on the basis of developing and putting resource-conserving technologies into practice, as well as converting to low-waste production.

In line with this, Azneft and Kasporneftegaz must make widespread use of secondary and tertiary methods of extracting oil, particularly in the old oil fields.

The percentage of extracting iron ore during mining (by the open-pit method) will amount to 97.3; the extraction of valuable components from mineral raw materials when the iron is being enriched, i.e., concentrated, will be brought up to 69.8 percent, including magnetite—up to 92 percent.

In accordance with the concept provided for developing the food industry until the year 2005, Gosagroprom must bring the production volume of mineral waters in the Azerbaijan SSR up to 850 million half-liters a year. With this goal in mind, during the period 1991-1995 we must provide for the additional introduction of capacities for producing 600 million half-liters a year, including 200 million in 1991-1995, 200 million in 1996-2000, and 200 million in 2001-2005 on an annual

basis. The amount of capital investments for these purpose will come to 45 million rubles, or 15 million rubles in each five-year plan of the period being planned. The utilization of the average-annual production capacities of the facilities involved will amount to 74.2 percent by the year 1995, 82.2 percent by 2000, and 88 percent by 2005.

In toto, 621 million rubles will be earmarked for protecting our interior wealth and the optimal utilization of our mineral resources, including 612.8 million rubles of capital investments. Of these sums, 191.5 million and 189.3 million rubles respectively will be invested during the years 1991-1995.

One of the general directions in environmental protection and reducing the expenditure of natural raw materials will be drawing into production the by-products which are formed. By the end of the 14th Five-Year Plan we must achieve the full utilization of the by-products of agricultural production and closely allied processing sectors, by 92-95 percent for the by-products of petrochemistry, and by 85 percent for industrial rubber items, including steel-belted tires.

On the Apsheron Peninsula and in other places we must create electric-smelting production facilities for the complete utilization of scrap metal.

Forest Resources

Taking into consideration the fact that this republic's forests belong to the first group and basically perform water-preserving, protective, sanitary-hygienic, and restorative functions, the principal efforts must be directed at their reproduction and protection. The Azerbais PO must reforest an area of 97,000 ha, including 30,000 ha during the year 1991-1995. It must protect forests from pests and diseases by the biological method on an area of 230,000 ha or 80 percent of the total volume of forest-protection operations.

The organization of green zones in and around cities (recreational areas) must be carried out on an area of 14,100 ha. For this purpose we must allocate 59.1 million rubles, including 19.6 million rubles during the years 1991-1995. In the city of Baku alone the area of green plantings must increase by 4,160 ha at a total estimated cost of 51.6 million rubles.

In order to put a stop to cutting down forests for fuel, prior to the end of the 14th Five-Year Plan we must complete the gasification of this republic's populated points. We must carry out the construction of gas pipelines having a total length of 250 km, including 180 km during the years 1991-1995. A total amount of 59 million rubles is to be allocated for work on preserving and restoring forest resources throughout the entire period, including 19.8 million rubles for the period 1991-1995.

Resources of the Plant and Animal World

Some 9,250,000 rubles will be earmarked for the protection and reproduction of wild animals during the years 1992-2005, including bio-engineering methods.

The State Committee for Environmental Protection, in conjunction with the concerned ministries and departments, as well as the appropriate rayispolkoms of Soviets of People's Deputies, will organize three reservations on an area of 49,000 ha, including the Pirkulinskiy (10,000 ha), the Tutgunskiy (22,000 ha), and Ordubadskiy (17,000 ha) reservations.

In order to provide a purposeful tourism, camping facilities, rest and recreation for working people, as well as to preserve natural complexes, provisions have been made to create four national parks having a total area of 502,000 ha: the Muravdagskiy (168,000 ha), Shakhdag-skiy (136,000 ha), Babadagskiy (130,000 ha), and Talyshskiy (68,000 ha) national parks.

By the year 2005 the total area of specially protected territories will reach eight percent of this republic's territory.

The reproduction of fish stocks will amount in each five-year plan to 2.8 billion units, primarily the young fish of valuable species or breeds. During the 13th Five-Year Plan the Maritime Fish Hatchery at the mouth of the Kura River will be put into operation; it will have a capacity of producing 440,000 young fish a year.

In toto, 114.6 million rubles, including 97.7 million rubles during the years 1991-1995, will be channeled into the protection and reproduction of wild animals and the organization of territories where nature is protected.

Expenditures on environmental-protection measures are slated to be increased from 460 million rubles during the 12th Five-Year Plan to 1.1 billion during the 15th Five-Year Plan. Their proportionate share in this republic's national income during the 13th Five-Year Plan is scheduled to increase to 6.8 percent or twice as much as the presently existing level.

Implementation of the provided-for program of measures will allow us to achieve a basic restoration of health to the sanitary-ecological situation in this republic's cities and other populated centers, to improve living conditions, and to reduce the level of disease among the population. The estimated prevention of damage and harm from lowering the level of environmental pollution is supposed to amount to 2.36-2.45 billion rubles for each five-year plan.

There will be a substantial improvement in the use of natural resources. The volume of additional output due to the more complete and comprehensive utilization of natural and secondary resources will reach more than 100 million rubles a year.

Deputy on Safety of Reactor at Moscow Nuclear Energy Institute

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in Russian 20 Nov 90 p 3

[Interview with Doctor of Physical-Mathematical Sciences Andrey Yuryevich Gagarinskiy, deputy director of the Atomic Energy Institute imeni I. V. Kurchatov, conducted by P. Kiselev: "Red Signs Against a Yellow Background"; date and place of interview not given]

[Text] The explosion of public indignation caused by the accident at Chernobyl turned nuclear-industry personnel from national heroes into practically the enemies of humanity. Among other questions, the question of nuclear reactors in the capital was urgently raised. MOSKOVSKAYA PRAVDA has addressed the topic twice recently ("Should There Be Nuclear Reactors in Moscow," 12/7/90, and "Calm Amid the Storm," 9/9/90). The Atomic Energy Institute imeni I. V. Kurchatov and its symbol, red signs against a yellow background, which warn of the presence of a reactor, have found themselves the target of criticism.

Notwithstanding all today's mistrust in the arguments of an interested party, we believe that a view from inside, the position of the people working at the institute, will still be interesting to our readers. With this in mind the editors turned to Doctor of Physical-Mathematical Sciences A. Yu. Gagarinskiy, the institute's deputy director. We offer our interview with him.

[Kiselev] Andrey Yuryevich, first of all we should probably give our readers at least a general picture of the institute, which was at one time established to develop Soviet nuclear weapons and presently occupies 90 hectares of land in Moscow.

[Gagarinskiy] When I. V. Kurchatov was trying to choose a spot for a supersecret scientific laboratory, which subsequently received the modest code name MILAS (Measuring Instruments Laboratory of the Academy of Sciences), Oktyabrskoye Field was on the remote outskirts of Moscow; it had previously been an artillery firing range. On a deserted bank of the Moscow River, plots of ground for planting potatoes were carved out for the laboratory staff members, who were not overly well fed. The problem of the public attitude toward that institution simply did not exist at that time. And in December 1946 who besides a relatively small group of scientists and several other people in the country could have known that the world's second "atomic boiler" (the first was assembled under the stands of Chicago Stadium in 1942) had started operating on the previously vacant land?!

Not until the time of the Khrushchev thaw did the public first learn about MILAS's offspring, the Atomic Energy Institute (AEI).

Today this center is known to physicists the world over, and not only, or even primarily, for its work in the field

of the utilization of energy from the fission of heavy nuclei. The eminent scientists I. V. Kurchatov, A. P. Aleksandrov, L. A. Artsimovich, I. K. Kikoin and the institute's other founding fathers strove to create a center of modern physics by uniting three general areas in it: the fundamental properties of matter, fission energy, and controlled thermonuclear synthesis.

Work of a medical nature occupies an important place among the institute's topics. The institute cyclotron, which was built in 1947 under a program for the development of atomic weapons, has assumed the most peaceful occupation today. Radioactive nuclides for Moscow clinics are produced on it. In 1984 we produced the first lot of thallium-201 on it. This preparation is truly invaluable; after all, it has given physicians the capability of making diagnoses with hitherto unheard of precision. It is urgently needed by patients suffering from cardiac ischemia and myocardial infarctions.

In order to diagnose diseases of the thyroid gland, liver, kidneys, heart and other organs, the production of iodine-123 was recently begun on the cyclotron. The radiation dosage on the organism from its use is one-hundredth the dosage from the iodine-131 that is used today. One of the most important areas in nuclear medicine is positron-emission tomography, or PET for short, which is based on the use of ultra-short-lived radionuclides. They are capable of being incorporated in all organic molecules without changing their chemical and functional properties. PET has been used abroad to obtain unique diagnostic information, and methods employing it have been developed for the treatment of schizophrenia, dementia, epilepsy, Parkinson's disease and other ailments previously considered incurable.

At present there are several dozens of successfully operating PET centers in the world. As far as I know, there is not yet one in the USSR. Our institute is presently working intensively on the development of such a center, which would incorporate a small-scale cyclotron, automated radiochemical collectors, and a positron-emission tomographic device. The center is slated to begin operating in 1992, if, of course, the public will allow us to do so.

[Kiselev] Indeed, it is impossible to imagine modern medicine without radiochemical devices for diagnosis and treatment, but the Atomic Energy Institute is not a clinic, and its reactors are not x-ray units. And from that standpoint the demands that are being heard to close down the institute as a potentially dangerous facility are perfectly understandable.

[Gagarinskiy] Life is arranged in such a way that there is a price for everything. Just what the price is for the benefits of scientific and technological progress is another matter. A large amount of scientific knowledge is being obtained by a large collective of people using extremely costly experimental facilities. The people has invested billions of rubles in them and, of course, has the right to demand that this national property produce full-fledged scientific and technological "revenues." But

that right should not enter into conflict with the right to safety of the residents of the town surrounding the institute.

Let me try, "going beyond the wall," to provide that sort of assessment of the Atomic Energy Institute.

It must be said that the forefront of science today demands extreme values for the physical parameters of experimental facilities. Temperatures close to absolute zero and in the millions of degrees, electrical currents of hundreds of millions of amps, superpowerful magnetic fields, vacuums comparable to that in outer space. Unquestionably, all that creates an additional risk. But only for those—and this must be taken into account—who have decided to work at such facilities. However, our institute has units whose designers have managed to create flows of many billions of neutrons within a relatively small, enclosed volume. Those are nuclear reactors. In them sources of radioactive radiation are also created, of the danger of which the Moscow press so persistently reminds us.

[Kiselev] And what is the physicists' own attitude toward that problem?

[Gagarinskiy] Only a few of them dismiss the "latest intrigues of the Greens" out of hand. Most of them take a normal critical view of the work of their own hands. And since those times when the results of safety calculations sat idly on shelves bearing a "secret" classification, as the reactors have become surrounded by the city, increasingly strict analyses have been made of whether there is any measurable danger to the nearby population from the research reactors. It must be said right off that for most of the institute's small reactors a strict and unequivocal answer has been obtained: they represent no danger. Nothing happening to them will in any way change the ambient radiation "beyond the wall."

[Kiselev] All that is true for the "small fry." But what is the story as to the large (albeit one-hundredth the power of an ordinary power-generating reactor) MR [expansion unknown] unit? Muscovites would like to have a 100-percent guarantee of its safety.

[Gagarinskiy] It is true that the power of the MR reactor reaches 40 megawatts, and that a fairly substantial amount of long-lived radionuclides is formed during its operation. But under any conceivable situation, radioactivity cannot go beyond the bounds of the reactor premises.

An analysis has also been made of the "inconceivable" situations wherein that radioactivity might leave the nine-meter underground canyon made of thick concrete and stainless steel. The results obtained in the course of these studies arouse no fears. Nonetheless, no matter how improbable might seem the set of events that must occur simultaneously to make it necessary, on account of an increase in ambient radiation, to disturb the inhabitants of our neighboring buildings (and that set includes such inherently unpleasant phenomena as the explosion

of a large land mine or an earthquake practically the size of the Armenian one), that probability is still not equal to zero.

[Kiselev] That means that the problem of a large reactor in a big city does objectively exist. And it is practically impossible to persuade Muscovites of the need for its operation. Everyone is interested in the question—when?

[Gagarinskiy] At first glance, it might seem that there is a simple course that has been tested repeatedly in our country: close it promptly! And the fact that in our "green drabness" we have left ourselves without medicines and come to the verge of an energy crisis, is hardly an argument in this case. Let me try to answer the question on the basis of the official recommendations of independent monitoring agencies.

For six months an authoritative commission of experts of the State Industrial Atomic Energy Inspectorate, reinforced with specialists from the USSR Ministry of Health and the International Atomic Energy Agency, worked at the Atomic Energy Institute. On the basis of the results of the commission's work, an expert finding was prepared, the eighth point of which states, in part: "Despite the fact that a normal radiation situation is achieved in the operation of the MR reactor, the commission, taking the reactor's considerable power into account, has proposed that specific dates be set for the removal of that reactor from Moscow."

Specialists understand that the immediate closing of the institute's research reactors would do substantial damage to the safety of operating nuclear power stations and result in a considerable lag in the development of new-generation power-engineering reactors, and in the slowing of scientific and technological progress in nuclear physics and technology, and that that would entail substantial economic and environmental losses. And how, say, can one compensate for the increased risk to existing nuclear power engineering from terminating research that is extremely essential to it?

If we do not want to repeat the mistake of our fathers, who left us without computer technology, and deprive our children and grandchildren of an inexpensive and dependable source of energy, where can research be carried out in order to develop safe reactors of the future? Where are we to get isotopes for treating tens of thousands of patients in Moscow clinics? And finally, what is to be done with the reactor's radioactive structures, which it would be dangerous to leave on the site? After all, a radioactive "legacy" was already buried in the Kurchatov Institute's ground during remote postwar years, and the safety of that buried waste requires serious and constant work.

But the main thing is that a reactor is not an electric range, and it cannot be turned off by pulling a plug. Taking one out of service is a complex problem, the solution of which requires time and considerable financial, material and human resources.

It is not easy to develop a rational program of action amid these numerous, contradictory factors. But the Kurchatov Institute's rich life experience suggests an optimal line of action—the establishment, as physical science develops, of new research centers. That is what previously led to the establishment of the Combined Institute of Nuclear Research in Dubna, the Institute of Nuclear Reactors in Dmitrovograd, the Scientific Research and Technology Institute in Leningrad Oblast, the Nuclear Physics Institute in Novosibirsk, and a number of others. That same course must be followed for the creation of a new base of research reactors.

Nonetheless, specialists at the Atomic Energy Institute have developed and turned over to the Moscow City Soviet a program for taking the reactors out of operation; that program indicates specific dates:

the Gamma reactor—1993;

the MR reactor—1996;

the IR-8 reactor—1999.

[Kiselev] And what accounts for precisely those dates?

[Gagarinskiy] Primarily the fact that under no pretext must major power engineering be left without an experimental base. And until research reactors are built outside of Moscow, there can be no talk of taking ours out of service. After all, I repeat, a broad program of research is being carried out on them that is directly connected with ensuring and enhancing the operating safety of the nuclear power plants operating in the country.

Nonetheless, the problem of the institute's reactors is being seriously examined by our collective. A proposal for new experimental research facilities was presented to the government several years ago. And for the time being, for all of our economic difficulties, we are steadily following a line of enhancing the safety of the institute's experimental units.

We are open to any independent expert review. The Atomic Energy Institute's Public Information Center, which is located at 9 Gamaleya Street, invites Muscovites to visit the Atomic Energy Institute. We hope that you will see that there is something in the country that we can take pride in.

Deputy Foreign Minister on International Role in Chernobyl Cleanup

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[Dialogue between V. Petrovskiy, USSR deputy minister of foreign affairs, and V. Gubarev, PRAVDA editor for the department of science: "The Pain of the Planet"]

[Text] [Petrovskiy] I definitely encounter the word "Chernobyl" every day when I look through summary reports, press reviews, coded cables, and reports of

agencies and embassies. Aid is arriving from all continents, concern and alarm are heard in different languages. The scale of aid is growing...

[Gubarev] Almost five years have now passed... However, I get the feeling that the tragedy occurred yesterday: All of these years have been associated with Chernobyl to some degree. At first, we reported the story; after all, I headed the first group of journalists who went to Chernobyl, and now there is quite specific aid. I mean the action: "For the Children of Chernobyl" that is conducted by PRAVDA, the joint-stock company, "Unknown Space Launch Complex," and many Soviet and foreign organizations that are cooperating with us.

[Petrovskiy] The accident at the Chernobyl AES [nuclear electric power station] is one of the greatest man-made disasters in the history of world civilization. Its global dimensions became apparent in the very first days after the explosion. The perception that the grief that befell the planet was common was so profound that the issue of who was to blame virtually did not arise in the international arena. They gave thought to something else: What was to be done next? The answer to this question was unambiguous: To help.

[Gubarev] Still, we should remember that the delay of information in the initial days and its subsequent concealment have harmed us tremendously, and not only abroad but first of all domestically: Mistrust developed. At present, it is manifested in different forms, including absurd ones. For example, conclusions drawn by the most authoritative scientists on the planet are called into doubt. We cannot conceal the truth from our own people—this is one of the lessons of Chernobyl. Incidentally, we, the journalists who worked there in the initial days after the accident, are reproached: They say that we failed to report completely and concealed a lot. This is not true. We only wrote about what we saw with our own eyes. Moreover, it was especially information coming from journalists that helped the government and the party leadership make a number of important decisions. It is a different matter that at the time it was difficult to appreciate the scale of what had happened. I was among the pessimists, that is, I said that we would not succeed in cleaning up the accident quickly. Moreover, in a conversation with Aleksandr Nikolayevich Yakovlev, I made this call: "Several years, maybe a decade will be required to neutralize the disaster..." Many specialists believed so at the time, only later, in another year, it became clear that decades would be required.

[Petrovskiy] Indeed, supersecrecy was a great obstacle in the initial days. The beginning of international cooperation did not come easy, whereas readiness for it was shown in the very first days after the reactor explosion. A number of Western countries gave us expertise and the technical means for the analysis of what had happened. A group of medical personnel arrived in the USSR in order to provide emergency aid to those exposed to radiation.

[Gubarev] Incidentally, a book by Robert Gail was recently published in our country. He describes in detail his work in Hospital No. 6, the victims, and the heroism of Soviet medical personnel who did all they could in order to help the injured and to save those who could not be saved... Unfortunately, people have come forward who have tried to belittle the medical and political role of Robert Gail. Fortunately, the American professor did not respond to petty attacks. In this case, he turned out to be "on the level," though he failed to understand why they were somehow rebuking him. After all, he did all he could. We have met with R. Gail several times, both here and in California: His attitude toward the Soviet people has not changed; he is always prepared to help us. Perhaps, some people do not know that he has accepted several sick children at his clinic and is treating them free of charge.

[Petrovskiy] We will be forever grateful to Dr. R. Gail, his colleagues, and the many people who came to our aid. At present, instruments and equipment, individual dosimeters, disposable syringes, various types of drugs, and baby food sent by government, public, and private organizations continue to arrive in our country. It appears to me that the example of Dr. Gail is quite instructive; he now has many followers and like-minded people.

[Gubarev] I would not like readers to get the impression that everything began with Dr. R. Gail and Armand Hammer, who sponsored the work of the medical personnel and who immediately after the Chernobyl accident donated drugs and necessary equipment for the victims. There were many such cases. We have touched on just one area. It appears to me that recently the scale of aid has undoubtedly increased compared to the summer of 1986. Perhaps, you know more about it. After all, in essence the USSR Ministry of Foreign Affairs has become a headquarters of sorts, into which all information comes.

[Petrovskiy] Soviet diplomats have been doing a lot of work in this regard though technically this is not one of their official duties. We try not only to express our gratitude to those who would like to help but also to make every effort for the aid to arrive in a timely manner and without bureaucratic foot-dragging which, unfortunately, is still very much in evidence...

[Gubarev] Excuse me, but I should thank the staff of embassies and consulates who have joined the campaign by PRAVDA associated with extracting drugs from coconut shells. It was precisely due to the diplomats that the contacts needed were established. The first shipment of drugs has already arrived; it was sent to treatment facilities for children in the Ukraine and Belorussia. There also is an agreement with Vietnam from which this raw material is going to come. This will make it possible, within two to three years, to fully meet the need for such medication... Literally a couple days ago, we received a message from England: Embassy employees have collected funds with which drugs and baby food will

be purchased. They will be sent to the orphanages of Bryansk Oblast. We would like to give our heartfelt thanks to all of those who participate so vigorously in our campaign: "For the Children of Chernobyl."

[Petrovskiy] This is our human and civic duty. Undoubtedly, we will provide such aid in the future as well.

I believe that our people need to be aware of the current scale of work associated with eliminating the consequences of the Chernobyl accident. In essence, the entire international community is taking part in it. Let me give several examples.

The government of the FRG gave to the Soviet side as a gift a facility for the decontamination of powdered milk (costing 40 million marks). France allocated 10 million francs for conducting a special program of aid to those who were affected by the consequences of the accident. The government of India, having handed over a check for 10 million rupees, stated its readiness to furnish medical equipment and drugs for this amount. The Netherlands, Great Britain, Switzerland, and a number of other countries would like to provide material and technical assistance. Literally days ago, we learned about the decision of the EC to deliver to the USSR free of charge dosimeters worth a total of \$200,000.

The preparation of an agreement between France and the RSFSR, the Ukrainian SSR, and the Belorussian SSR on cooperation in the field of radiation medicine and on reducing the medical consequences of the accident to a minimum is being completed.

Good prospects are opening up in conjunction with the signing and the beginning of the implementation of a Soviet-Japanese memorandum on cooperation in overcoming the consequences of the accident. Japan is providing to us, through international organizations, aid in the form of medicines in the amount of U.S. \$15 billion. The development of an expanded intergovernmental agreement on the issues of Chernobyl is on the agenda.

On a practical level, we are pursuing opportunities to secure funds for Chernobyl from public and private donors. Thus, the private Japanese organization, "the Sasakawa Fund," is preparing a five-year program of assistance to the three republics affected (on the order of \$30 million). About 10,000 children have been given an opportunity to go abroad for recreation in the last year alone on the invitations of various organizations from 25 countries, including the World Scout Organization. Several dozen people received courses of treatment in the best clinics.

[Gubarev] Recently, a delegation from ASAHI visited us. The journalists were received by the USSR president. At this meeting, the chiefs of ASAHI handed Mikhail Sergeyevich a letter in which they communicated that they had also joined in helping the children of Chernobyl. There have been many similar cases. However, we would very much like the Soviet people to perceive the real effect of these donations, so that they do not go

down the drain. As I see it, we should control such contributions more thoroughly and specify concrete addresses. In particular, it appears to me that the ASAHI donation should be turned into quite real medical equipment. We have already received requests from the Ukraine for medical equipment for hospitals in the vicinity of the zone. The trade unions of Belorussia have suggested that we take part in outfitting the Republic Health Maintenance Center for children and parents from the affected zone. The public should also carefully see to it that such equipment does not rot away in warehouses or disappear without a trace. Information should, perhaps, be concentrated in the committees for the issues of Chernobyl which have been created in the republics. To my mind, it is necessary to regularly report in the press and, perhaps, in the Supreme Soviets as well, on how the equipment and medicines are used. In all honesty, at times we cannot inform our foreign partners about precisely how their gifts are used. Unfortunately, aid is not necessarily provided to those who need it.

[Petrovskiy] I agree: Punctiliousness is absolutely necessary in such an endeavor. Tremendous confidence is placed in us, and it is criminal to abuse it.

[Gubarev] All the more so because the most authoritative international organizations have now become involved in the Chernobyl issue.

[Petrovskiy] You are right. The general human background and the principle of mutual dependence were manifested particularly vividly in the course of considering, in the UN organs, the issue of assistance in the elimination of the consequences of the tragedy, which was raised on the initiative of the USSR, the Belorussian SSR, and the Ukrainian SSR, with active participation by the RSFSR. We should note that the pursuit of this initiative was quite complicated because at issue was the allocation to us of actual resources—financial, material, and human—within the UN framework. Nonetheless, based on the results of discussions in the Economic and Social Councils, a special UN mission visited our country. Useful recommendations, prepared by participants in the mission, were presented to the world community in a report by the UN secretary general.

The consideration of these recommendations at the 45th Session of the UN General Assembly ended in the preparation of a resolution that was co-authored by an unprecedented number of countries, 120. The resolution provides for specific measures aimed at reinforcing corresponding programs, securing additional voluntary contributions for their implementation, and continuous monitoring of such work. A special center for coordinating such cooperation has been set up in the UN Secretariat.

[Gubarev] I do not think that the role of international organizations, which have been working in Chernobyl since May 1986, has declined. I mean the International Atomic Energy Agency [IAEA], WHO, UNESCO, and UNEP [United Nations Environment Program].

[Petrovskiy] Specialized elements of the "UN family" play a special role in the Chernobyl problem. In particular, IAEA General Director Hans Blix visited the Chernobyl area as early as several days after the disaster. The agency made a substantial effort to analyze objectively the situation in the affected areas and evaluate the radiological situation. The USSR provided to the IAEA a detailed report on the technical aspects and causes of the accident, as well as the integrated program of safe development of nuclear power generation. International conventions on notification of a nuclear accident and assistance in the event of a nuclear accident were developed under the aegis of the agency and with our vigorous participation. We have signed a number of bilateral agreements on the basis of these conventions.

In the environment of the profound emotional effect the accident had on the population of the affected areas and the lack of trust in the evaluations of domestic specialists that developed due to this, the Soviet Union approached the IAEA with a request to organize an independent expert review of the situation in these regions under its auspices. It is now being carried out using the potential of the WHO, UNEP, and a number of individual experts from developed countries. In September 1990, the USSR, the Ukrainian SSR, and the Belorussian SSR signed an agreement with the IAEA on establishing in Chernobyl an international center for the study of the consequences of the nuclear accident.

[Gubarev] Hans Blix is among the laureates of "PRAVDA-90." In the summer of last year, he published principled material on the pages of our newspaper. As is known, a quite sensitive situation developed at the time. A group of experts was greeted in the zone in, to put it mildly, a "hostile manner." Prominent scientists came here using their leave time and at their own expense, but, in pursuit of political ambitions, some people accused them of ill-will and betraying the interests of science. Shameful articles were published in the local press. Naturally, the scientists took offense. To the credit of Hans Blix, he turned out to be above these petty intrigues. He managed to convince his colleagues from various countries that such incidents are not characteristic of our society. The authority of the general director definitely played a role. The expert review in the affected areas has been carried out. At present, full and comprehensive processing of the results is being completed.

[Petrovskiy] It is necessary to stress that cooperation with foreign states and international organizations with regard to the issues of Chernobyl graphically reveals one more aspect of interdependence. The simple receipt of material and technical aid by us is not the whole issue. In turn, our partners gain access to the scientific research of processes caused by the catastrophe and the work on eliminating its consequences. In particular, this is the rationale for the international centers set up jointly by the IAEA and the WHO.

These developments are absolutely necessary from the point of view of the already available international

experience. We may recall in conjunction with this research projects carried out in Japan, which suffered the deadly effects of nuclear weapons. These research projects are significant for all of humanity and are conducted with a view to benefiting all states and peoples, the entire sorrowful nature of events that are the basis for these projects notwithstanding.

When making generalizations about the scope of international aid, we should be fully aware that this aid will not solve our problems in and of itself, and that the main responsibility for restoring normalcy in the affected regions devolves on us. It is no secret that the stress of Chernobyl overlapped with obvious statewide and local socioeconomic problems, and difficulties of an organizational nature that are due to evident oversight, irresponsibility, and confusion.

This is why particularly great responsibility devolves on the recently created all-Union committee for eliminating the consequences at the Chernobyl AES, and the proper RSFSR, Ukrainian SSR, and Belorussian SSR organs. The success of our common endeavor will largely hinge on their ability to ensure effective interaction with the coordinating center of the UN Secretariat and to support its efforts in the field.

GENEVA, 22 January (TASS). A resolution on an international program to reduce the impact of the consequences of the Chernobyl accident on the health of the populace was adopted today by unanimous decision of the members of the WHO Executive Committee. In particular, this program, which was initiated by the WHO and the USSR Ministry of Health, calls for setting up an international center for the issues of radiation medicine in the city of Obninsk near Moscow in order to study the issues of treatment and prevention of diseases in people who have suffered from the Chernobyl accident.

Chairman Details Ukrainian Chernobyl Committee Tasks

91WN0181A Kiev MOLOD UKRAYINY in Ukrainian 12 Dec 90 p 1

[Interview with Chairman of the State Committee of the Ukraine for the Protection of the Population From the Effects of the Accident at the Chernobyl AES, H.O. Hotovchyts, by Ievhen Tur: "The 'Chernobyl Committee' Begins Its Work"]

[Text] October of this year saw the establishment of the State Committee of the Ukraine for the Protection of the Population from the Effects of the Accident at the Chernobyl AES [nuclear electric power station]. As a result of the efforts of the Supreme Soviet Commission on Chernobyl Problems, Heorhiy Oleksandrovych Hotovchyts was selected as committee chairman. Before taking up this post, Heorhiy Oleksandrovych served as the deputy chairman of the Zhytomyr oblast executive committee. During the last three years, he has dealt with the problems of the effects of Chernobyl. He is married and has two daughters. He sees the aim of his work as

being the solution of all problems linked to the Chernobyl catastrophe. Our correspondent discusses with H.O. Hotovchyts replies to questions put in letters from readers.

[MOLOD UKRAYINY] What exactly is your committee?

[Hotovchyts] The State Committee of the Ukraine for the Protection of the Population from the Effects of the Accident at the Chernobyl AES has been in existence for only one month. It is a new structure of the organs of state government. It was established in order to bring together all the efforts made by scientists, practical workers, local councils and government bodies, so that all efforts being made for the protection of the population would give practical benefits. So that there would be no idle talk, scattering of resources, duplication of work. Plus the passage of laws, acts, which would protect people who live in the contaminated districts and who have moved to new places.

[MOLOD UKRAYINY] You committee has only just been established. But the problems are old.

[Hotovchyts] And they are mainly very difficult psychological problems. You can imagine, tens of thousands of families obliged to leave their accustomed places of residence, to break social, cultural, ethnographic ties. We must organize their resettlement, build habitations for them. If this year's program dealt with the resettlement of 13 thousand people, for next year, we foresee the resettlement of close to 30 thousand.

[MOLOD UKRAYINY] From which raions?

[Hotovchyts] Mainly from the contaminated zones of the Kiev, Zhytomyr, Rovno and Chernigov oblasts.

[MOLOD UKRAYINY] How do you view the solution of the problem of refugees from Chernobyl?

[Hotovchyts] In the Ukraine, close to two million people find themselves in zones of radiation. There are different levels of contamination, different levels of risk, effect on health of the present and future generations. That is why we think that there is a need for gradation. First of all, people who have children below the age of 14 should leave those several hundred populated points which are contaminated. For those who remain, we must solve the problem of improving medical service and providing food products.

[MOLOD UKRAYINY] Are the people who resettle being given material compensation?

[Hotovchyts] They are being given compensation for everything that they lose in their place of residence. But there is no firm guarantee that they will be protected in the new places of settlement. The draft laws that are being elaborated by scientists, council workers, co-workers of our committee include legal protection of the victims.

[MOLOD UKRAYINY] When, in your view, will these laws be passed?

[Hotovchyts] Eligibility with regard to place of residence and medical condition, the draft law on the status of the zone, these have been passed on for examination to the commissions of the Supreme Soviet. The draft law on protection of victims and participants in the elimination of the effects of the accident, will be passed on in the near future. Thus, they should be ready by the end of this year or at the beginning of next year.

[MOLOD UKRAYINY] And what is the likelihood that they will be ratified?

[Hotovchyts] Of course, there will be alternative proposals, there will be deputies who do not agree. These documents will be added to, completed, but the logic of their passage stems from the decisions of the Supreme Soviet.

[MOLOD UKRAYINY] There are rumors that as of 1991 the payment of compensation is going to be stopped.

[Hotovchyts] Such rumors reach us too. We will do all we can to make sure that rumors remain just rumors. At present, as a preliminary stage, we have examined these questions with the state planning committee of the Ministry of Finance of the Ukrainian SSR and this money has been put into the preliminary plan.

[MOLOD UKRAYINY] Please tell us the exact amount.

[Hotovchyts] Over 600 million rubles. This is the minimal sum which satisfies the needs of people. But if the zone gets larger, if new benefits are accepted, then, naturally, the necessary monies will be found.

[MOLOD UKRAYINY] With the shift to the market system, or with the increase of prices, that small compensation will be reduced to nothing.

[Hotovchyts] This makes the situation more difficult. But we are setting the budget for next year taking into account the possibility of indexation of prices.

[MOLOD UKRAYINY] And will the so-called "coffin" subsidies be covered by coupons?

[Hotovchyts] At present, I cannot give you a clear answer to that question. The coupon system is new, but as much as possible we will try to influence the solution of this problem.

[MOLOD UKRAYINY] To where are people being resettled from the contaminated zones?

[Hotovchyts] The basis of the approach to the solution of this complex question is the wishes of the people. We give the right to people themselves to choose the place of resettlement. Preponderance is given to places where there is a need for manpower, where people will be able to find jobs. Let people go there, become familiar with the conditions. These are mainly places in the same

oblasts, but where there is no contamination. However we have at present examples, and this was, in fact, foreseen by the Council of Ministers resolution no. 228, of people resettling into the Kharkov and Kirovograd oblasts.

[MOLOD UKRAYINY] How is the resettlement being financed?

[Hotovchyts] Money for resettlement as part of this year's and next year's program was allocated by the resolution of the Supreme Soviet of the USSR of April 25 of this year. In addition, financing is foreseen in the draft law. This is a sum of more than R1.5 billion.

[MOLOD UKRAYINY] All right, so the money will be granted, but will there be anyone to put it to use?

[Hotovchyts] This is not a simple question. In a very short time, beginning with January-February of next year, we should begin to make use of that money, to build and build. There should be harmonious work on the part of all organizations, ministries, departments, oblasts.

[MOLOD UKRAYINY] Should be... but are they doing it?

[Hotovchyts] Unfortunately, there are already some cases of refusal. This applies to the Dnipropetrovsk, Zaporozhie, Volyn and a number of other oblasts. They justify their refusals by the impossibility of achieving such an amount of construction works and the necessity of fulfilling the "Habitation" program and other social programs. But Chernobyl is a national problem, a national catastrophe.

[MOLOD UKRAYINY] Those guilty of sabotage must be forced to work.

[Hotovchyts] Of course. The Council of Ministers has already held two meetings.

The government will use all means in order to see that its decisions are carried out.

[MOLOD UKRAYINY] What are the time frames for carrying them out?

[Hotovchyts] We have decided to complete the resettlement program, which was planned for two years, in one year. There is a need to hurry.

[MOLOD UKRAYINY] No less important is the question of protection of the health of the victims.

[Hotovchyts] In our committee there will be a special subcommittee for the protection of health and improvement of health of the population, and we will elaborate a program of planning, selection, coordination and control of all state institutions, foreign countries and firms and community organizations which have answered the appeal of our government for help. There should be a planned, clear action based on medical indicators, natural-climatic conditions and people's age. At present, the

program is being worked on by specialists; it will be returned to us before the end of the year. With the beginning of 1991, the improvement of health should begin.

[MOLOD UKRAYINY] For most people, the zone of catastrophe is the Kiev, Zhytomyr and Chernigov oblasts. We only recently learned that there is contamination in the Rovno and Volyn oblasts. What measures are being planned for the western part of the Ukraine?

[MOLOD UKRAYINY] The fact that the Rovno and Volyn regions were contaminated became known only last year. The natural-climatic conditions in that region are such that at a fairly low level of contamination, food products and water are very much affected. Objectively speaking, this was a failing on the part of our scientists, the Hydro-Meteorological Institute. Did we really need almost four years to find the contaminated areas? At present, measures are being taken. A whole string of raions of these oblasts have been included into the government resolutions dealing with resettlement next year. But much time has been lost, the confidence of the people has been lost. Whatever else, we must help people.

[MOLOD UKRAYINY] In that case, do you not intend as the head of the committee to raise the question of payment of at least the "coffin" subsidy to the people of these regions for the period 1986-89, taking into account the level of inflation?

[Hotovchyts] There is common sense and logic in what you ask, but so far we function according to the obsolete formula that the law is not retroactive. But probably, for this trouble, it will be necessary to pay up.

[MOLOD UKRAYINY] How is payment of compensation for dwellings progressing?

[Hotovchyts] The procedure for the payment is clearly indicated in Resolutions 315 and 115 of the Council of Ministers. A person who wants to leave approaches the existing commissions, which go to the spot and assess, taking into account the period of use, the value of the building, garden, auxiliary buildings, greenery, farm buildings. Unfortunately, sometimes mistakes are made in the payments. Another matter is the fact that for that money, people cannot buy a dwelling of equal value in clean districts.

[MOLOD UKRAYINY] So perhaps indexation of prices should be introduced?

[Hotovchyts] The first step towards this system is its introduction into the draft budget of 1991, about which I have already spoken.

[MOLOD UKRAYINY] But still there is no guarantee that there will be full compensation?

[Hotovchyts] So far, that is the case. But in the draft we included this principle. In addition, people who are resettling will be guaranteed a dwelling, without waiting

their turn, in selected places of resettlement. Local councils are permitted to buy dwellings at state cost and give them in ownership to people who are resettling. If, for example, a person decided to move from the Narodychi raion to the Kherson region, the Kherson region would buy the dwelling and the Narodychi raion council would pay them back.

[MOLOD UKRAYINY] Is there a system guaranteeing the provision of equally-valuable usable land, garden and other conditions?

[Hotovchyts] So far, not completely. But in the laws elaborated by us, full compensation for all conditions is foreseen.

[MOLOD UKRAYINY] In conclusion, let me ask this: many of our newspapers write about Chernobyl. Could not a "hot line" be set up which would bring your specialists in contact with people?

[Hotovchyts] One of the tasks of our committee is ensure that complete, objective information on all problems of Chernobyl is provided. It is impossible to avoid contact with people in this matter. We expect to receive people openly, to have our own newspaper or bulletin dealing with Chernobyl problems. But taking into account that we have only just been established, that we are not yet staffed, these questions will be settled by the end of the year.

Republic Official Details Post-Chernobyl Ukrainian Health Data

*91WN0180A Kiev LITERATURA UKRAYINA
in Ukrainian No 49, 6 Dec 90 p 7*

[Interview with the Deputy Minister of Health of the Ukrainian SSR, A. M. Serdiuk, by Valentyna Pashchenko: "Will We Continue To Exist on the Earth?"]

[Text] After the catastrophe at the Chernobyl AES [nuclear electric power station], when nobody here knew anything yet, Finnish television immediately provided its people with detailed instructions about how to protect themselves and what medications to use in order to neutralize the small dose of radiation that they received. This was a very telling fact. It was like a prologue to the whole epic, which later included the May First parade and disinformation and the claim, so stubbornly repeated, that Kiev residents will die not from radiation, but from radiophobia.

Why do I mention these things? Because little has changed since that time. Yes, today we are living in a state of euphoria because of glasnost and the democratization of our society. And we really can say whatever we want. But the one thing about which we still do not have complete information is Chernobyl, the extent of the ecological catastrophe. When this topic is raised, many highly-placed people begin—and this has become a socially-acceptable thing to do—to criticize their predecessors for the fact that they did not give the people

honest, objective information, while at the same time, maintaining those predecessors' line. It is true that they say more, but they do not say everything.

That is why when the press published the frightful figures cited by the Deputy Minister of Health of the Ukrainian SSR, Professor of Medicine A.M. Serdiuk, they struck like an explosion. These figures were the topic of our discussion.

[LITERATURNA UKRAYINA] Andriy Mykhailovych, we would like to hear a more detailed analysis of the latest data about the state of health of the inhabitants of Ukraine. You said that you spoke about this at a meeting of the republic's Council of Ministers. I think that the general public also has the right to this information.

[Serdiuk] A whole host of people worked in order to determine this data—geneticists and our medical/statistical center and other specialists. And the figures reveal that here in the Ukraine the worst of all possible catastrophes has begun—the degeneration of the nation. What is the reason for this? There are many causes.

Over the last few years, we have seen a consistent decline in the birth rate. In 1989, it was 86 percent as high as it was in 1986. Taking into account the real mortality rate, this has led to a sharp reduction of natural population growth. Let me cite some figures: in 1987 it was 77.3 percent, in 1988—63.6 percent, and in 1989—only 38.6 percent of what it was in 1986. But closer analysis shows that last year was critical in this respect. In 1989, for the first time, the coefficient of reproduction, that is, the number per woman of girls who had reached the age of 15, fell below one. According to preliminary data, in 1990 it is rapidly rising.

A characteristic feature of mortality in the Ukraine is that the death rate among men in all age groups, and in particular, among young, employable men, is much higher than among women. This tendency is taking on a catastrophic character. In the mid-1960s, this difference in life expectancy was 3.7 years and was one of the largest in the world. But in 1989, men in the Ukraine lived on average 10 years less than women. So in only one generation, this index worsened by a factor of more than 2.7. Last year, the average lifespan was 65.3 years for men and 75.4 years for women.

[LITERATURNA UKRAYINA] But things are not much better for women. It seems to me that there is an overall decline in health.

[Serdiuk] And this is caused mainly by the fact that women are overly busy working outside the home, in unsatisfactory and harmful conditions. Work-related illnesses account for 30 percent of the total number of illnesses discovered each year and occur primarily in chemical, light industrial and agro-industrial enterprises. Industrial chemical factors, compounded by the effect of the environment, result in ecologically-based illness:

ischiodic illnesses have increased two-fold, spontaneous miscarriages, four-to-six-fold; every year, this happens to 40,000 women.

As a result of our barbaric attitude towards women's health, the total lack of contraceptive devices, we have the shameful distinction of being first in the world in numbers of induced abortions. In 1989, there were over one million. If we also consider what awaits women after abortions (30 percent suffer inflammation, 60 percent have secondary infertility, 22 percent have miscarriages, etc.), then let the economists calculate the cost to us of the government's attempts to economize—whether it be on buying contraceptives abroad or on building our own modern manufacturing plant.

Another indicator has been noted which should be cause for concern. The overall mortality of the republic's population is increasing: during the first six months of this year, in comparison to the same period last year, it rose by 6.8 percent. But the features of mortality also vary according to area. In large cities (particularly industrial ones) it has risen more rapidly, and in Kiev it has risen more dramatically than has ever been the case in times of peace—by 8.1 percent in the first seven months. This means that in only one year, the average lifespan declined by more than five years.

[LITERATURNA UKRAYINA] Are you saying that the big cities of the Ukraine are being transformed into "black holes" which are swallowing and destroying people?

[Serdiuk] In general, our ecological situation is frightful. And our highly-praised society has been and continues to be responsible for creating this situation at a cosmic rate with no regard for the consequences. Donbas and Kryvbas, the Dnieper and Dnester River regions, the coasts of the Black and Azov Seas, Zaporozhie and Chernovtsy, Chernobyl—this is a far from complete list of the zones of great human misery.

In most regions, air pollution exceeds the established limits by five to 20 times. Only last year, there were three billion cubic meters of polluted sewage in the republic. As a result of the aggressive application of agricultural innovations, we observe practically everywhere a threatening degree of pollution of agricultural production and food products by pesticides and nitrates.

A crying mismanagement, criminal impunity with regard to implementation of accepted decisions, primitive application of technology have led to a destructive effect on nature, and thus, on people. In the health of the nation, negative tendencies have clearly become apparent which are closely linked to the ecological situation. The lifespan of the republic's men is seven-eight years shorter, and of women, four-six years shorter, than in developed countries. In this respect, the Ukraine is in 20th place in the world. We have the sad distinction of being in first place in numbers of cardiovascular, allergic and oncological illnesses, bronchial asthma, sugar diabetes. Unfortunately, this list could go on and on. But the

greatest tragedy is in the fact that, by worsening living conditions, we are causing irreparable harm to the health not only of the present, but also of future generations.

And what if the environmental pollution has reached such a level that it poses a real threat to the genetic apparatus of not only people's somatic, but also their sex cells? It is known that under normal conditions, every second fertilized egg cell dies in the mother's womb as a result of genetic cataclysm. If we allow such a degree of pollution of the environment that mutagenesis will lead to a doubling of the frequency of natural mutations (and this can happen if, for example, ionizing radiation occurs in doses of 100 bers over 30 years, that is, a person's reproductive life), then 100 percent of fertilized egg cells will be mortally afflicted, which will lead to inevitable catastrophe for humanity.

The study of the effect of the surrounding atmosphere on the genetic structures of sex cells of people from Zaporozhie and Mariupol, which are located in the most polluted Donetsk-Dnieper region, showed that the genetic effects of chemical environmental poisoning, as expressed in the biological equivalents of roentgens (bers) over 30 years, are 80 bers in Zaporozhie and 180 bers in Mariupol.

Thus, chemical environmental pollution in Zaporozhie has practically reached, and in Mariupol, significantly exceeded, the limit which, if maintained over 150 years, will lead to the physical and intellectual degeneration of the local population. But even if the air basin were cleaned tomorrow, the genetic consequences of the pollution would still manifest themselves for many decades to come.

[LITERATURNIA UKRAYINA] The genetic consequences—you mean the ruination of heredity. Did I understand you correctly?

[Serdiuk] Yes. And that is a much more dangerous process than merely the slow dying off of the indigenous population. From the structure and dynamics of pathologies, it is possible to make conclusions about the beginning and acceleration of the destruction of the heredity of the population of Ukraine, which is accompanied by its physical and intellectual degeneration.

According to data from studies of school graduates (and this given our primitive methods of study) only 20 percent are completely healthy; the other 80 percent have some illness. Out of 2.3 million adolescents, almost one-half million have clearly diagnosed illness.

Over the last 10 years, there has been a five-fold increase in births of nonviable children and babies of abnormally low weight. Rapidly increasing is the number of babies born with clearly visible defects—from 1975, the number has doubled.

Congenital developmental defects among children in cities with polluted environments are three-four times more frequent than in relatively clean areas.

Children's mortality is slowly decreasing. But in comparison with developed countries, it remains high. In the first nine months of this year, it was 12.4 per 1000 births, this is, twice as high as in Japan and Switzerland, and one-and-a-half times as high as in the U.S.

Against this background of declining natality, particularly threatening is the tendency towards an increase in the number of children with mental disorders. In one year, from 1988 to 1989, that number rose by 2.3 percent, and such children now constitute 3.6 percent of the entire maturing generation.

[LITERATURNIA UKRAYINA] Please tell us, Andriy Mykhailovych, are you somehow trying to fight this?

[Serdiuk] A year ago at a meeting of the Council of Ministers of the Ukrainian SSR, I raised the question of preventing births in cases in which we, physicians, can say after examination that the child would be an invalid for the whole of its life. Why is this done in other countries? Why is it that in Japan, before they get married, a future bride and groom must provide medical certificates regarding the suitability of their genetic potentials. It is determined who will have healthy children, and who may have sick ones. And people are warned: if you give birth, it will cost you this much—and they really add it up! Because there the state protects itself.

And here? A few years ago we boasted that we had built 20 children's homes, with 4000 places for orphans. Today, 80

of the children there are mentally ill. So 20 children's buildings have been transformed into mental hospitals. That is what we have come to. And we could have prevented it.

Using modern methods, one can determine in the 12-14th week whether a child will be born sick or well, and one can say, "Dear citizen, unfortunately your child may be an invalid. You want to be a mother—we will help you and next time everything will be okay." And I am certain that no woman would refuse.

The year before last, we prevented close to 400 births this way, and last year—800. but at the same time, last year, 13,800 children were born with physical and mental defects. We do so few examinations because we do not have sufficient equipment. And meanwhile, all that is needed is to do an ultrasound examination of every pregnant women—and we have 750 000 of them each year—and this would not be a problem.

So let's do a calculation: on the one hand R15 million, the value of the necessary equipment, and on the other, the misery of thousands of families, the parents' inability to work, the essential need to keep building more and more children's buildings and residences for invalids. Which is cheaper?

In this situation, the Supreme Soviet of the republic should force the government to allocate the money. We

do not need much hard currency; we have agreements with foreign partners to create a joint enterprise, with the involvement of "Arsenal," to put out ultrasound equipment, but we need assistance from the Council of Ministers of the Ukrainian SSR. And as soon as possible. Because if the present situation continues for one or two generations (that is, over 30-60 years), the principal portion of the young, indigenous population of the republic will be composed of mentally and physically defective individuals.

The state of health in the republic is close to critical. I will cite you some terrible figures: we have 8.2 million recorded cases of cardiac illnesses, 0.7 million people with malignant growths, close to one million ill with chronic alcoholism, over one million with mental illnesses. Every year, close to 14 million people occupy beds just in the hospitals of the Ministry of Health of the Ukrainian SSR.

But, my dear people, over the ages, the Ukraine constantly renewed its genetic pool, compensating for the terrible devastations caused by Tartar-Mogol invasions, by wars—the civil war, the world wars, famine. But at present it is rapidly turning into a territory fit for settlement by other nations. So let us finally do something.

[LITERATURNIA UKAYINA] Andriy Mykhailovych, what do you see as the way out of this tragic situation?

[Serdiuk] First of all, we must quickly bring into effect economic, political, social, legal and community levers, in order to create conditions for the survival of the nation. It is essential to feed the people, create working and living conditions that are worthy of human beings, restore a clean environment, and finally make concrete efforts to care for the health of every person and the whole nation.

Secondly, in order to ensure a permanent scientific backing for the solution of these problems, we (the Republican Scientific Hygienic Center, the Worldwide Scientific Laboratory, the Scientific-Engineering Center of the Ministry of Health of the Ukrainian SSR and a number of other republican and foreign organizations) are establishing a modern medical-social scientific center; we'll call it the "Survival Center." This will be a nongovernmental, independent organization which will be able to publish scientifically-grounded analytical data about the state of health of the people of Ukraine, recommend specific economic and social measures for coming out of the crisis situation, make prognoses for the future. For work in the center we intend to bring in competent specialists from other countries too—geneticists, ecologists, physicians, biologists.

If you want, this will be the truth of the last resort: the independent, highly-competent thinking of scholars, aimed at helping our Supreme Soviet to make well-founded and truly intelligent decisions with regard to such questions as the ecology, the health of the nation,

and related problems, such as food and working conditions. But to ensure food supplies—that will not be our problem. And that is why we should say to those who deal with this problem, in this case, the State Agricultural-Industrial Department: if you continue to feed us the way you feed us now, whatever scientists and physicians do will have no results.

Thirdly, of course, objective information should be provided to the society on a permanent basis about the state of mental and physical health and advice on how to improve it.

And, of course, perhaps first of all, we must solve without delay the problems linked to Chernobyl. Here in the Ukraine, the International Chernobyl Medical Council has been established (chaired by Iu. M. Shcherbak), which, along with the Ministry of Health, is supposed to harmonize, generalize and coordinate all actions related to external links. The problem is that international confidence in our official circles (including the Ministry of Health) has been undermined. For years they turned away all help, claiming that they could manage on their own. So the money, drugs and products that were sent did not get to the right place. Or things are done for political reasons, as happened with Cuba, when the Children's Fund made all arrangements through Moscow and placed us before an accomplished fact: send your children. You know the result—we lost three children. Or we are sent something which has already been paid for, and at the customs they demand that duty also be paid, or they do not let it through, or put up some other obstacles. So over every shipment there is a real epistolary war. One would think that everything arriving for Chernobyl victims should come in free of interference. In general, there has been so much unpleasantness around Chernobyl.

So the International Chernobyl Medical Council was created in order to establish direct links, without any middlemen. But in order for it to function, we need a resolution of the Council of Ministers of the Ukrainians SSR allowing certain things which only it can allow, in particular, duty-free transport of goods.

[LITERATURNIA UKRAYINA] What is the present situation with regard to Chernobyl? One gets the impression that now, as before, we are alone with our problem.

[Serdiuk] Close to 1.8 million people continue to live in contaminated regions of the Ukraine. More than 150 persons, including almost 60 000(!) children, are afflicted by higher-than-permitted doses. And of these children, 13,000 received more than 200 rads. And 8000 adults received more than 500 rads. That is the sad arithmetic.

In these zones, the incidence of general and children's illnesses is growing. There has been a significant increase in the number of premature births, cases of hemorrhage, hematological and endocrinological illnesses; people's immunological state is getting worse. Five operations

have already been performed on swollen thyroid glands in children who were exposed to high doses of radiation.

These are deadly statistics. But unfortunately, things are moving very slowly.

[LITERATURNIA UKRAYINA] I recently found out that in Japan, after Hiroshima, there were no thyroid gland complications, because the medical care was well-organized.

[Serdiuk] We all criticize our pathetic medicine, but given that at present we spend R80 per capita on health, and we need a minimum of R280-300, it certainly cannot be better. If, let us say, in the United States, it is \$1350 and here, only R80 per year, one can see the difference.

Or let's consider these statistics: in the United States, spending on health is twice as high as on defense. In the United States, 11.9 percent of the gross national income goes for health, while here it is three percent. And if we take into account the difference in the levels of income of the two countries. . . So, let's consider, where does the state care about the people's health?

We should also say something about the value of lost health. For a long time we did not care about this at all, and even today, to be honest, we have not learned to do it. And for that reason, we simply do not recognize the value of our health. It is easy for the state to squander our health, and for us to do it ourselves.

In America, back in 1972, a special committee of the National Academy of Sciences proposed measuring damage caused to the population by ionizing radiation in terms of dollars. The experts on the committee decided to assess the loss of health from radiation of one person in the dose of one ber at \$12-120. Later, this approach was also recommended for the evaluation of economic damage caused by the action of chemical mutagens. If we take even the lowest assessment of \$12, then just those who participated in dealing with the accident at the Chernobyl AES should be paid by the state a minimum of 16 million (assuming that each one received 20 bers, which is a very low figure), and if we use the median assessment, the state should pay them close to 100 million. And then how much damage would the state have to pay to the population of the Ukraine for the restoration of its health, to those 6000 children, who received over 200 bers on their thyroid glands? Or to Kiev residents who after the first post-accident year had more than 1 ber of general radiation?

[LITERATURNIA UKRAYINA] Well, as I understand it, this is a rhetorical question, for, at least in the near future, our government will not try to deal with it. It does not have the money. But let us turn to the simplest question, that of drugs. Recently we were informed that next year, there will be only about half as many coming from abroad.

[Serdiuk] We have finally recognized the fact that the Soviet authorities have invested R15 billion into the pharmaceutical industry abroad. And now the countries of Eastern Europe have left us, and we have nothing from them and will have nothing from them. And our own factories are decrepit; they do not supply us with drugs (at present they supply only only 30 - 40 percent) and will not supply us tomorrow. That is our policy for you.

But when we established a joint enterprise in Borispol, we were accused of illegally exporting cotton wool. Listen, people, we set up an enterprise that works. It has to be paid for. Nobody gives us dollars, nobody wants to take our rubles. But the enterprise is here, it is working here, forever ours—and this is bad. When will we become wiser?

So the prospects for drugs are bad. As before, we receive foreign medications through Moscow. They do not give us any dollars for their acquisition. In February of this year, When I spoke in Moscow, it was still under Comrade Chazov, I raised the question of giving the Ukraine's portion of hard currency to the Ukraine. It is more evident to us what needs to be bought, taking into account Chernobyl and all our other troubles. But, as they say, on that we parted, and with the new minister, everything remains as before.

[LITERATURNIA UKRAYINA] Perhaps it is not at the ministerial level that this question must be resolved?

[Serdiuk] Yes. The Supreme Soviet of the Ukraine must say: we will not give you the hard currency that we earned. Here is your quota—20 percent, and the rest, 80 percent, is ours. The Ukraine must protect herself; after all, we have proclaimed sovereignty.

[LITERATURNIA UKRAYINA] Andriy Mykhailovych, to tell you the truth, I am just stunned by these terrible facts. Tell me, why was this not discussed earlier?

[Serdiuk] It was discussed. But unfortunately, not with journalists. We submitted reports, but nothing was done. We tried to take some initiative. In particular, we brought geneticists together, established a coordinating council and are continuing organizational work for the revival of medical-genetic assistance to Ukraine. We are trying to reach the modern standard, but this is extraordinarily difficult. The government allocated all of R100,000 for the preparation of medical-genetic monitoring—for acquiring equipment and doing related scientific work. No funds have been allocated for actually doing the monitoring, that is, permanently following the state of health.

I also spoke to the Ukrainian Republican Council of Unions about the terrible conditions of work in our enterprises. Every year we declare with pride that we have taken tens and hundreds of thousands of workers out of unsatisfactory conditions. But we are also putting in the same number. Is it not time to put an end to such compromises?

Our Supreme Soviet should immediately examine the demographic situation in Ukraine, the state of health, life, work and food of the nation. We should feed our people. If we are to believe the figures, the republic is capable of doing this. But it turns out that it may be so in the figures, but is not in fact. Even having such a problem as Chernobyl, we have not been extended any favorable terms. When we asked the central authorities whether we could supply less milk, so that we could have clean milk for the affected regions, our request was refused.

[LITERATURNIA UKRAYINA] Why do we ask? Are we sovereign or not?

[Serdiuk] Yes, and we should create conditions which would be worthy of people. We still do not have a law—and I believe that we should pass it as soon as possible—on the protection of the dignity of every person. Such a law should be in place, but it is not.

And we must take concrete, major measures. I will cite one example: we must immediately put into place a national program for the maintenance of the nation's gene pool, and, naturally, back it financially. Extraordinary measures needed to be taken 10 years ago at minimum. And there is experience in doing this; we still have to do it, as soon as possible, although already it is too late to get radical results. The catastrophe has gone too far; the inertia of genetic processes is very high and what is happening will gain strength if radical measures are not taken.

Today there are 52 million of us in the Ukraine. How many there will be tomorrow, or at the start of the new millenium, what we will be like, will depend on us and only on us.

[LITERATURNIA UKRAYINA] At present, it depends mainly on whether our government, the Supreme Soviet of the republic, want to hear us.

Who will finally take the part of the Ukrainian people? It seems that no lesson has benefitted us, nothing has taught us anything—neither Chernobyl, nor Chernovtsy. Everything depends on whether our present republican leadership has the wisdom, resolve and courage to make a radcial change and truly defend the sovereignty which it has declared. For we are facing the abyss and nonexistence.

P.S. While these materials were being prepared for print, Andriy Mykhailovych Serdiuk exchanged his position in the Ministry of Health of the Ukrainian SSR for scientific work, taking on the chairmanship of the Republican Scientific Hygienic Center of the Ministry of Health of the Ukrainian SSR. And as he himself assured us, he has no intention of abandoning the attempt to solve the acute problems which were discussed in the interview.

Gruzgeologiya Director Reviews Ecology Efforts in Georgia

91WN0218B Tbilisi ZARYA VOSTOKA in Russian
6 Dec 90 p 2

[Interview with "Gruzgeologiya" Production Association Director Irakli Gogitidze by Irina Cherkezishvili under the rubric: "The Ecology and the Economy": "Consumption Alone Is Criminal"; date, place not specified]

[Text] It is no secret that the ecological situation in Georgia is complicated. And in spite of all efforts to change something, there have not been many moves. There are more than a few reasons for this, and just as many explanations. Yet one thing is certain—we have organizations on which to a great extent depends just how capably and with the least risk we can use nature's gifts. After all, the time has passed when it was possible to take everything we wanted from nature. Life has shown that sooner or later it comes time to pay.

The "Gruzgeologiya" production association is one such organization. I asked production association Director Irakli Gogitidze to describe the problems that the association must solve in the vein of ecological stability, but of course, not to the detriment of the republic's economy:

[Gogitidze] Works of a geological nature have been conducted over the course of 20 years in the system of the association. Among the most important research studies we may count the engineering-geological studies of the territory of Georgia, aimed at determining the level of involvement with dangerous geological processes. Put simply, these are landslides, flash floods with debris, and certain other processes with decisive significance for the placement in various mountainous regions of national economic sites, settlements, and individual structures.

For several years the association has also conducted rock formation monitoring. And here this is closely connected with the economy. Observations are constantly being made on the nature and scale of the spontaneous geological processes in the regions of intense economic assimilation. Their results permit timely reporting on danger to the appropriate directive organs, ispolkoms of local soviets. For over 10 years there has been intensive research and work to eliminate, retool and equip old, abandoned pits, potential sources of depletion or pollution of underground water.

It seems to me that overall, we forecast the change in the strategic trends in environmental protection and effective utilization of natural resources in time and correctly by having created in 1979, for the first time in the Soviet Union, a special party to control environmental protection.

Based upon the experience already accrued and the need for a comprehensive solution to the problems of the ecology, we began to develop a program for action unlike

any the republic had ever seen. Its significance is hard to overestimate, unless we consider the scale of the impending tasks. Judge for yourself. The program proposes the unification of existing conceptual approaches, acting incrementally in the study of individual components of the geological environment, and involving them in the system of scientific, methodological, and production research with a concrete designation of the types of research and the terms for conducting it. Under these conditions, each successive stage of the program takes into consideration in retrospect the results of the previous stages.

The ultimate goal of the program is to create a monitoring environment within whose limits the mechanism of adopting decisions in the mode of the automatic system of management must function. In addition to the departments and organizations concerned, the system's consumers will be first and foremost state organs, and the investors our economy needs so much, which is important under the conditions of the transition to a market.

As far as the geo-ecological program is concerned. It is constructed such that at the early stages of its assimilation it would be possible to receive a full description of the radioactive and geo-chemical situation across the entire territory of the republic, data on the pollution level of underground water, and the determination of harmful elements such as heavy metals, pesticides, mineral and organic fertilizers in the air. The level and nature of the integrity of the earth's resources is a separate discussion.

The zoning of the republic's territory by the scale, nature, and severity of the violation of ecological balance is begun on the basis of the data obtained in the initial phase. In individual locations—within the boundaries of physical-geographical or administrative units—more detailed geo-ecological studies will be conducted, including the study of the ecological state of individual cities—Tbilisi, Rustavi, Kutaisi, Sukhumi, Borzhomi, Kaspi, and others.

Concrete parcels and adjacent territories of major industrial enterprises, ore-enrichment complexes, and territories with intensive irrigation and drying will also become the objects of research. Republic, scientific production, control, environmental protection, and other organizations, in short, all those who cannot but be concerned for the future of our children and grandchildren must join in executing the program.

The ecologicalization of the economy is one of the most important tasks of today. All the more so because the time is coming when in all instances, the ecology must be given more attention than ever. The market spoils no one. This is understandable when it happens with people. But such an attitude toward nature cannot be permitted. Today, to be just a consumer is criminal.

Turkmen SSR Supreme Soviet Examines State of Republic's Environment

92WN0192A Ashkhabad TURKMENSKAYA ISKRA
in Russian 20 Nov 90 pp 1-2

[Unsigned article: "On the Agenda—Questions of Ecology: Report on the Second Day of Work by an Extraordinary Session of the Turkmen SSR Supreme Soviet"]

[Text] The ecological state of the Aral Sea area of the Turkmen SSR and measures to improve it were the last item on the agenda of an extraordinary session of the republic's Supreme Soviet. But in terms of its significance for Turkmenistan this is one of the most urgent and important issues. For this reason the entire second working day of the session was devoted to a discussion of this issue. In accordance with a decision by the deputies, it was arranged to hold the session in Tashauz.

P. Tanryknulyev, chairman of the TuSSR Supreme Soviet Committee on Ecology and Public Health, presented a report at the session. In the report he noted that in terms of ecological, economic and public-health indicators the situation in the Tashauz, Chardzhou and Mary oblasts cannot be called anything other than catastrophic. The main reason for this lies in the destruction of man's environment for habitation by unacceptable pollution of the drinking water, the deterioration of soil conditions and the low level of social benefits.

The population has virtually no high-quality drinking water. The natural waters are constantly being polluted by salts, poisonous chemicals, and other various toxic and biologically-active substances. The rates for infant mortality and infectious diseases are growing; the number of children born with various developmental defects is increasing every year.

These oblasts comprise the region with the country's highest infant and maternal mortality rates; they are characterized by frequent outbreaks of infectious gastrointestinal diseases and unsatisfactory public-health conditions in built-up areas.

It is a question of possible survival for nearly 2,307,000 people, almost two-thirds of the population of the Turkmen SSR.

Today the level of infant mortality for these oblasts exceeds the average Union-wide indicator by 2.5-3-fold.

In Tashauz Oblast the socio-economic damage from child mortality alone amounts to about 120 million rubles annually, in Chardzhou Oblast it amounts to R86 million and in Mary Oblast it is R117.9 million. There is now a danger that the population of these oblasts may lose its medico-genetic stability.

For a long time priority in the oblast was given to developing massive amounts of new irrigated lands without considering the consequences, which are present today.

Virtually no effort was made to find methods for using water economically in agriculture and industrial production. The quality of the water which is being used for land irrigation has deteriorated four-five-fold in the last five years.

The report goes on to say that the development of the agro-industrial complex has been accompanied by the broad application of mineral fertilizers and toxic chemicals, as well as by serious and scientifically-unsubstantiated violations of the technology for their utilization; this has led to further significant pollution of the water, soil and agricultural products.

The situation has been made worse by the failure of the ministries, agencies and oblsposloms to fulfill the decision by the Presidium of the Turkmen SSR Council of Ministers on the implementation of a set of measures to shift facilities which pollute water and land resources away from the protected zones of the Amu Darya River, the Karakum Canal and other water sources.

The last 30 years were a period of wasteful, barbaric plunder of the national wealth represented by the waters of the Amu Darya and Syr Darya rivers.

This situation is leading to an irreversible loss of the invaluable wealth of living nature—the gene fund of endemic fauna. The death of the tugai (vegetation-covered bottomland), of reedy undergrowth and ponds in the deltas has brought with it an impoverishment of the animal world: previously there were 173 species of valuable animals, but at present there are only 33 in all.

The Ichthyological Commission of the USSR Ministry of the Fish Industry has concluded that it is dangerous to use the fish which remain in Sarykamish Lake for food.

Reedy undergrowth covering an area of 800,000 hectares in Tashuz Oblast alone has died. Relic tugai reeds along the river bed are on the brink of extinction.

The CPSU Central Committee and the USSR Council of Ministers attribute great sociopolitical and economic significance to the fundamental improvement of the ecological situation, the state of the population's health, as well as favorable working and living conditions for the people residing in the regions adjacent to the Aral Sea; for this reason they adopted a resolution in 1988: "Concerning Measures To Fundamentally Improve the Ecological and Public-Health Situation in the Aral Sea Region, To Increase the Effectiveness of Resource Utilization and To Strengthen the Protection of Water and Land Resources in Its Basin."

However, the amount of money appropriated for the construction of water management facilities, that is, for water-supply, sewage and treatment facilities in Tashauz Oblast was 30-fold less than in the neighboring oblasts of the Uzbek SSR and the Kazakh SSR, and no funds at all were provided for the Chardzhou and Mary oblasts.

In this regard it was the leaders of these oblasts and the republic's Council of Ministers above all who were guilty

in the fullest measure; they failed to obtain timely increases in capital investment and material resources.

A majority of the rural population in these oblasts uses water from wells, most of which do not meet the most basic public-health norms. Another several hundred thousand rural residents use water from irrigation ditches and canals because their villages do not even have wells. As a result of this the rate of illness from acute infections is not falling. In the last 10 years 26 outbreaks of intestinal infections have been recorded in Tashauz Oblast alone. Suffice it to say that during an outbreak of viral hepatitis in 1984-1985, more than 16,000 people came down with the disease.

An analysis of water quality shows that today there are no guarantees against repeated outbreaks of various diseases. Nor can one exclude the possibility of a particularly dangerous infection such as cholera.

No less persistent is the problem of providing the population of Tashauz, Chardzhou and Mary oblasts with food supplies. A comparative analysis of the data on the per capita consumption of basic foodstuffs shows that these oblasts belong to a region with an extremely low consumption level for basic biologically-active foodstuffs.

Air pollution, especially in residential areas, is becoming a serious threat. Every year more than 115,000 tons of harmful substances are discharged into the atmosphere.

Today health care in the Tashauz Oblast is in a disastrous state. The physical facilities and equipment of its treatment and preventive-care institutions do not meet present-day requirements. Of these institutions, 95-97 percent are located in adapted quarters; only eight-17 percent have running water. Providing medical personnel for the region's population is also a serious issue.

Radical transformations in health care are possible only if there are changes in the principles and methods of financing it. The insignificant growth in health care financing which has been noticed in recent years does not meet the normative requirement.

Matters are no better here with regard to education, the development of sports and fitness programs or the provision of housing.

At the end of the report P. Tanrykulyev noted the unsatisfactory work of the Turkmen SSR Council of Ministers on the fulfillment of resolutions which have been adopted for the protection of the environment and the efficient utilization of the republic's natural resources. No draft of a long-range program for the protection of the environment and the efficient utilization of the natural resources of the Turkmen SSR has been drawn up yet.

The session continued with a report by O. Khodzhakov, chairman of the Tashauz Oblast Soviet of People's Deputies and first secretary of the party obkom.

He said that the residents of Tashauz were waiting with faith and hope for today's special session of the Turkmenistan Supreme Soviet. As long ago as May of this year the deputies of the oblast soviet adopted an appeal to the republic's government on the need to improve the region's natural environment. The disastrous situation in the Aral Sea zone was discussed at the 28th CPSU Congress, the 24th Congress of the Communist Party of Turkmenistan and at the USSR Congress of People's Deputies.

The ecological crisis is deepening with each day; this means that not only is the state of the land and the air threatened but also people's health.

One of the main causes of the ecological disaster, the speaker emphasized, was the regular poisoning of the land, the water and the air. In more than 100 places drainage wastes are discharged into the Amu Darya, the sludgy waters of which go to fertilize the fields. On average, these wastes amount to 10 billion cubic meters per year, every liter of which contains 12 grams of salts and harmful substances. Along with the irrigation water, every hectare receives about 3.5 tons of salts and wastes from toxic substances. As a result, some lands are going out of use; they are losing their fertility.

In an area which quite recently had hundreds of thousands of hectares of fertile lands, hardly one healthy hectare remains. In the last five years there has been significant growth in the amount of land with a medium-level of salinization. Naturally this has led to a reduction in the yields of food and fodder crops. The poor meliorative state, including the lack of drainage networks, further exacerbates the situation. At present for every hectare there are only 24 linear meters of drainage networks instead of 53. Forty percent of the arable fields require fundamental improvement in their meliorative state. At present the level of ground water is significantly higher than the norm on 83 percent of the sown area. In a year an average of 4 billion cubic meters of water come to our oblast through inter-republic drainage networks. Moving through the Deryalyk and Ozernyy Canals they swamp the arable lands and reduce the quality of drinking water. After emphasizing this problem in particular, the speaker noted that it is directly linked to the high rate of illness in the oblast's population, the reduction in people's life span; the ecological crisis, which is continuing to deepen, has reduced the population's living standard. The oblast's per capita income is two-fold lower than the average for the republic. There are 150 built-up places which have no electricity, and the schools are short 70,000 places. In villages only one out of 10 children goes to preschool. Ninety percent of health-care institutions have no running water or sewage system. Many of them are located in old buildings. There are not enough physicians. Only 30-60 percent of the population's demand for meat, milk, eggs and other basic foodstuffs is met.

In order to improve this difficult ecological situation, the Union-level, republic-level and local soviets and economic organizations are definitely at work, the speaker continued.

The speaker reported that in accordance with the 19 September 1988 resolution of the CPSU Central Committee and the USSR Council of Ministers: "Concerning Measures To Improve Fundamentally the Ecological and Public-Health Situation in the Aral Sea Region, To Increase the Effectiveness of Resource Utilization and To Strengthen the Protection of Water and Land Resources in Its Basin," the TuSSR Council of Ministers and the Tashauz Oblispolkom had approved a program to achieve these targets. Its fulfillment was discussed at an oblast session in August of this current year. As a result of the measures taken, certain conditions have been created in the last three years to improve the ecological situation. First of all, changes have taken place in land reclamation. The construction and renovation of canals has been speeded up. New agricultural maps have been compiled; they show the content of various salts in the soil. The renovation of the Deryalyk and Ozernyy Canals has been carried out. Control over the use of water resources has been increased, and economical methods for the utilization of water have been introduced. Efforts are being made to provide people with high-quality drinking water. Preparations are being made to supply 400 cubic meters per day of fresh ground water. The construction of water and sewage systems has been accelerated.

In agriculture the application of mineral fertilizers and toxic chemicals has been improved. The use of aviation for defoliation has been stopped, and eight types of toxic chemicals are no longer being used. We have started to use biological methods on a broad scale. At present there are 75 functioning biofactories and biolaboratories, which are helping to protect three-quarters of the land under crops against harmful insects.

However, the program for ecological improvement is being carried out unsatisfactorily. Although the oblast is at the center of an ecological disaster, it is not receiving sufficient appropriations of financial and material resources, foodstuffs, medicines, medical equipment or other goods. One gets the impression that the Union and republic organs are allotting to Tashauz Oblast only those funds which are left over. And the oblast leaders must also share the blame. They are not working to solve the problems decisively and quickly. In three years Tashauz Oblast has been allotted R16 million from the Union budget for the Aral program. This is a miserly sum. The republic's Council of Ministers and its Gosplan have not been energetic enough in their efforts to resolve this problem.

The working people of the oblast received with great hope a resolution of the TuSSR Council of Ministers on the development of Tashauz Oblast. But this resolution, too, remained on paper. All this creates among the population distrust and pessimism. On behalf of all the

residents of Tashauz Oblast O. Khodzhaev appealed to the people's deputies and the president of Turkmenistan to supervise the resolution of issues related to providing the oblast with material resources. The residents are also waiting for the establishment of an index factor, he emphasized. It is essential to stop—beginning in 1991—the discharge of drainage waters into the Amu Darya and the inter-republic canals. The same proposal should be made to the supreme soviets of the Tajik and Uzbek SSR's. If we do not do this, all our resources will be spent in vain, the speaker emphasized. He proposed that the resolution of this issue should be assigned to the republic's prime minister.

In the next two years it is essential to provide the people with clean drinking water. For this it is necessary to put into operation ahead of schedule the Tuyamuyun-Tashauz water-supply line and the Ashkhabad Drinking Water Plant; it is also necessary to assign the appropriate agencies to put into operation in the Oktyabrskiy and Kunya-Urgenchskiy rayons 400 water-distillation installations. It is essential to develop the construction industry in the oblast, in particular, to create the Aralvodstroy Association.

The speaker also proposed the following as measures to improve the ecological situation in Tashauz Oblast: introduce biological and other methods for the treatment of drainage waters, levy an ecology tax on plants and enterprises which poison the air and earmark the funds collected for environmental recovery. In order to implement environmental protection measures it is necessary, in his opinion, to be bolder in recruiting foreign firms. He reported on a plan to create in the oblast a scientific-practical center for the study of the natural phenomena which are taking place, and he emphasized the need to open a branch of "Aral" in Tashauz. Reducing taxes on the kolkhozes and sovkhozes in the disaster zone would help to create additional financial resources for the development of the economy.

In conclusion the speaker expressed the hope that the Supreme Soviet, the people's deputies and the republic's president would support the demands of the oblast's residents and would fulfill their request. He thanked the session participants who had come to the oblast at what was a difficult time for it.

The people's deputies then began to discuss the reports.

The fate of Aral and the fate of the people living in the surrounding area are our shared pain and concern, said K. Ilyasov in his remarks. None of us can remain aloof; everyone must make whatever contribution he can to remedy the situation which has been created here and to resolve the problems of the Aral area. Today Aral is one of the main stories being covered by staff members of the republic's newspaper SOVET TURKMENISTANY. It regularly contains reports on what is happening in the ecological disaster zone and what kind of measures are being taken to improve the people's living conditions; it publishes the opinions of scientists and writers. The rate

of illness among the Tashauz Oblast population, especially women and children, arouses particular concern. Of course, in two-three years it is impossible to change the situation in a fundamental way, but it is essential to do everything possible to protect people's life and health. After approving in general the resolution's provisions on the ecological state of the Aral territory in the republic, the deputy emphasized that one could not allow them to remain only on paper. The main point is to begin realizing them as soon as possible. An important step in this process would be, in his opinion, the establishment of a special fund from the public's means which would be used to resolve the region's problems.

Unfortunately, the measures which have been taken up to now to resolve the problems of the Aral area have not brought fundamental positive changes in the oblast, noted K. Masharipov in his remarks. One of the reasons for this is during the formulation of the government program: "Concerning Measures To Fundamentally Improve the Ecological and Public-Health Situation in the Aral Sea Region, To Increase the Effectiveness of Resource Utilization and To Strengthen the Protection of Water and Land Resources in Its Basin," insufficient attention was given to the ecological situation in Tashauz Oblast. And it is the oblast leadership above all that is to blame because only an insignificant portion of the funds allotted for resolution of the Aral problem is being channeled into improving the ecological situation here. The deputy said it was distressing that the total illness rate of the Tashauz Oblast residents had increased sharply. The neighboring areas—the Kara-Kalpak ASSR and the Khorezm Oblast of Uzbekistan—have mobilized all their forces and resources to remedy the state of affairs in their regions. But in our republic the resources being allotted for these purposes are obviously inadequate. In order to improve the population's supply of high-quality drinking water, the speaker went on to say, it is essential to set up the production of water-treatment devices. The oblast needs its own plant to bottle drinking water, like the one which is being built in Ashkhabad. Enterprises in the building industry need to be renovated and their capacities expanded.

Kh. Dzhumabayev, directed the attention of the deputies to two aspects of the disastrous situation in the Aral area. First, the Aral Sea is drying up and, second, the waters of the Amu Darya are being polluted. The river and canals receive particularly barbaric treatment from economic organizations, as well as industrial and agricultural enterprises, which discharge untreated waste water into them. This makes an already difficult ecological situation even worse. Moreover, no one is being punished for this. The speaker called for an immediate halt to the discharge of drainage waters into the Amu Darya, and he proposed that every rayon center should have water-distillation equipment to provide people with pure drinking water. The appropriate decision has been made. However, it has not yet been fulfilled, and the oblast does not have a single distillation device.

V.V. Rashidov informed the session participants about the work of the governmental commission studying the ecological problem in Tashauz Oblast. The commission members stated that the situation in the Turkmen part of the Aral Sea area is no better than in the neighboring areas of Uzbekistan. Large amounts of money are needed to begin to correct the state of affairs. Next year the republic will be allotted R115 million from the Union budget for capital investments and R99 million for construction and installation work. And although these resources are not enough, nonetheless, it is necessary to try to use them effectively and appropriately. The question of allotting material-technical resources remains a difficult one. About 60 percent of the amount required has been received. All this delays the implementation of measures aimed at improving the situation. The speaker also demanded an immediate halt to the discharge of drainage waters in the Amu Darya.

The TuSSR people's deputies listened attentively to a presentation by A.P. Tsygankov, the deputy chairman of the USSR Council of Ministers Commission on Emergency Situations. They asked questions, argued and uttered reproaches for the commission's inadequate attention to the region's needs. A.P. Tsygankov, who agreed with many of the comments, said that the commission members, having studied in detail the state of affairs at the local level and the needs of the republic, would provide the necessary help. In particular, water-distillation equipment would be sent, and additional financial resources would be allotted for the renovation of collecting mains and material-technical resources. Water-distillation equipment will be provided first of all to supply drinking water to hospitals, daycare centers and schools. He noted that in order to fulfill the program which has been set out it is essential to strengthen the oblast's construction base and to invest more funds in the expansion of the construction industry's capacities.

A. Dzhumadurdyev, chairman of the Agrarian Committee of the TuSSR Supreme Soviet, stated that in our shared concern for the fate of the Aral area residents, we must recognize that what is being done is still extremely inadequate to eliminate the threat presented by the ecological disaster which has been unleashed on them. It is completely obvious that the republic itself is not capable of coping with this task. The help of the central organs is necessary; however, they are in no hurry to provide that assistance in full measure. For this reason the people's deputies and government of the republic must display more persistence and must use all the powers granted to them to finally make those people responsible for the Aral problem face it. The deputy made a number of recommendations which, in his opinion, would help in the struggle against the salinization of lands and soil erosion, and he focused attention on the consequences of using poor-quality drinking water, which is all that is available to a significant portion of the republic's population at present.

I.N. Denisov, the USSR minister of health, emphasized in his remarks that the Aral problem had gone beyond

the framework of an economic or social problem; increasingly it is taking on a political cast because it is directly related to the protection of the population's health. I think that every one of those sitting in the hall, said the speaker, asks himself the question: how did it happen that the oblast which is number one in the republic in terms of raw-cotton production per capita ended up in such a sorry state, as reflected by the indicator for the protection of the population's health? What must all of us who are involved in this problem do to correct this situation? In the first place, we must understand that the resolution of the problem largely depends not on the work of medical personnel, but rather on those who are responsible for the social and economic situation in the region. I.N. Denisov described the aid which the USSR Ministry of Health is extending to protect the health of the republic's population. He has proposed looking for funds to raise the salaries of medical personnel living and working in Tashauz Oblast, and he has called for more funds to allot for the construction and repair of hospitals, polyclinics and midwifery-obstetric centers, and to provide them with modern medical equipment.

K. Melyayev, who spoke next, noted that a group of USSR people's deputies from Tashauz Oblast had appealed to the Supreme Soviet and the government of the country to provide the necessary aid to our region. The difficult situation in which its inhabitants find themselves can be judged by the Takhtinskiy Rayon alone. The collection and drainage network has needed renovation for a long time; this leads to ever greater salinization of soils. As a result, the efforts of rural workers are frequently in vain; the harvest dies, and this means that people's living standard drops as well. Medical examinations have revealed 50,000 people with various diseases.

Ch. Arasklychev emphasized how important the issue being discussed by the deputies was for the future of the oblast and for the entire republic. Can one really remain calm when women and children are falling ill and the harvest of agricultural crops is dying in the fields? With each year the number of cattle is declining. For this reason urgent and effective measures are needed to improve the meliorative state of the lands.

In his remarks Kh. Soyinov talked about the need to combine forces and to allot more money to solving the problems of the residents in the ecological disaster zone. He provided a critical evaluation of the work by the central organs and, in particular, by the government's Commission on Emergency Situations; he directed the attention of session participants I.N. Denisov and A.P. Tsygankov to the inadequate assistance provided by the Union government to the residents of the Aral area.

There have been many conversations about the problem of the Aral Sea, stated O. Ovezgeldyyev from the podium. However, real tangible changes are not taking place, and most of the blame for this lies with the country's government, which has been extremely slow in

extending practical help to resolve the existing difficulties. The problem of the Aral area must become a top-priority task of urgent importance for the republic's government as well. The speaker proposed the adoption of a special appeal to the USSR president, to the chairman of the country's Council of Ministers and to the leaders of the Central Asian republics to extend aid to the population of Turkmenistan, a majority of whose territory is in an extremely precarious ecological state.

In his report O. Khodzhaberdyyev, people's deputy of the republic, noted with alarm that today a significant portion of the residents in the Dargan-Atinskiy Rayon suffer from various illnesses; due to the worsening ecological situation infant mortality has increased, and children cannot develop properly in a physical or moral sense. He proposed recognizing the rayon as an ecological disaster zone and stipulating measures to grant the necessary aid.

The problems which the residents of Tashauz Oblast face also exist in the Farabskiy Rayon, said O.K. Tacheva. It is essential to increase the punishment for those who discharge untreated waste water into the Amu Darya, which leads to irreversible ecological consequences and diseases among the people.

B.A. Ishankuliyev expressed the hope that the current session would be the start of fundamental and effective work to improve the state of affairs which had developed in the oblast. It is necessary to do everything possible to save the health of the people, to revive the earth and air and to provide the residents with high-quality drinking water. He requested that Tashauz be allotted additional monetary and material-technical resources to carry out work on the construction of water and sewage systems in the city.

Professor A.S. Safayev, representative of the Coordination Council of the USSR Academy of Sciences, introduced a series of amendments and additions to the draft resolution on the state of the territories in the Aral area of the Turkmen SSR. He proposed that a VUZ [higher educational institution] be opened in Tashauz to train ecology specialists.

In summing up the results of the discussion, S.A. Niyazov, the president of the Turkmen SSR, noted that the problem of the ecological state of the republic's Aral Sea area requires the most concentrated attention. After all, the fate and health of hundreds of thousands of people, as well as the future of the Turkmen people, are related to it. And the decision to hold a special sitting of this extraordinary session of the Supreme Soviet here, in Tashauz, proves once more the concern and alarm of the republic's leaders for the ecological situation, and for the life and health of the people. This alarm and pain are shared by all the republic's residents, especially because the negative consequences of the ecological disaster which has befallen the Aral Sea area is felt to one degree or another in its various regions. S.A. Niyazov went on to say that certainly at some time soon the ecological

state of Mary Oblast and the other oblasts and rayons of the republic should be discussed thoroughly and in this same detail. There is also no doubt that funds must be found to introduce in Tashauz Oblast an index factor which would trigger supplements in pensions, in social benefits for residents and in the earnings of workers, kolkhoz members and service employees.

To be fair, it should be said that the Union government and other interested central ministries and agencies are helping to resolve the problems of residents in the Aral area of the Turkmen SSR. But the help is obviously not enough. We shall request additional aid from the center.

The president of the republic emphasized that in resolving the problems of the Aral Sea area the oblast leadership and the people's deputies at all levels of power must show more persistence and initiative. It is essential to search for and utilize reserves to improve the meliorative state of the land, as well as to renovate existing collection-drainage systems and to build new ones; this will make it possible to increase the production of agricultural output, especially foodstuffs, and in the final analysis it will contribute to a rise in the people's living standard. It is essential to show concern for people's needs not only in words but also in concrete, practical deeds to improve their well-being.

Today, despite the difficulties, the sociopolitical situation in Tashauz Oblast is stable, and this contributes to a good labor climate. There is evidence of this in the fact that oblast's farmers significantly overfulfilled the quotas for the production of raw cotton. It is important to retain this climate and to do everything possible to improve the state of affairs. It is necessary to develop and strengthen mutual relations with neighboring oblasts in fraternal Uzbekistan. The disaster of Aral is our common disaster, and we can only overcome it together, by joint efforts. We must not tolerate mutual slights or reproaches. Only in respect for one another and in the desire to help at a difficult time can there be any guarantee of the successful realization of all the measures which have been specified. There is much to be done in order to eliminate the existing problems and to improve the people's life.

With this the special sitting of the extraordinary session was concluded.

Black Sea Pollution Issues Investigated

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[Article by Kim Smirnov, IZVESTIYA special correspondent, reporting from Sevastopol, Odessa, Constanta, Varna and Istanbul: "When Will the Black Sea Explode?: Myths and Truths About Ecological War"]

[Text] "Have you heard? They've closed all the beaches. It's the plague, I tell you, the plague..."

"And fish are dying in the Sea of Azov. Some unknown ailment kind of like AIDS. The fishing fleet is being shifted to the Caspian Sea. But they are afraid that they will carry the infection with them."

"What does that matter, if in 1991 the Black Sea is going to explode anyway? That will be the end of the world. That is what Zarathustra said. And it's a magic number: the same when read left to right or right to left..."

Waves of rumors are sweeping over the country, from Chernobyl to Chukotka. The Black Sea, which in many cities and towns is synonymous with recreation and therapy, is today not only "the bluest in the world" but also the most myth-shrouded. But what connection is there between the splendid legends of ancient Hellas, many of which were played out on these very shores, and the gloomy imaginings of today's mythmakers? And are their prognoses really unfounded? Are danger signals in evidence all across the Black Sea?

In hopes of finding an answer to these and other pressing ecological questions one sunny autumn day I boarded the research ship "Akademik Vernadskiy," which was the scene of the multinational "Eco-Black Sea '90" conference, a gathering of what might be described as the entire intellectual flower of present-day knowledge about the sea and its shores. The conference was sponsored by the worldwide movement Ecoforum for Peace. It was preceded by three purely research-oriented expeditions last summer: a Soviet expedition on the "Akademik Boris Petrov," a Bulgarian expedition on the "Akademika" and a third expedition on shore. Their findings, the very latest, were collected in a book entitled "Practical Ecology of Maritime Regions: The Black Sea" ["Prakticheskaya ekologiya morskikh regionov. Chernoye more"].

Well, is the Black Sea going to explode? It turns out that Zarathustra is not the only one saying that. Some scientists also believe it. This is a hypothesis which has been circulated in the press and at state forums. According to it, dead, lifeless expanses of hydrogen sulfide which fill the sea from depths of 100-200 meters all the way to the bottom at a recorded depth of 2,245 meters have begun to shift and are ascending rapidly; when they reach the surface, so the hypothesis goes, the sea will explode. To be sure, at the conference it was demonstrated that this is simply a myth. Research and observations conducted over the past 70 years as well as the latest findings indicate no cause for alarm.

Yet more has been written about the mythical hydrogen sulfide explosion than about the terrible disaster which is indeed bearing down on the Black Sea and the Sea of Azov. A member of phylum Ctenophora, or comb jellies, originally from American shores, has struck a devastating blow at fish populations in particular and at fauna in both seas in general. This rapacious animal, more transparent than a jellyfish, consumes approximately one-half of the entire plankton biomass. This has been a knockout blow for the Sea of Azov, and it really is time

to shift the fishing fleet to the Caspian Sea (according to press reports the Ministry of the Fish Industry has already decided to send eight ships from the Sea of Azov there), but then that will be the end of that sea as well. The number of Ctenophora in the Black Sea is already nearing one billion tons, which is much greater than the entire biomass of all the fish in it.

What happened? Is a comb jelly so powerful? "No," replies M. Vinogradov, deputy director of the USSR Academy of Science Oceanographic Institute and USSR Academy of Science corresponding member, "the ecosystems of both seas have been that badly weakened. Back in 1982, before the comb jelly invasion, we were sounding the alarm: the sea is dying. Eight years have not sufficed to create a program to save it. True, officially a program does exist. But it is a typical conglomeration of various topics being handled by various institutes."

My old friend, Bulgarian journalist Kirill Panayotov, introduces himself like this: "a sailor on dry land without rank or scientific titles and an enemy of the comb jelly and excessive complacency." He has proposed that all who share his beliefs in the countries bordering the Black Sea form an "SOS Black Sea Club" and "cuss out loud" in defense of the sea. He went too far, of course, by saying that they should use that kind of language. But when you know the whole truth about what is happening on these shores and nearby you will feel both pain and a desire to shout bad words at the top of your voice.

But you should not. You are standing next to a sickbed. On the ecological maps hung in the messroom of the "Vernadskiy" during the discussions the blue was rimmed with a deathly shade of red, an alarm signal. It is as if the Black Sea ecosystem is on the verge of a heart attack, and the Sea of Azov has already suffered a massive one. The critical points are those places where the Danube, Dnestr, Dnieper and Don flow into the sea with virtually the entire periodic chart of elements in their water along with agricultural and household organic wastes. Phosphorus and nitrogen concentrations in coastal waters are 30-50 times higher than in the 1960's. Each year the Danube and the Dnieper "enrich" the sea with 30 metric tons of mercury. The infamous algae blooms and "red tides" cover huge areas. Toxic microscopic algae have not yet taken part in these sinister blooms. But what if they do?!

Oxygen deficiency in some years affects up to three-quarters of the continental shelf in the northwestern part of the sea: oxygen is consumed by oxidation of the plankton "snow" and settling organic wastes. Valuable species of fish are disappearing. The dolphin population has been reduced from 2.5 million to 80,000. Pollutants have virtually an open highway to the sea: the majority of cities and towns do not have water treatment facilities. Beaches are being closed as a result of severe bacteriological pollution. Resorts are seriously threatened. Add to this the fact that the bottom, plowed up as a result of overfishing by trawlers, looks like the scene of a tank battle.

This is the mosaic which emerges from the data contained in reports by Bulgarian, Romanian and Soviet researchers: N. Bodeanu, A. Bronfman, M. Vinogradov, I. Volkov, M. Datov, V. Yeremeyev, V. Keondzhyan, A. Mandych, V. Romanenko, V. Saviny and A. Stoyanov. The integrating factor in this mosaic are these lines from the conference's final resolution: "The Black Sea, upon which depends the present and future of the peoples of Europe and the Black Sea region, at the present time finds itself on the verge of ecological disaster as the result of totally anthropogenic pressure."

Incidentally, Academician B. Laskorin, head of the expedition, feels that science itself is to blame for the sea's present tragic state. For too long science justified inept, suicidal economic activity with the "theory" that the sea would purify itself. The truth which he stubbornly defended both here and previously, during voyages on the Danube and in the Baltic Sea, was this: we must not argue about who is the biggest polluter, but instead identify and shut off literally all sources and means which are poisoning the sea.

Either the death of the sea or a technological revolutions on its shores based on ecological considerations—no third option is available. This will require great effort and expense. And that means agreement among all the people who live on the shores of this sea. V. Neykov, general secretary of Ecoforum for Peace, is correct when he poses this paradox: "If we do not save the sea the shores will perish as well. But we cannot save the sea without reaching agreement on land."

From this standpoint "Eco-Black Sea '90" was a serious breakthrough in the direction of mutual understanding. Agreement was reached on a unified research program. At the suggestion of Turkish scientists it includes an important section on an international fund to save the sea. From the very start the initiators of Ecoforum have dreamed of long-range action: a Danube-Black Sea-Mediterranean project which will view these bodies of water as a kind of ecological trinity superseding national borders.

Now, at a time when serious political changes have taken place on the shores of the Black Sea and the ideas of national sovereignty and local government have become so popular, it is appropriate to remind people that the point of these concepts is not a tug-of-war across borders, but rather the making of the most reasonable and rapid decisions possible and the taking of direct action at the local level. I agree with Kolyo Kolev, former European boxing champion and now a well-known doctor and scientist and founder of the Bulgarian Ecological Culture Club: "If we do not use the data obtained by science to bring about immediate and specific actions at the governmental level, then tomorrow's generation and the dead Black Sea will curse us as their murderers."

The club sends materials on the critical state of the environment to all the main competing political forces. Each of these, even if it wished to, is unable to conceal

these materials from public opinion and is forced to propose its own solutions or, even better, unite with its opponents, because ecology cannot be broken down along party lines.

That is what the Bulgarians are doing. What about us? We unfortunately have numerous environmental protection parties, leagues and associations which remind one of separate, "sovereign" principalities completely incapable of sharing their spheres of influence and funds, spending more on their new administrative apparatus than on work to diagnose, project and treat environmental ills. Beating on the ecological drum is often substituted for this kind of work.

We have already learned to protect nature that way. I daresay that under our present unlimited pluralism it is much easier to demand the resignation of the government or to determine who is the "greenest" of our numerous "Greens" than it is to bury the hatchet, combine forces and cut off all the sources of stinking sewage, which were modestly termed "septic and household sources" in the conference reports.

They say that we need idiot-proof technology so that no idiot can mess it up. We have no need for an idiot-proof human being. We have been conditioned to think like that. Our vaunted Soviet chemical industry is making its products right next to the beaches of Odessa, yet we do not voice our rage.

We have another amazing trait: we focus on two or three ecological disaster areas but hardly seem to notice all the rest. The state has been overwhelmed with nationwide mourning over the Aral Sea. Indeed, that is a personal source of sorrow for me and for you, for all of us. Yet right next door we have the equally moribund Sea of Azov. The hour for swift reaction and rescue brigades has struck. What are we waiting for?

Farsightedness and the ability to meet misfortune before it happens are what we lack most of all. That is our most important shortage. On this point we agreed with Andre Paviat, a French scientist, European Parliament member and director of the European Comet Program, who was also recently elected board member of Ecoforum for Peace. Outside the porthole the Bosphorus "was ablaze with blue fire" (and was also thoroughly polluted), and we felt a strange dual attraction: that of my Black Sea and his Mediterranean.

He feels that my sea needs the same kind of "Blue Plan" that is being carried out for his sea under U.N. auspices. This plan envisions various scenarios in response to all sorts of possible options for interaction between man and nature between now and the year 2025. Its goal: to render harmless in advance any risk (including human ignorance) which is inevitable in the development of modern civilization. A group of 45 universities and approximately 60 other organizations in Europe and industrial firms from Italy, France, Germany and Belgium are working on this plan.

Why are business people making an alliance with ecology? "Because," Paviat explains, "they are able to calculate tomorrow's profits. It is becoming more and more advantageous for industry and agriculture to have clean faces. Business is becoming ecological."

Do we have farsighted people and ideas? In abundance. But there is also an abundance of obstacles facing them. O. Mironov, a doctor of biological sciences from the Ukrainian SSR Academy of Sciences Institute of Southern Marine Biology, was—almost 20 years ago—the first to propose that the sea could be rid of oil and various biogenic pollutants with the aid of mussels, marine worms of the class Polychaeta and other organisms. The purification is more effective by factors of 5-10 and more ecologically sound than when physical or chemical means are used. When Mironov proved that his method would also be less costly, costing just a few tens of thousands of rubles, that was the very thing which alarmed the bureaucrats: "If it were 50 million rubles we could do business with you..." Now his idea is being tested successfully in Sevastopol. But he is not certain that his innovation has retained its primogeniture over two decades and that it is not already being implemented somewhere else with greater results.

"I swear by Zeus, the Earth, the Sun, Virgo, the gods and goddesses of Olympus and the heroes who rule the city, district and fortifications of the Chersonese that I will be single-minded with regard to the welfare of the city and my fellow citizens and will betray neither Chersonesus, nor the Kerkitides, nor the Splendid Harbor... but I will protect the Chersonese for the people and will not violate democracy."

I was shown this vow, which the Hellenes gave thousands of years ago as they came of age, at the Kherson Museum by Valeriy Milodan, a naval seaman who worked in peacetime clearing mines from Sevastopol Bay. Once this region was famed for its constellation of ancient Greek cities linked not only by maritime trade routes but also by a high level of spiritual culture, lofty concepts of patriotism and a vow of loyalty to their shore and their sea. A vow which we have inherited and which we have betrayed: we have brought both the sea and its splendid harbors to the brink of death.

Immediately after the war the great Soviet architect A. Burov proposed something that is now clear to all, an ecologically idealistic project to restore and rebuild Yalta. The project was rejected: "Where did you ever get the idea that Yalta will be suffocating from an excess of automobiles in 10-15 years?" Today the city is in fact suffocating from motor madness. Is Yalta alone in that fate? Today there are 52 square kilometers of highly urbanized land pressing in on every square kilometer of the western and northwestern Black Sea. Along the Adriatic Sea this ratio is only two to one.

What is the solution? To add another "trinity" to the inseparable ecological trinity of Danube-Black Sea-Mediterranean, i.e. science-public movements-municipal government. Their ties to each other should become direct. And those ties are being established even now. In Burgas the international firm EKOSI, in which the leading role is played by Soviet and Bulgarian specialists, has proposed that the oblast soviet conduct an actual trial of a concept of practical ecology which will blaze a path from theoretical projections to well-founded engineering projects. The Burgas authorities decided to try the experiment, and they have not regretted it.

Ecoforum's actions naturally included an historical first: a meeting of Black Sea mayors. Those of them who were on the trip with us were among the most enthusiastic participants in the discussions.

Arkadiy Shestakov, chairman of Sevastopol Gorsovet Ispolkom and a former sailor, had this idea: to turn Sevastopol into an "anti-Yalta." Into a city of ecologically clean tourism and recreation. In order to do this it will be necessary to create an infrastructure up to world standards and one which is definitely in complete harmony with nature, not in violation of a single one of its bans. The highest guideline should be ecology of culture. To reveal Sevastopol's cultural and historical image is the dream of A. Shestakov, V. Milodan and retired Rear Admiral L. Mitin, currently one of the leaders of the environmental protection movement.

During our voyage Shestakov signed in Istanbul a document on cooperation with the Association of Tourism Investors. Turkish specialists will assume the task of building, marketing and financing projects jointly with Soviet organizations. Even earlier the Sevastopol Gorispolkom and the American firms Production Development Corporation and Harkins and Association signed letters of intent regarding "establishment of an organization which will plan, direct and make decisions on matters pertaining to Sevastopol's economic development within the framework of joint programs. The volume of joint investment over a long-range period of cooperation could be \$3-4 billion over a 25-30-year period.

These are the first outposts, the first miles traveled by rationally acting man along this unexplored path toward ecological coordinates in a sea of prevailing anti-ecology. The future lies with these outposts.

Bulgarian scientists showed us films made this past summer. A blue plankton "snow" shrouded a bomb which had sunk to the bottom half a century ago. We were sailing on a calm sea. Yet underneath us, in the depths, there was this bomb. And that "snow." It, too, was an unexploded bomb, but from a different, unfamiliar war.

Yes, what is happening to the Black Sea is an unfamiliar war which is being waged against it not only by individual poisoners, whether they use toxic substances or ministerial authority, but rather by all of us together,

through our ignorance and shortsightedness; we keep on beating the drums instead of taking real rescue action. By our lack of ecological culture; by our ethnic and regional limitations, like ostriches sticking their heads into their sovereign sand when faced with a common danger; by our tolerance of outmoded technologies and no less outmoded technocratic thinking.

As we set sail I heard a colleague say: "Do the readers really need this right now, tormented as they already are by shortages, rallies and the rising crime rate?" He was right, in his own way. The fate of the Black Sea is an impending disaster, but there is no meat on store shelves today. But is the reason for the fact that we are rushing from one fire to the next not that we were unable (or did not want) to put them out in time, before they got well started? Every era has its own fires, and efforts to extinguish them are used as an excuse not to look even one generation ahead.

In lieu of an epilogue—the confession of Rasul Gamzatov, on board the "Akademik Vernadskiy":

"At first I felt like an architectural flourish on board this Noah's Ark of scientific research. Then I got used to it. And I did not protest when the shipboard intercom announced: 'Scientific associate Gamzatov is requested to come to the messroom to fill out a customs declaration.' But I want to fill out another declaration. A poetic one."

"Since ancient times poets have translated the melodies of the trees, the waves and the stars into human language. Yet we translate nature into cement, oil and ferrous metals. We have turned concepts of good and evil upside down. Molotov said this about a novel by Leonov: it is not the Russian forest that is being cut down, it is the Russian people. He cursed him. But in fact that was praise for a fearless artist."

"We have made legends out of many stupid slogans. Once after maneuvers Voroshilov proposed a toast to 'the conquest of nature': we have conquered the sky and the stars—airplanes fly there; we have conquered the earth—our tanks roll over it; we have conquered the sea—our ships sail there. But nature did not agree with him. Without freedom it dies. And the seas blaze like Homer's eyes. The hour has come to erect monuments to the seas and springs that have died. Except that soon there will be no one left to erect them."

"When faced with the sea Ovid, Dante and Pushkin were mute. Yet we speak a lot. At rallies, and at scientific conferences. Let us actually do something. Let us start small. By saving springs. They are dying. Quietly. Anonymously. Without public funerals, as is the case with the Aral Sea. For me this is a very personal pain. When my father was dying he asked that water be brought from the spring in his native *aul*—he said that would heal him. They could not find the spring. It had gone dry. Thus my father died. People, I implore you: save the springs! And then save the sea as well.

Wisdom of Water Project in Caucasian RSFSR Questioned

91WN0212B Moscow TRUD in Russian 17 Jan 91 p 3

[Article by Yu. Kostinskiy: "Half a Billion for...A Catastrophe? 'Projects of the Century' Continue To Exist"]

[Text] **Many think that the diversion of rivers in our country is over with. This is an error! The redrawing of the physico-geographic map of our country is continuing.**

Here is just one specific place: the Western Caucasus, the Karachayevo-Cherkess area. It is planned to "turn" and "divert" the mountainous rivers of Bolshoy Zelenchuk, Marukha, and Aksaut (the last two, joining, form the Malyy Zelenchuk) into the Great Stavropol Canal. The Zelenchuks flow into the Kuban beyond the range of the canal, and now it is necessary for them to flow in front of it. Then new water will enter the canal.

This is a relatively modest construction job in scale—not on the order of those rivers that it has already been possible to save from being turned from north to south—which will cost us, the taxpayers, about a half billion rubles. One-fourth of this sum has already been put into it, which would have been most welcome for replenishing the budget deficit. But let us examine why an offensive has been launched on the beautiful Caucasian landscape. Perhaps the game is worth the candle?

...At one time, in years not that long ago, at first the Nevinnomyssk and later the Great Stavropol Canal cut through the arid lands of Stavropol. And now 70 percent of the water of the once mighty river of the Kuban flows irretrievably into the irrigation system. Of course, this was done for good reasons—to improve conditions for farmers in fertile rayons. But the result?

The productivity of the land was not raised noticeably. Only the structure of the sowing area was changed. Wheat was planted previously, and now—rice. Are there other results?

Oh, yes! Two years ago one of the laboratories of the Institute of Geography of the USSR Academy of Sciences concluded a study of the soil of the southeastern European part of the USSR. In addition to Stavropol and Krasnodar Krays, the research also encompassed other oblasts of the region, but the significance of the findings for the zone of the two canals is not reduced by this. We will not present convincing quotations from the article, which was published in the journal PRIRODA (No 2 for 1990), on the results of this important research, but we will formulate the main conclusion: A degradation of the soils has occurred, they are ruined.

The entire agrarian strategy in the region has turned out to be wrong. The traditional drought-resistant farming and pasture cattle breeding here, the forest reclamation methods for collecting moisture in the soil, the compulsory fallow, and the long "breather" for the soil—all of

this was drastically and unjustifiably changed by irrigation farming. No attention was paid to the recommendations of G.N. Vysotskiy, the Russian soil scientist and forestry specialist. But his findings were used by the practical Americans, and, owing to forest belts, moisture is preserved in the enormous spaces of the Midwest, where natural conditions are similar...

And now, a little more information. By passing water through the Great Stavropol Canal, and along its distribution network, we are losing 40 percent, as is customarily said, of "life-giving moisture." The land turns into marshes along the canal, and the homes are flooded. Just close to Ust-Dzhegut, 20 powerful pumps pump excess water out of drain holes. Hundreds and thousands of hectares of pasture land salinized "thanks" to this water use are written off in Stavropol annually.

Now what—will new rivers hurl "watering" actions into this theater?

But we have by no means related everything about the results of the irrigation action, more correctly, the inundation epic. Every schoolboy knows where the Don and the Kuban flow: into the Azov Sea. But inasmuch as this in fact is half the Kuban and practically half the Don, the designation Dead Sea would be very appropriate for the Azov today.

The fact is that the former water-saline, hydrobiological, and hydrochemical regimes of the sea, as the saying goes, departed this life. The solid flow of the major rivers was also sharply reduced (it seems that the sea also needs mountain pebbles), the sediment-forming processes were changed, and the shorelines were weakened. Little fresh water comes in, and the salinity of the sea is rising sharply. And inhabitants along the shoreline are beginning to forget about many of the commercial fish of this sea—which was at one time the most productive in the world. But jellyfish have reproduced...

It is not difficult to predict the future fate of the Sea of Azov. Because we already have a most glaring example—the ruined Aral, the victim of a similar "irrigation strategy."

If the planned diversion of the Zelenchuks into the canal is implemented, another 1.2 kilometers of fresh water will be removed from an unfortunate reservoir that is deprived of fish, according to the data of V. Novozhenin, chief engineer of the diversion. Is it not time to invest money now to return to the Azov Sea the fresh water that was taken away from it?

But this still is not all of the fruit of today's approach to the Caucasus with dynamite and bulldozers...

Tell me, do you want to visit paradise? Then you must go to Arkhyz, Dombay, and Teberda. "The Caucasus made a fantastic impression on me," said FRG Chancellor Helmut Kohl, who visited Arkhyz recently. "There are beautiful places—mountains, forests... Most of all, I liked the virginity of nature in the Caucasus, the

meadows and the grass that still do not know artificial fertilizer." The chancellor expressed a desire to return here again as an ordinary tourist.

Well, the chancellor should hurry up with his return visit. Because it is for these places that a catastrophe is being readied. It will arrive with the construction of dams and reservoirs on the Aksaut River and with the diversion of rivers. One hundred and fifty hectares of forests will be flooded in the Kyshkyt meadow and the road at Volchye Vorota that leads to the upper reaches of the river where a mine settlement, rest facility, tourist refuge, and mountain pastures of two large kolkhozes are situated. In the very first year, low-water rivers and springs that are connected to the Zelenchuks with mutual brooks will disappear immediately in several rayons. The artesian wells containing water conduits will dry up. The residents of dozens of Circassian, Abaz, Nogay auls, and Cossack stanitsas and small villages will be deprived of water entirely.

The microclimate of the waterless villages will become more arid. On the other hand, owing to the new reservoir and canal, there will be an increase in humidity in the rayon of the Main Caucasus Mountain Range. Dombay, Teberda, and Arkhyz will be deprived of many sunny days. The interference in nature will not occur unnoticed in the Teberda and Caucasus reserves.

The initiators of the diversion of the waters of the Bolshoy and Malyy Zelenchuks literally forgot that the Caucasus is one of the most seismically active rayons of the country. A narrow strip of the northern slope from the valley of these rivers to the Military-Georgian road is part of the most dangerous zone, a first seismic category zone. And it is in this rayon that construction of a reservoir is proposed! And if an earthquake destroys the dam, the water will rush into the valley, sweeping away everything in its path...

Is it not worth stopping and giving the diversion more thought: Can electric power and water irrigation be achieved at such a price (especially, as it appears, an unwarranted price)? Is it necessary to intrude on nature in this way?

These questions were raised more than once. Chief engineer of the diversion project V. Novozhenin reassured the public: "The economic feasibility of the project was examined by a state expert commission of the USSR Gosplan [State Planning Committee]—the highest expert organ of the country..." But about the ecology here—not a word.

Of course, wrote V. Novozhenin, this project was also examined in the "ecological part of the USSR Academy of Sciences." The main thing that interested the academy, in his words, was the question about whether the sky will be sufficiently clear for the large azimuthal telescope of the Zelenchuk astrophysical observatory. Will the stars not be blocked out by evaporation from the reservoir? It turns out that no, the stars will continue to be bright.

Absolutely no one programmed the whole complex of this region's approaching problems. The project, which was developed in the 1960's by the "Gidroyekt" Institute of Minenergo [Ministry of Power and Electrification] and sanctioned by experts of USSR Gosplan (with an itemized listing approved in the State Committee for Construction Affairs), was adopted. The next "construction job of the century" is being implemented with mechanical precision by the trust "Sevkavgidroenergostroy" [North Caucasus Hydropower Construction] of the same USSR Minenergo.

But perhaps we have had enough self-made ecological catastrophes?

Central Asian Water Crisis, River Diversion Tied to Republic Sovereignty Issues

91WN0212A Moscow LITERATURNAYA GAZETA
in Russian No 2, 16 Jan 91 p 8

[Article by Iskander Khisamov: "Water as a Cause of Fire"]

[Text] *Is it possible to return to a discussion of the question of river diversion?*

It is as though two hydraulic dredgers are mirroring each other, working on both sides of a bend in the river. And they are doing the very same thing: They are deepening the bottom and sucking the water onto their own shore, as if spurning the opposite shore. This absurd picture could serve as a symbol of the developing struggle for water in Central Asia. You see, one dredger is in Uzbekistan, and the other is in Turkmenia.

Komsomol [All-Union Leninist Communist Youth League] detachments from Khorezm conduct bold night raids on the "foreign" side of rivers and canals, and on the sly they cut the drive belts of the dredgers set up there. However, their own peasants are also not blameless, and young Tashauz men watch them vigilantly. Disputes and fights among irrigation workers are becoming more frequent at rayon junctions. They are dividing the water.

Justifying its ancient name of Dzheykhun (Wild), the Amu Darya frequently cuts across republic borders. During the sanctioned friendship of peoples, this did not alarm anyone. Thus, the Karshi main canal, which serves southern Uzbekistan, began on the territory of Turkmenia. And the Karakum canal has its source in Uzbekistan and exits into Turkmenia. And now appeals can be heard frequently at meetings of informals, writers' plenums, and scientist symposiums of both republics to close the "foreign" canal that is robbing "our" river.

Also not standing aside are colleagues from Kirghizia and Tajikistan, where the two great Central Asian rivers, Amu Darya and Syr Darya, have their sources. They are demanding payment from "lower neighbors" for water that flows there, which is causing outbursts of righteous indignation and promises of retaliation.

Tens of millions were expended on the creation of an integrated water distribution system in the basin. But it is not working, because the republics do not plan to set up hydraulic headwork projects in it.

The whole world grieves for the Aral. The government, scientists, and specialists are engaged in a search for water for the Aral, and the public is sounding the alarm. And, nonetheless, I will risk the assertion that the efforts that are directed at saving the sea will not lead to anything. By all accounts, the heavily populated region will reach a severe water crisis in no longer than five years. One does not even want to imagine to what political consequences this could lead, aside from all the rest.

The many years of newspaper and journal discussions on these questions developed a whole series of stereotypes. The first: The water in Central Asia is being used wastefully, by economizing many happy years can be lived. Second, the odious Minvodkhoz [Ministry of Land Reclamation and Water Administration], which has now been converted to a concern, is to blame for everything. It is to its advantage to carry out gigantic projects for developing new lands and diverting rivers. And the third: The Aral was destroyed by the socialist system of economic management and the rapacious use of natural resources.

It seems, Dostoevsky said, that if 70 percent of a book is true, then it is entirely a lie. That is the situation here. During the years after the revolution, the population of the region grew from 7 million to almost 40 million. And already now there are quite a few huge economic units with 25-40,000 persons in oases that have only 4-6,000 hectares of land requiring irrigation. In a word, unemployment in Central Asia is a direct result of a shortage of arable land, and it is the result of a lack of water.

As for drainage canals for saving moisture, there are not very many of them. Crop farming in Central Asia is probably the highest in the country. These figures were cited at a recent conference on the problems of the Aral in Bloomington, United States [at Indiana University]. In Uzbekistan, an average of 12-14,000 cubic meters of water is used on one hectare. In California, which is similar but less arid, 9-12,000 is used on the very same crops. To reduce water irrigation by 5-10 percent, it is necessary to spend enormous amounts of money.

The number of projects to save the Aral and the region is increasing. Some people propose engaging in large-scale pumping of water from under the ground. Others—to draw on all reservoirs. Incidentally, this means a full degradation of the rural economy of the kray and the collapse of hydropower. Crop irrigation, which now yields more than 90 percent of agricultural products, will remain only in river floodplains.

There are versions of the immediate substitution of cotton and rice by fodder and fruit. However, in our arid region, fodder requires no less irrigation. But their profit

is much lower, which would lead to a new impoverishment of the peasants, more than half of whom are already living on the edge of poverty.

In any case, a large-scale reorganization of the rural economy, a change in the system of crops, and the reorientation of industry and science associated with this will take many years. But the water is coming to an end.

Here is an assessment by F.P. Miklin, who is far removed from our national and territorial passions and contradictions:

"The Soviet Union has run into a hopeless crisis of water resources in Central Asia. It is very doubtful, even with the most careful water-saving measures, that regional water resources will be adequate to satisfy future economic and social requirements and also preserve the Aral Sea. Thus, the Soviet Government, possibly, will be forced to return to the project of diverting part of the flow of the Siberian rivers in the 1990's not only for water management reasons, but also for political and social reasons."

The situation in the country is changing rapidly. Both Russia and the Central Asian republics have legislatively reinforced their sovereignty with respect to natural resources. Market relations are approaching. And while previously the problem was who will be able to persuade the center to adopt one or another decision, now decisions will have to be made independently.

There is probably no need to relate in detail the history of the rise and fall of the project to divert part of the flow of the Ob and the Irtysh into the Aral basin. One can understand the angry reaction of the people of Russia—the potential water donor for Central Asia—behind whose back important decisions were made. Especially since this project was associated in the mass conscience with European, really farfetched diversions.

"But now, when the Russians can be assured that no one will make arrangements for them, can this subject finally be discussed in a businesslike way?" asks Rim Giniyatulin, Uzbekistan Minister of Water Administration: And he cites reasons: A water catastrophe in Central Asia will have disastrous consequences for the economy of the whole country. Up to 90 percent of the cotton is exported to the other republics, including half to the RSFSR ((Russian Soviet Federated Socialist Republic)). A sharp drop in deliveries will paralyze the textile and light industries.

Second, the Central Asian region is a huge and very simple market for commodities from other republics. If as a result of a crisis this market gets smaller or is closed entirely, millions of workers throughout the Union will become unemployed.

Hundreds of thousands of tons of fruit, vegetables, grapes, and melons come from Central Asia to the all-Union table. With the elimination of the cotton plant monoculture this stream increases sharply. The rich

natural climatic potential of the region is opened up and promises the whole country a sizable addition of food.

It can also be added that Uzbekistan itself and contiguous republics are suppliers of many kinds of strategic products, fuels, and nonferrous metals, including gold also. There is no need to shatter the air with invocations about internationalism and lasting friendship—a pragmatic calculation is necessary.

What is needed? There is talk about five to seven percent of the water of the Ob basin (so far there are no other versions). Of course, there can be no avoidance of consequences for the nature and the population of the northern rayons of Western Siberia, and there is no reason to be cunning here. But, then, a majority of the rivers in the world are used and expended for irrigation. The Mississippi, the Yangtze, the Nile, the Euphrates, and the Volga give their water to feed people. And no one gives a thought to refusing their use.

The example of the little Baltic area and episodes from the life of the Transcaucasus show how vulnerable we are, and how obstinate we are individually. This brings to mind an interesting moment in the last session of the parliament of Uzbekistan. One of the leaders of the republic's Academy of Sciences talked about how the provision of water for Central Asia is an all-Union problem. And he was interrupted by a comment from President Islam Karimov:

"Hold on, you just talked about the need for the full sovereignty of the republic. And now you are appealing to the Union. And you yourself are proving that we can raise and resolve this question only in a federation structure..."

Yes, water is a decisive argument for Central Asia, and very important for the Union as a whole, in favor of preserving the federative system of the country. If this fact will not be assessed in the proper way, then water, and the shortage of it, will be the cause of a great fire.

Council of Ministers Approves Aral Sea Region Consortium

91WN0218A Moscow PRAVITELSTVENNYY
VESTNIK in Russian No 50, Dec 90 Insert p 8

[Report of text: "Resolution No 1185 of the USSR Council of Ministers of 24 November 1990: On the Formation of the Union-Republic 'Aral Consortium'"; Moscow, the Kremlin]

[Text] To improve the ecological and sanitary-epidemiological situation and living conditions of the populace in the Aral Sea area, to restore favorable conditions for the natural environment in the Aral Sea basin, and to make effective use of the financial resources and material-technical resources allocated for these purposes, the USSR Council of Ministers resolves:

1. To approve the proposal of the Uzbek SSR Council of Ministers, the Kazakh SSR Council of Ministers, the Tajik SSR Council of Ministers, the Turkmen SSR Council of Ministers, the Karakalpak ASSR Council of Ministers, the "Vodstroy" state concern for water resources construction, the Khorezm, Kzyl-Orda, and Tashauz oblast ispolkoms concerning the formation of a union-republic consortium "Aral" (the "Aral Consortium"), entrusting to it the functions of a single client for the implementation of the range of measures to improve the ecological and sanitary-epidemiological situation and living conditions of the population in the Aral Sea basin.

2. That beginning 1991, USSR Gosplan, USSR Gosnab, the USSR Ministry of Finances, the Uzbek SSR Council of Ministers, the Kazakh SSR Council of Ministers, the Kirghiz SSR Council of Ministers, the Tajik SSR Council of Ministers, and the Turkmen SSR Council of Ministers provide in drafts of state plans and and budgets of the Union of SSR's and the corresponding union republics the allocation by a separate line item to the "Aral Consortium" limits of capital investment, financial and material-technical resources.

After confirmation of the state plans and budgets of the Union of SSR's and the union republics, the "Aral Consortium" distributes the volumes of the capital investment, material-technical and financial resources allocated to it among the enterprises and contracted organizations, including the managements of enterprises being built.

3. To concur that the "Aral Consortium" is a legal entity, has its own accounts, is financed as a union-republic organizational structure from the resources of the Unions of SSR's, republic, and local budgets, uniting on a voluntary basis enterprises, associations, and organizations while preserving its departmental affiliation and economic independence, and implements its activity on the basis of the effective legislation of the USSR and the union republics, the charter, and other founding documents of the consortium;

the "Aral Consortium" develops, in conjunction with the organs of state administration of the Union of SSR's, Uzbek SSR, Kazakh SSR, Kirghiz SSR, Tajik SSR, and Turkmen SSR long-term and annual plans to realize a range of measures in the Aral Sea basin, and presents them in the established procedure for inclusion in the drafts of the appropriate state plans;

the "Aral Consortium" participates in the development of union-republic programs for improving the ecological situation and the population's living conditions in the Aral Sea area, and bears responsibility for its realization;

the managements of enterprises being built and other enterprises and organizations active in the basin may be included in the "Aral Consortium" with the consent of labor collectives;

the highest administrative organ of the "Aral Consortium" is the council, whose members are confirmed by the union republic Councils of Ministers, the Karakalpak ASSR Council of Ministers, "Vodstroy" state concern for water resources construction, and oblispolkoms, the founders of the consortium. The number of representatives from each founder is determined by the charter. The expenses associated with fulfilling the obligations of the consortium council members are born by its founders;

a representative of one of the republic-founders of the consortium is elected chairman of the "Aral Consortium" council on a rotating basis,

the consortium council elects a board as the executive organ which organizes the consortium's activity and represents the interest of the consortium's founders, as well as the associations, enterprises, and organizations comprising it, in relations with ministries, departments, institutions, and organizations. The activity of the council and the board of the consortium are regulated by its charter;

the "Aral Consortium" council determines the structure and staffing of the board apparatus, expenses for its maintenance, and labor compensation conditions for its staffers; the board and its apparatus are maintained at the expense of resources stipulated in the combined estimate accounts for the construction of facilities, earmarked by the managements of enterprises and other organizations being built, the financing of projects being executed, and from union, republic, and local budgets;

the chairman of the "Aral Consortium" board is elected according to the procedure stipulated by the charter and is confirmed by the USSR Council of Ministers State Commission for Emergencies.

4. In accordance with the proposal of the "Aral Consortium" founders, to entrust to the USSR Council of Ministers State Commission for Emergencies coordination and control over the consortium's work.

5. That the "Aral Consortium" in one month's time develop and in in coordination with the USSR Council of Ministers State Commission for Emergencies confirm the charter of the consortium.

6. That the "Vodstroy" state concern for water resources construction, in coordination with the executive committees of the local soviets of people's deputies, grant the "Aral Consortium" the necessary premises to accommodate the consortium board and its apparatus. The consortium representatives are located in the cities of Kzyl-Orda, Urgench, Nukus, and Tashauz.

Aral Sea Crisis Solution Proposed by Kazakh Economist

91WN0199A Alma-Ata KAZAKHSTANSKAYA
PRAVDA in Russian 20 Nov 90 p 4

[Article by Zh. Abdirov, senior scientific associate of the KaSSR Academy of Sciences Economics Institute and candidate of economic sciences: "Water for the Aral Sea"]

[Text] *In order to restore the Aral Sea, the watersheds surrounding it and the Amu Darya and Syr Darya rivers it is essential that we take a completely new approach and make innovative decisions dictated by the extreme complexity and difficulty of this problem. The problem can only be resolved if approached in a comprehensive manner. The objective source of a solution to this problem lies in natural and socioeconomic factors. Here a real possibility of a way out of this ecological crisis may be found.*

Given that, the goal of my plan is to develop and carry out a series of measures the revitalization, radical water conservation and renewal in the Aral Sea, adjoining areas and the Amu Darya and Syr Darya as a unified natural whole based on preservation of the existing aquatic system, formation on various tiers (levels) on two desiccated sea floors, introduction of an effective water conservation system of agricultural irrigation, and creation of a zone for nature preserves, industrial processing of minerals and interrepublic tourist facilities.

The end result of radical water conservation reconstruction will be restoration of the sea to its natural water level with a much smaller demand for water resources by means of maintaining the presently existing Western Great Sea at a level of 37-38 meters, creation of two seas at higher levels (tiers) (an Eastern Great Sea at levels of 42-53 meters and a Northern Little Sea at levels of 43-53 meters) in the basin of the dry sea floor, with a regulated depth of 7-10 meters, to be connected between themselves and with the Western Great Sea by modern water channels with an automated system to regulate water flow by the year of during a certain period of the year (season).

The waters of the Amu Darya and the Syr Darya, which flow through five union republics, together with the glaciers which feed them and the Aral Sea itself comprise a single naturally-created "rectangular" natural system (the mountains - the Amu Darya - the Syr Darya - the sea). The artificial or, more precisely, violent disruption of this system is tantamount to a crime, since it is causing catastrophic disruption of the environment and the viability of the peoples living in this region and other regions.

Tajikistan and Kirghizia should not be considered the sole proprietors of the Amu Darya and Syr Darya because the rivers have their source there, nor should Turkmenistan and Uzbekistan, through whose territory they carry their water to the sea. Just as no one people or

one country (or republic) can lay claim to the sun, the moon, the universe or the ocean, no one people or one country (or republic) has a right to claim as its exclusive property any river which flows through many countries (republics) and regions.

In the restoration and continuous renewal of the Aral Basin an exceptionally important role will be played by the establishment of an interrepublic (interstate) Cotton Cost-Accounting Association based on principles of cooperation and integration; it will be comprised on a voluntary basis of all raw cotton producers, processing enterprises, the textile industry and trade enterprises regardless of their location; all will have the right to distribute and utilize the finished product (fabrics, clothing, etc.) and the pure profit in proportion to the contribution made by each of them to the end results of their joint efforts along the technological chain, including the needs of the Aral Sea and its basin in the financial and other means allocated for annual restoration and repair of individual sectors.

Implementation of radical water conservation reconstruction of the Aral Sea and its basins is based on calculation of the total water resource shortfall in this expansive arid zone and study and analysis of the bathymetric condition of the sea itself, which is comprised of two seas: the Central Great Sea and the Northern Little Sea.

The larger sea, which occupies almost 90 percent of the Aral Sea's total area, is divided in terms of depth into four sections: a narrow strip (along the western shore) which comprises four percent of the Aral Sea and has a depth over 30 meters; the western central portion, the largest area, covering 33.6 percent of the sea to a depth of 20-30 meters; the eastern central portion, which surrounds the western central portion of the Great Sea and covers 31.5 percent of the Aral Sea to a depth of 10-20 meters; and the southern and eastern shore areas of the Great Sea, covering 20.9 percent to depths up to 10 meters.

At the present time, of these provisional divisions of the Great Sea the southern and eastern shore area has dried up completely, along with a portion of the eastern central basin, for a lost volume of approximately 24.4 cubic kilometers, or approximately 42.1 percent of total volume. This is the area which should be separated from the present Western Great Sea and used to form a relatively independent Great Sea. As a result, two seas will be formed in the former basin of the Central Great Sea: the Western Great Sea and the Eastern Great Sea.

The Northern Little Sea, which occupies at least 10 percent of the Aral Sea's total area and its northeastern section, is separated from the Great Sea by the southern island of Kokaral. The depth of this sea over the greater part of its extent averages 10 meters (maximum depth is 67 meters). The Little Sea Basin, into which water flows only from the Syr Darya, includes Saryshyanak, Butakovka, Shevchenko and other bays, with maximum

depths varying from 13 to 28 meters. This sea should be formed independently and be separated from both the Western Great Sea and the Eastern Great Sea.

This plan for restoration and reconstruction of the Aral Sea envisions that the Western Great Sea which currently exists in the central portion of the Aral Sea (with an area of roughly 33,600 square meters [sic]) will be stabilized in perpetuity and kept at a level of 37-38 meters, which will save not less than 350 cubic kilometers of water each year. In order to maintain the annual water balance in the Western Great Sea continuously at this level a water supply between 29.5 and 32.6 cubic kilometers will be required.

The Eastern Great Sea will be formed between the levels of 42 and 53 meters and will cover an area of not less 16,100 square kilometers. In order to fill it to an average depth of 6-11 meters roughly 144.9 cubic kilometers of water will be required, with an annual water supply of 14.2-15.7 cubic kilometers of water required after filling.

The Eastern Great Sea will extend from the south of the Western Great Sea and along its eastern portion up to the Northern Great Sea. Along the entire length of the southwestern and northern shore of the Eastern Great Sea, roughly calculated at 250-400 kilometers or more, dikes 8-12 meters high will be erected, primarily along elevated portions of the desiccated Aral Sea floor. The most powerful modern Soviet land- and sea-based (or river-based) civil and military equipment or explosives, as well as the resources of foreign countries on a contractual basis, will be employed to build dikes and complete the preparatory excavation of the areas which will receive the waters of the Amu Darya and the Syr Darya.

The Northern Little Sea, which is planned to be at a level of 43-53 meters and have an area of 5,100 square kilometers, will be separated from the Western Great Sea and the Eastern Great Sea by a common or separate dike up to 12 meters high running from west to east across Kokaral Island. This sea's total water requirements will be not less than 50 cubic kilometers to fill and an annual water supply of 4.5-5.0 cubic kilometers.

Thus, as a result of implementation of radical water conservation reconstruction in the Aral Sea Basin the total surface area of the three sea will be 54,800 cubic kilometers [sic], which is 7,400 less than the previous area, and the water flow required to maintain the seas will decrease from 60.7 to 53.5 cubic kilometers. The area of islands and land area between seas will be 9,700 square kilometers instead of the 2,300 square kilometers which existed in the 1960's.

It would be appropriate to complete filling of the two seas (the Eastern Great Sea and the Northern Little Sea) with a volume of 195 cubic kilometers with subsequent stabilization of their surface level at 53 meters and maintenance of the Western Great Sea at a level of 37-38 meters within seven years, with an average annual inflow of not less than 76 cubic kilometers; following restoration of the Aral Sea within its new territory it will be

necessary to ensure an annual water flow of between 48.2 cubic kilometers (not counting precipitation) and 53.5 cubic kilometers (with precipitation included).

Of the three seas to be created in the Aral Sea Basin the least saline will be the Northern Little Sea and the Eastern Great Sea, which will be the scene of intensive development of fish farming, muskrat raising and other promising types of commercial activity. The reconstruction will make it possible to process the mineral resources found on the desiccated Aral Sea floor (i.e. oil, natural gas, shales with above-normal concentrations of rare and expensive elements, building materials, limestone, coquina, etc.) using a rotating shift method and to restore and regularize freight and passenger shipping. Hydroelectric power could also be generated along the channels connecting each sea with the Western Great Sea.

The problem of restoring the Aral Sea is above all a problem of where to find water sources within the natural area in question, i.e. the "rectangle" and the agricultural complex which is based on it, primarily cotton production, the largest user of water from the Amu Darya and Syr Darya, which are fed mainly from mountain glaciers (or snowfields), precipitation and underground water.

Siberian rivers and the water of the Caspian Sea should not be used to preserve and restore the Aral Sea. Rechanneling of water is a very expensive proposition. The technical feasibility of doing this has not been determined, and its effects cannot be predicted. Construction of a Caspian-Aral canal is also risky. The Caspian Sea is located 28.5 meters below sea level, while the Aral Sea is 53 meters above sea level. Therefore supplying water to the Aral Sea from the Caspian Sea would be a very complex technical problem.

The primary advantage of the plan outlined above is the fact that a huge mass of water, 480 cubic kilometers, will be saved during filling of the Aral Sea following its reconstruction, with 7.2 cubic kilometers to be saved while still maintaining the necessary annual water supply under the new conditions. Practical realization of this plan will make it possible to reduce capital investment by a factor of at least 2.3 and to cut the time frame for realization of efforts to restore the Aral Sea and its basins by a factor of two.

In order to ensure full realization of this plan it will be necessary to declare the decade of 1991-2000 a restorative period for the Aral Sea and its basins and to introduce a special economic regime in connection with this work.

Turkmen Authorities Issue Plan of Action for Aral Sea Crisis

*91WN0224B Ashkhabad TURKMENSKAYA ISKRA
in Russian 19 Dec 90 p 1*

[Decree of the Turkmen SSR Supreme Soviet: "On the Ecological Situation of the Turkmen SSR Near-Aral Territories and Steps for Its Improvement"]

[Text] The destruction of the human environment caused by the drying-up of the Aral Sea, the intolerable pollution of the Amu Darya River, the worsening of the soil and reclamation condition of the land, and the low level of social services have led to such a situation that, from the point of view of ecological and medical-hygienic conditions, the territories of Tashauz Oblast and Dargan-Atinskiy Rayon in Chardzhou Oblast cannot be called anything but an ecological disaster zone.

The supply of drinking water for the population is well below the norm, while the bacteriological pollution of water sources is 10 times the norm. The supply of quality food for the population is inadequate. The ecological situation in the oblast is catastrophic and life-threatening. During the last 15 years the number of infectious diseases—first and foremost affecting children—has risen sharply. The incidence of viral hepatitis, tuberculosis, and various cancers has increased dramatically; infant mortality is high. The maternity mortality rate is three to four times higher than the all-Union average.

Recognizing the sociopolitical and national-economic importance of the fundamental improvement of the ecological situation and the health of the population, and the creation of favorable conditions for work, living, and the everyday environment of the people who live in Tashauz Oblast and Dargan-Atinskiy Rayon in Chardzhou Oblast, the Turkmen SSR [Soviet Socialist Republic] Supreme Soviet decrees:

1. To designate the territories of Tashauz Oblast and Dargan-Atinskiy Rayon in Chardzhou Oblast an ecological disaster zone, establishing in it a special regime for economic activities. To cease the further development in this zone of ecologically harmful production activities, first and foremost those that require excessive consumption of water; to limit production largely to those activities that are related to the service industry or are ecologically harmless.

2. To approve the Turkmen SSR Supreme Soviet's Appeal to USSR President Comrade M.S. Gorbachev on the subject of ecological disaster in Tashauz Oblast and Dargan-Atinskiy Rayon in Chardzhou Oblast.

3. To acknowledge the advisability of establishing a 1.6 coefficient to the stipends and pensions of residents, and to the salaries of workers, kolkhoz [collective farm] members, and office employees in Tashauz Oblast and Dargan-Atinskiy Rayon in Chardzhou Oblast. To appeal to the USSR Supreme Soviet and the USSR Council of Ministers to allocate the means necessary for this purpose from the all-Union budget.

4. For the Turkmen SSR government:

- to develop, before 1 March 1991, a program to fundamentally improve the ecological and health situation, increase protection of land and water resources in Tashauz Oblast and Dargan-Atinskiy

Rayon in Chardzhou Oblast, and improve the efficiency of land and water use on those territories;

- using one of the existing hydroeconomic trusts as a basis, to create in Tashauz Oblast a specialized unit of the state concern on hydroeconomic construction "Vodstroy," with its work financed by capital investment and supported by material and technical resources from the all-Union budget;
- to fundamentally improve, in 1991-1995, the conditions of human life, and ensure the fulfillment of the measures, approved by the Turkmen SSR Supreme Soviet, on improving the water, gas, and electricity supply of populated areas. To construct, in 1991-1992, a drinking water plant in the city of Tashauz. To bring up to condition the existing water supply facilities and piping network; to establish orderly accounting for water usage; to establish separate water usage quotas for industrial and residential use; to create special health protection zones around the water sources; and to prohibit continued use of existing water supply systems and water sources that do not meet health requirements and deliver substandard-quality water to the population;
- to accomplish measures directed at water and soil protection, including the construction and reconstruction of sewer networks and treatment plants in populated areas, as well as the construction and reconstruction of facilities for industrial waste treatment at industrial enterprises and agricultural entities;
- to develop and implement a comprehensive program of clean air protection, cleaner atmospheric environment of populated areas, reduction in the release of hazardous elements into the atmosphere—first of all, automobile exhausts—and to strengthen the material and technical base of the appropriate services;
- to take immediate measures to fulfill the program for the prevention of environmental pollution caused by pesticides and mineral fertilizers; to establish strict control over the measured use of weed and pest killers and chemical fertilizers in agriculture, and to bring order into accounting for such materials and their storage and transportation. To solve the problem of disposal—on the appropriate enterprise—of unused, as well as now prohibited, weed and pest killers;
- to boost work directed at the expansion of biological methods of combating agricultural pests and a sharp reduction in the use of chemical means of plant protection; to cease using aviation for pesticide applications as well as using drainage water with a high content of mineral fertilizer or pesticides to water the fields used for growing vegetables and grains;
- to construct new enterprises mostly on the basis of ecologically clean, minimum-waste technologies; to permit construction project financing only after obtaining positive ecological expertise;
- to work out in 1991 a program aimed at employment of the population not engaged currently in the national economy; for this purpose to plan for the development of light and local industry enterprises, including small and other enterprises;

- to work out and implement measures aimed at the stimulation and increase in production of ecologically clean high-quality food products; to ensure the supply of main food categories to the population of Tashauz Oblast and Dargan-Atynskiy Rayon in Chardzhou Oblast at a norm not lower than the republic average;
- to accomplish measures aimed at improving the health of the populace, including a ban on using school-age children and pregnant women in agricultural work in fields where weed and pest control chemicals have been used, the strengthening of a material and technical basis of health-care units, and providing qualified medical cadres, medical technology, and instruments, as well as improvement in the area state supervision of health conditions;
- to make additional efforts to reduce infant and maternal mortality by perfecting the organization of medical help for children and mothers; to implement differentiated pay based on final result to medical personnel;
- to implement, in 1991-1995, measures aimed at the further development of social and cultural life, increased volume of residential construction, child-care facilities, sanitariums, preventive care facilities, rest and recreation facilities, and enterprises engaged in providing service, cultural, and sports activities, and settlement improvements;
- to charge the Turkmen SSR Ministry of Justice, the Turkmen SSR State Committee on Nature, the Turkmen SSR Ministry of Health, and the Turkmen Hydrometeorological Institute to prepare and submit for confirmation by 1 January 1991 proposals on increased the liability of enterprises, organizations, official personae, and individual citizens for violating nature protection laws, including economic sanctions applied to official personae in order to recover the damage done to the natural environment, as well as increased liability of the above-mentioned entities for the willful concealment and distortion of information regarding accidents with ecological consequences, the level of environmental pollution, and the status of the health of the population;
- to define the degrees of economic liability for pollution of the environment by collector and drainage waters, including the introduction of fees for the normal disposal of collector and drainage waters into water sources and water collectors, and fines for excessive disposal of such, and for transporting drainage waters through republic territory.

5. For the Turkmen SSR Academy of Sciences:

- together with the "Aral" coordinating center to resolve the issue of the creation of a branch of this center in Tashauz Oblast in 1991; in 1991-1992 to conduct scientific research work in order to develop scientifically based recommendations for improving the ecological situation in Tashauz Oblast and Dargan-Atynskiy Rayon in Chardzhou Oblast;
- to develop, together with the Turkmen SSR State Planning Committee, the Turkmen SSR State Committee for Labor and Social Problems, and the

Turkmen SSR Ministry of Health, in 1991-1992, a concept for decreasing ecological tensions and improving the health of the population, paying special attention to the rational use of natural resources and the optimal placement of production forces in both agricultural and industrial production;

- to create a center for ecology, which will coordinate the scientific research and experimental design work, the expertise, and the development of complex programs.

6. To recommend to the Turkmen SSR Trade Union Federation Council to increase, starting in 1991, the number of vouchers to the republic and central recreation facilities and sanitariums that are allocated to the workers of Near-Aral zone, as well as allocate the necessary finances to pay additional allowances to low-income families.

7. To state that the CPSU Central Committee and USSR Council of Ministers Resolution No. 1110 of 13 September 1988 "On Measures Towards Fundamental Improvement of the Ecological and Sanitary Situation in the Aral Sea Area and Increased Effectiveness of Usage and Enhanced Protection of Water and Land Resources in its Basin" does not take into account the interests of Turkmen SSR in improving the ecological situation in Tashauz Oblast, which is part of the Aral ecological disaster zone.

The USSR Council of Ministers State Commission on Emergencies (Comrade V.Kh. Doguzhiev) does not devote sufficient attention in its practical activities to the resolution of problems related to the ecological and health situation in the Near-Aral area of the Turkmen SSR.

The Turkmen SSR Supreme Soviet considers it necessary to target no less than 25 percent of financial and material resources allocated from the all-Union budget for the Near-Aral area to the improvement of the ecological situation in Tashauz Oblast and Dargan-Atynskiy Rayon in Chardzhou Oblast. An appropriate proposal to that effect is to be presented to the USSR Supreme Soviet and the USSR Council of Ministers.

8. The Turkmen SSR Supreme Soviet, in reinstating the Turkmen people's desire to maintain friendly ties and good-neighborly relations with the brotherly peoples of the Uzbek SSR and the Tajik SSR, appeals to the higher organs of state power of the brotherly republics to instruct appropriate executive and economic organs to jointly undertake immediate measures to stop the discharge of untreated sewage and collector and drainage waters into the Amu Darya River. Amu Darya—a symbol of friendship and well-being of the peoples who populate its shores—should be as clean and clear as the meaning of these notions.

9. To charge the Turkmen SSR Supreme Soviet Committee on Ecology and Protection of People's Health and other Turkmen SSR Supreme Soviet committees with control over the implementation of this resolution.

[Signed] S. Muradov, chairman of the Turkmen SSR Supreme Soviet, Tashauz City, 17 November 1990.

Uzbek Plan for Saving Aral Sea Criticized

91WN0199B Tashkent PRAVDA VOSTOKA in Russian
25 Nov 90 p 2

[Article by Uzbekgidrogeologiya PO administrators: R. Niyazov, general director, V. Volkov, chief geologist, and V. Krasnikov, chief engineer: "Expert Assessment": "You Cannot Fool Nature"]

[Text] The authors of a plan to solve the Aral problem (published in PRAVDA VOSTOKA on 13 March) one-sidedly claim that the main reason for the disappearance of the Aral Sea is the effect of geological factors which have changed the flow of the Amu Darya as a result of the rise or fall of certain sections of the Aral region. This fails to take into account the fact that these processes are constant in nature and that their rate and direction have not undergone any significant changes over the past several million years. This is confirmed by numerous data resulting from highly accurate survey work conducted by the Main Administration for Geodesy and Cartography between 1928 and 1978 and by analysis of the relief structure and local observations.

Indeed, elevated areas parallel to the stream flows are "growing" at a rate of up to two or three millimeters per year (six to nine centimeters every 30 years), which is consistently equal to the rate of erosion, thus maintaining a natural balance between the different natural processes. As long as a guaranteed water supply is maintained in the Amu Darya and the Syr Darya tectonic movement cannot be the cause of a catastrophic drying up of the Aral Sea. It is not tectonic movement but actually technogenic effects which are the main factor in changes in mineral content and pollution in ground water, a rise in ground water level and, as a result of this, flooding and swamp formation; this has been confirmed by many years of observations by nine specialized water gauging stations maintained by Uzbekgidrogeologiya PO and encompassing the entire territory of Uzbekistan in their research.

Calculations done by the Central Asian Hydrometeorological Scientific Research Institute and Central Asian Irrigation Scientific Research Institute imeni V. D. Zhurin indicate that the drop in the level of the Aral Sea is due primarily to marked changes in its water supply. Until the early 1960's its surface level averaged 53.3 meters above sea level, the area it covered was 67,600 square kilometers and the volume of water it contained reached as high as 1,090 cubic kilometers. Evaporation from the water surface was compensated for by the combined flow of the Amu Darya and the Syr Darya, with 56.0 and 11 cubic kilometers of annual flow, respectively. It was this relationship which ensured stability in the sea's water level.

However, in the subsequent period there began a sharp increase in the area under irrigation and overall water

consumption. One after the other the Karakum, Amu-Bukhara and the Karshi canals were built, diverting almost one-half of the Amu Darya's annual flow. The building of reservoirs holding another five cubic kilometers increased losses due to evaporation. Total flow into the Aral Sea in 1968 was 36.3 cubic kilometers. In 1969 nature decided to compensate for the Aral Sea's losses and unexpectedly gave it 80.6 cubic kilometers all at once despite, it seemed, all of our laws, which it had obviously studied... and despite incessant tectonic movement! This was followed by a lengthy period of drought (1970-80) as a result of which the Aral Sea experienced a shortfall of approximately 120 cubic kilometers of inflow. Finally, in 1975 the Syr Darya virtually ceased to flow into the sea. The Amu Darya held out until 1985, carrying an average of 10 cubic kilometers of water into the Aral Sea each year. In 1985 not a single cubic kilometer of water entered the sea from either river: it all went to irrigate cultivated fields.

Thus, the main reason for the disappearance of the sea is the excessively high and not always justified anthropogenic burden on its basin, as a result of which surface flow into the sea has ceased and allowed evaporation to reduce its surface level by one meter a year.

The authors of a study done by the Priroda [Nature] State Center are simply ignoring this fact and are attempting to pin all the blame for the disappearance of the Aral Sea on geological processes.

Unfortunately, even today neither science nor the production sector has taken a position on the main question relative to the Aral Sea: "Who or what should be saved?" Shall we carry out the requirements of the most emotional and least knowledgeable segment of our society and use any means possible to restore the sea to its former boundaries, or shall we utilize the existing bodies of water at the mouths of the rivers to create artificially regulated bodies of water intended to reduce the impact of salt concentrations and improve the region's economic and ecological situation?

Is it possible to restore the Aral Sea to its former boundaries? In order to do that it would be necessary to secure a one-time flow of approximately 700 cubic kilometers and then ensure an annual supply of 60-70 cubic kilometers to cover evaporation; at the present time that is unrealistic. That would require that the entire flow of the Amu Darya and Syr Darya for a period of many years be channeled into the sea basin and that all the inhabitants and farmland of the Central Asian republics intentionally be deprived of water for drinking and irrigation. Where else could such a huge amount of water be found?

The authors of this plan have proposed using underground sources, thereby demonstrating unjustified optimism. At first glance the available volume of underground water with mineral contents of less than five grams per liter, according to our calculations, are 2,700 cubic kilometers, and there are also up to 12,000 cubic

kilometers of underground water with mineral concentrations above five grams per liter. So it seems simple—just take this water! Yet these figures were arrived at based on a large number of assumptions and conditions. Practical realization of a plan to utilize a large volume of underground water is a rather complicated and expensive undertaking. Why?

In hydrogeological terms this region has ground water which lies in the first water-bearing strata beneath the surface and in interstrata layers founds at great depths underneath impermeable strata. Each type of source differs in terms of its available store of water. The high-volume reserves, or as they are called in the article "ancient" reserves, are a body of gravitational water filling pores and cracks in the rock. This water is an integral part of the deposit structures, is not very mobile and as a rule is difficult to extract. Replenishable reserves or natural reserves are sources of water which are in constant movement, flowing from their source to the area in which they eventually reside.

These reserves are formed through filtration of precipitation and filtration losses from rivers and irrigation and total about 58 cubic kilometers a year in the region. It has been estimated that no more than 17 cubic kilometers a year could be removed from these reserves without causing harm to the environment or the economy.

Underground interstrata water with mineral contents above five grams per liter is mineral water or thermal water and is used for therapeutic purposes; in a number of cases this water contain industrially-recoverable concentrations of valuable components. The reserves of this water are truly huge, but the replenishable portion, i.e. that portion which may be diverted each year without causing serious disruption of the natural balance, is just 3.6 cubic kilometers. Thus, the projected usable reserves which could be diverted without causing a serious change in the present water use regime and ecological system are approximately 20 cubic kilometers a year, no more.

Presently there are approximately 31,200 working wells in Uzbekistan, pumping over 10 cubic kilometers of underground water each year. Of these, 15,000 wells supply drinking water, yielding a total volume of 3.6 cubic kilometers; irrigation accounts for approximately 7,000 wells using over three cubic kilometers, and 4,500 wells produce 2.7 cubic kilometers of water for vertical drainage. The remaining wells pump water for industrial uses.

The authors of the article: "Water for the Aral Sea" propose pumping 10 times as much every year. But this could result, firstly, in disruption of the present balance in nature and disappearance of fresh water reserves in all the major sources. Secondly, pumping saline water out of deep reservoirs and dumping it into the natural water flow would thoroughly pollute river water and, as a result, would eliminate water supply sources on the middle and lower Amu Darya and would alter if not destroy fish and animal life and disrupt the irrigation water structure.

Nor will the plan for technical and economic justification of the proposals outlined by the authors withstand criticism. Suffice it to say that in order to obtain a mere 30-35 cubic kilometers of water over 200,000 wells costing over R14 billion [rubles] would be required. In order to obtain 100 cubic kilometers of water the cost of pumping facilities and infrastructure would exceed R100 billion, not R3-5 billion, as the plan's authors estimate. Of course, one could perform simple arithmetic calculations and demonstrate that drilling 600,000 wells would require millions of tons of steel pipe, hundreds of thousands of submersible pumps, construction of another Bratsk Hydroelectric Power Station to supply energy to industrial production facilities, expropriation of hundreds of thousands of hectares of land and an unimaginable amount of earth-moving and construction work which is beyond the capability not only of our republic's economic complex, but even that of the entire Union.

However, the main error in the plan lies elsewhere: by saving the Aral Sea in this manner we would unwittingly be creating the preconditions for the Aral syndrome to be repeated in other regions of our republic. Nature does not forgive mistakes and exacts terrible vengeance for violation of its laws.

It would be unrealistic to attempt to save the Aral Sea with underground water. Furthermore, it should be borne in mind that the main, top-priority task in our region is to supply the population with potable drinking water and to create the necessary social and living conditions for human existence.

Uzbekgeologiya has long been making intensive, ambitious efforts toward this goal. Uzbekgidrogeologiya PO has doubled its funding of the Aral Region Geological and Geodesic Expedition. Plans to identify and study underground sources of fresh water have been drawn up and are being carried out. We are now completing our reassessment of previously discovered reserves using methods of artificial replenishment, making it possible to maintain underground water quality at the level required by the USSR State Committee for Standards. With the aid of hydrogeologists an increase of almost 30 percent has been brought about in the productivity of the Turtkul, Kegeyli, and Akmangit water diversion projects, and the Alikul and Chimbay projects are next in line.

Still, we must admit that there are no guaranteed underground sources of fresh water which will fully meet the demands of population along the lower reaches of the Amu Darya. The planned work of drilling wells with distillation equipment is underway throughout the entire autonomous republic. A large part of this work is being done by Aralvodstroy and Aralselkhozvodoprodstroy.

Additional water resources must of course be sought, but sought in those places where they actually exist. In view of this the issue of diverting the excess flow of Siberian rivers must once again be put on the USSR Supreme Soviet's agenda.

USSR Nationality, Language Statistics

[Text]

91UN0663C Moscow SOYUZ in Russian No 51, Dec 90
pp 15-16

[Table: "Languages of the Peoples of the USSR"]

Distribution of the Peoples of the USSR by Nationality, Native and Second Language (According to 1989 Census Data)									
Peoples	Total	Consider Their Native Language							
		Language of Their Own Nationality		Russian Language		Languages of Nationalities of Formed Union Republics		Other Languages	
		Absolute	Percentage	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage
Abazins	33,613	31,397	93.4	1,578	4.7	46	0.1	592	1.8
Abkhazians	105,308	98,448	93.5	5,135	4.9	1,344	1.3	381	0.4
Avars	600,989	583,927	97.2	11,375	1.9	1,834	0.3	3,853	0.6
Austrians	504	149	29.6	292	57.9	24	4.8	39	7.7
Aguls	18,740	17,777	94.9	715	3.8	37	0.2	211	1.1
Adygeys	124,826	118,247	94.7	6,341	5.1	79	0.1	159	0.1
Azerbaijanis	6,770,403	6,614,262	97.7	113,499	1.7	11,718	0.2	30,924	0.5
Albanians	3,988	2,077	52.1	1,758	44.1	69	1.7	84	2.1
Aleutians	702	187	26.6	487	69.4	8	1.1	20	2.8
Altays	70,777	59,690	84.3	10,960	15.5	58	0.1	69	0.1
Americans	277	175	63.2	74	26.7	8	2.9	20	7.2
English	348	201	57.8	119	34.2	19	5.5	9	2.6
Arabs	7,747	4,767	61.5	778	10.0	1,936	25.0	266	3.4
Armenians	4,623,232	4,238,361	91.7	352,136	7.6	29,110	0.6	3,625	0.1
Assyrians	26,160	15,584	59.6	8,313	31.8	2,101	8.0	162	0.6
Afghans	6,695	4,222	63.1	432	6.5	1,546	23.1	495	7.4
Balkars	85,126	79,702	93.6	4,568	5.4	395	0.5	461	0.5
Bashkirs	1,449,157	1,047,723	72.3	162,421	11.2	2,854	0.2	236,159	16.3
Belorussians	10,036,251	7,116,753	70.9	2,861,914	28.5	52,204	0.5	5,380	0.1
Beluchi	28,796	27,908	96.9	350	1.2	474	1.6	64	0.2
Bulgarians	372,941	254,136	68.1	107,565	28.8	9,512	2.6	1,728	0.5
Buryats	421,380	363,620	86.3	57,192	13.6	139	—	429	0.1
Hungarians	171,420	160,882	93.9	5,625	3.3	4,576	2.7	337	0.2
Veps	12,501	6,355	50.8	6,066	48.5	22	0.2	58	0.5
Vietnamese	3,396	3,274	96.4	109	3.2	5	0.1	8	0.2
Gagauz	197,768	172,957	87.5	20,974	10.6	14	1.8	1,161	0.6
Dutch	794	250	31.5	481	60.6	14	1.8	49	6.2
Greeks	358,068	159,323	44.5	183,976	51.4	10,880	3.0	3,889	1.1
Georgians	3,981,045	3,909,947	98.2	66,049	1.7	2,450	0.1	2,599	0.1
Dargins	365,038	355,891	97.5	6,929	1.9	192	0.1	2,026	0.6
Dolgans	6,945	5,676	81.7	1,104	15.9	102	1.5	63	0.9
Dungans	69,323	65,698	94.8	1,699	2.5	1,636	2.4	290	0.4
Jews	1,378,344	153,385	11.1	1,193,957	86.6	27,103	2.0	3,899	0.3
Highland Jews	18,513	14,025	75.8	3,600	19.4	389	2.1	499	2.7
Georgian Jews	16,054	14,594	90.9	1,322	8.2	69	0.4	69	0.4

**Distribution of the Peoples of the USSR by Nationality, Native and Second Language
(According to 1989 Census Data) (Continued)**

Peoples	Total	Consider Their Native Language							
		Language of Their Own Nationality		Russian Language		Languages of Nationalities of Formed Union Republics		Other Languages	
		Absolute	Percentage	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage
Central Asian Jews	36,152	23,550	65.1	12,153	33.6	262	0.7	187	0.5
Izhors	820	302	36.8	425	51.8	71	8.7	22	2.7
Ingush	273,438	230,192	96.9	6,607	2.8	157	0.1	482	0.2
Spaniards	3,172	1,461	46.1	1,632	51.5	48	1.5	31	1.0
Italians	1,337	531	39.7	711	53.2	63	4.7	32	2.4
Itelmens	2,481	487	19.6	1,966	79.2	4	0.2	24	1.0
Kabardinians	390,814	379,848	97.2	10,192	2.6	206	0.1	568	0.1
Kazakhs	8,135,818	7,890,773	97.0	182,990	2.2	33,706	0.4	28,349	0.3
Kalmyks	173,821	156,386	90.0	12,774	7.3	4,521	2.6	140	0.1
Karaites	2,602	503	19.3	1,961	75.4	91	3.5	47	1.8
Karakalpaks	423,520	398,573	94.1	4,033	1.0	20,551	4.9	363	0.1
Karachays	155,936	150,999	96.8	4,240	2.7	433	0.3	264	0.2
Karelians	130,929	62,542	47.3	552	49.6	10	0.9	322	0.2
Kets	1,113	538	48.3	552	49.6	10	0.9	13	1.2
Kirghiz	2,528,946	2,473,981	97.8	14,557	0.6	39,023	1.5	1,385	0.1
Chinese	11,355	3,738	32.9	7,303	64.3	184	1.6	130	1.1
Komis	344,519	242,515	70.4	101,505	29.5	267	0.1	232	0.1
Komi-Pere-myaks	152,060	106,531	70.1	45,154	29.7	103	0.1	272	0.2
Koreans	438,650	216,811	49.4	219,953	50.1	1,114	0.3	772	0.2
Koryaks	9,242	4,847	52.4	4,292	46.4	21	0.2	82	0.9
Crimeans	1,448	505	34.9	900	62.2	12	0.8	31	2.1
Cubans	2,811	2,020	71.9	457	16.3	19	0.7	315	11.2
Kumyks	281,933	274,589	97.4	5,829	2.1	115	—	1,400	0.5
Kurds	152,717	123,006	80.5	6,817	4.5	21,865	14.3	1,029	0.7
Laks	118,074	110,476	93.6	6,048	5.1	308	0.3	1,242	1.1
Latvians	1,458,986	1,382,674	94.8	73,097	5.0	2,466	0.2	749	0.1
Lezghins	466,006	426,644	91.6	22,458	4.8	12,251	2.6	4,653	1.0
Livs	226	99	43.8	33	14.6	87	38.5	7	3.1
Lithuanians	3,067,390	2,996,858	97.7	55,107	1.8	11,677	0.4	3,748	0.1
Mansi	8,474	3,140	37.1	5,253	62.0	32	0.4	49	0.6
Maris	670,868	542,160	80.8	126,129	18.8	437	0.1	2,142	0.3
Moldavians	3,352,352	3,070,389	91.6	249,262	7.4	27,695	0.8	5,006	0.1
Mordovians	1,153,987	773,827	67.1	377,187	32.7	850	0.1	2,123	0.2
Nanaians	12,023	5,298	44.1	6,650	55.3	7	0.1	68	0.6
Peoples of India and Pakistan	1,728	1,236	71.5	284	16.4	124	7.2	84	4.9
Nganasans	1,278	1,063	83.2	198	15.5	2	0.2	15	1.2
Negidals	622	176	28.3	421	67.7	4	0.6	21	3.4
Germans	2,038,603	993,812	48.7	1,035,072	50.8	7,901	0.4	1,818	0.1

**Distribution of the Peoples of the USSR by Nationality, Native and Second Language
(According to 1989 Census Data) (Continued)**

Peoples	Total	Consider Their Native Language							
		Language of Their Own Nationality		Russian Language		Languages of Nationalities of Formed Union Republics		Other Languages	
		Absolute	Percentage	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage
Nentsy	34,665	26,730	77.1	6,270	18.1	43	0.1	1,622	4.7
Nivkhi	4,673	1,089	23.3	3,551	76.0	12	0.3	21	0.4
Nogays	75,181	67,591	89.9	2,569	3.4	74	0.1	4,947	6.6
Oroki	190	85	44.7	103	54.2	—	—	2	1.1
Orochi	915	172	18.8	727	79.5	3	0.3	13	1.4
Osetians	597,998	520,186	87.0	41,660	7.0	34,500	5.8	1,652	0.3
Persians	40,176	13,338	33.2	4,105	10.2	21,583	53.7	1,150	2.9
Poles	1,126,334	343,675	30.5	322,513	28.6	457,372	40.6	2,774	0.2
Romanians	146,071	88,900	60.9	8,142	5.6	47,791	32.7	1,238	0.8
Russians	145,155,489	144,835,711	99.8	—	—	278,703	0.2	41,075	—
Rutuls	20,388	19,329	94.8	724	3.6	69	0.3	266	1.3
Lapps	1,890	797	42.2	1,067	56.5	6	0.3	20	1.1
Selkups	3,612	1,721	47.6	1,826	50.6	12	0.3	53	1.5
Serbs	2,685	1,096	40.8	909	33.9	185	6.9	495	18.4
Slovaks	9,060	3,436	37.9	924	10.2	2,677	29.5	2,023	22.3
Tabasarans	97,531	93,551	95.9	2,913	3.0	108	0.1	959	1.0
Tajiks	4,215,372	4,119,277	97.7	34,561	0.8	59,244	1.4	2,290	0.1
Talysh	21,602	19,524	90.4	103	0.5	1,861	8.6	114	0.5
Tatars	6,648,760	5,532,088	83.2	1,067,932	16.1	33,539	0.5	15,201	0.2
Crimean Tatars	271,715	251,537	92.6	14,488	5.3	1,412	0.5	4,278	1.6
Tats	30,669	22,041	71.9	6,443	21.0	1,431	4.7	754	2.5
Tofalars	731	314	43.0	404	55.3	5	0.7	8	1.1
Tuvins	206,629	203,534	98.5	2,965	1.4	28	—	102	—
Turks	207,512	188,939	91.0	3,850	1.9	12,772	6.2	1,951	0.9
Turkmens	2,728,965	2,688,683	98.5	26,808	1.0	11,892	0.4	1,582	0.1
Udins	7,971	6,834	85.7	750	9.4	341	4.3	46	0.6
Udmurts	746,793	520,101	69.6	224,351	30.0	499	0.1	1,842	0.2
Udegeys	2,011	528	26.3	1,322	65.7	57	2.8	104	5.2
Uzbeks	16,697,825	16,417,363	98.3	119,757	0.7	136,524	0.8	24,181	0.1
Uighurs	262,643	227,371	86.6	10,235	3.9	24,461	9.3	576	0.2
Ukrainians	44,186,006	35,820,999	81.1	8,308,624	18.8	39,069	0.1	17,314	—
Ulchis	3,233	995	30.8	2,140	66.2	30	0.9	68	2.1
Finns	67,359	23,274	34.6	36,746	54.6	7,010	10.4	329	0.5
French	701	327	46.6	292	41.7	72	10.3	10	1.4
Khakass	80,328	61,116	76.1	18,973	23.6	94	0.1	145	0.2
Khalkha-Mongolians	2,950	2,591	87.8	293	9.9	21	0.7	45	1.5
Khanty	22,521	13,615	60.5	8,739	38.8	17	0.1	150	0.7
Croats	780	388	49.7	346	44.4	32	4.1	14	1.8
Tsakhurs	19,972	19,007	95.2	304	1.5	486	2.4	175	0.9

**Distribution of the Peoples of the USSR by Nationality, Native and Second Language
(According to 1989 Census Data) (Continued)**

Peoples	Total	Consider Their Native Language							
		Language of Their Own Nationality		Russian Language		Languages of Nationalities of Formed Union Republics		Other Languages	
		Absolute	Percentage	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage
Tsygans	262,015	202,810	77.4	28,236	10.8	19,853	7.6	11,116	4.2
Circassians	52,363	47,322	90.4	3,321	6.3	48	0.1	1,672	3.2
Czechs	16,102	5,682	35.3	7,165	44.5	3,069	19.1	186	1.2
Chechens	956,879	938,765	98.1	16,123	1.7	581	0.1	1,410	0.1
Chuvans	1,511	324	21.4	1,039	68.8	5	0.3	143	9.5
Chuvash	1,842,346	1,408,218	76.4	429,471	23.3	1,097	0.1	3,560	0.2
Chukchi	15,184	10,677	70.3	4,297	28.3	16	0.1	194	1.3
Shors	16,652	9,446	56.7	6,921	41.6	20	0.1	265	1.6
Evenkis	30,163	9,175	30.4	8,587	28.5	32	0.1	12,369	41.0
Evens	17,199	7,543	43.9	4,734	27.5	16	0.1	4,906	28.5
Entsy	209	95	45.5	80	38.3	—	—	34	16.3
Eskimos	1,719	887	51.6	788	45.8	2	0.1	42	2.4
Estonians	1,026,649	980,033	95.5	44,983	4.4	1,302	0.1	331	—
Yukagirs	1,142	375	32.8	521	45.6	1	0.1	245	21.5
Yakuts	381,922	358,366	93.8	23,339	6.1	53	—	164	—
Japanese	683	314	46.0	334	48.9	15	2.2	20	2.9
Other nationalities	15,168	10,061	66.3	2,313	15.2	809	5.3	1,985	13.1
Nationality not indicated	17,279	—	—	—	—	—	—	17,279	100.0
Total	285,742,511	264,902,596	92.7	18,742,649	6.6	1,553,462	0.5	543,804	0.2

**Distribution of the Peoples of the USSR by Nationality, Native and Second Language
(According to 1989 Census Data)**

Peoples	Fluent in a Second Language of Peoples of the USSR								Not Fluent in a Second Language	
	Language of Their Own Nationality		Russian Language		Languages of Formed Union Republics		Other Languages			
	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage
Abazins	229	0.7	26,254	78.1	61	0.2	1,177	3.5	5,892	17.5
Abkhazians	819	0.8	82,958	78.8	2,565	2.4	260	0.2	18,706	17.8
Avars	1,643	0.3	365,364	60.8	32,160	5.4	6,235	1.0	195,587	32.5
Austrians	—	—	145	28.8	38	7.5	20	4.0	301	59.7
Aguls	122	0.7	12,816	68.4	131	0.7	956	5.1	4,715	25.2
Adygeys	1,476	1.2	102,003	81.7	186	0.1	178	0.1	20,983	16.8
Azerbaijanis	42,112	0.6	2,325,022	34.3	70,802	1.0	37,587	0.6	4,294,880	63.4
Albanians	—	—	1,987	49.8	324	8.1	27	0.7	1,650	41.4
Aleutians	29	4.1	172	24.5	1	0.1	4	0.6	496	70.7
Altays	1,360	1.9	46,107	65.1	86	0.1	217	0.3	23,007	32.5
Americans	—	—	127	45.8	27	9.7	7	2.5	116	41.9
	—	—	169	48.6	18	5.2	7	2.0	154	44.3
Arabs	—	—	3,963	51.2	1,253	16.2	119	1.5	2,412	31.1

**Distribution of the Peoples of the USSR by Nationality, Native and Second Language
(According to 1989 Census Data) (Continued)**

Peoples	Fluent in a Second Language of Peoples of the USSR								Not Fluent in a Second Language	
	Language of Their Own Nationality		Russian Language		Languages of Formed Union Republics		Other Languages		Absolute	Percentage
	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage		
Armenians	80,780	1.7	2,178,212	47.1	131,291	2.8	18,763	0.4	2,214,186	47.9
Assyrians	—	—	11,431	43.7	4,713	18.0	483	1.8	9,533	36.4
Afghans	—	—	2,006	30.0	1,937	28.9	78	1.2	2,674	39.9
Balkars	478	0.6	66,919	78.6	636	0.7	553	0.6	16,540	19.4
Bashkirs	26,737	1.8	1,041,075	71.8	7,762	0.5	18,314	1.3	355,269	24.5
Belorussians	1,025,058	10.2	5,487,216	54.7	134,800	1.3	15,193	0.2	3,373,984	33.6
Beluchi	—	—	1,313	4.6	16,110	55.9	106	0.4	11,267	39.1
Bulgarians	—	—	224,917	60.3	30,104	8.1	2,724	0.7	115,196	30.9
Buryats	10,514	2.5	303,762	72.1	426	0.1	600	0.1	106,078	25.2
Hungarians	—	—	74,184	43.3	19,882	11.6	219	0.1	77,135	45.0
Veps	1,857	14.9	6,123	49.0	70	0.6	165	1.3	4,286	34.3
Vietnamese	—	—	1,802	53.1	21	0.6	6	0.2	1,567	46.1
Gagauz	4,361	2.2	140,598	71.1	8,400	4.2	873	0.4	43,536	22.0
Dutch	—	—	244	30.7	35	4.4	13	1.6	502	63.2
Greeks	—	—	141,600	39.5	53,469	14.9	5,771	1.6	157,228	43.9
Georgians	15,930	0.4	1,316,326	33.1	14,586	0.4	10,544	0.3	2,623,659	65.9
Dargins	882	0.2	248,249	68.0	615	0.2	4,921	1.3	110,371	30.2
Dolgans	109	1.6	4,609	66.4	37	0.5	24	0.3	2,166	31.2
Dungans	—	—	49,075	70.8	1,762	2.5	218	0.3	18,268	26.4
Jews	55,634	4.0	139,590	10.1	333,779	24.2	12,662	0.9	836,679	60.7
Highland Jews	182	1.0	10,139	54.8	2,643	14.3	265	1.4	5,284	28.5
Georgian Jews	474	3.0	7,452	46.4	189	1.2	68	0.4	7,871	49.0
Central Asian Jews	2,684	7.4	18,287	50.6	3,206	8.9	253	0.7	45,123	19.0
Izhors	95	11.6	310	37.8	79	9.6	39	1.2	1,564	49.3
Ingush	827	0.3	189,979	80.0	275	0.1	1,234	0.5	45,123	19.0
Spaniards	—	—	1,348	42.5	221	7.0	39	1.2	1,564	49.3
Italians	—	—	344	25.7	116	8.7	14	1.0	863	64.5
Itelmens	108	4.4	426	17.2	8	0.3	31	1.2	1,908	76.9
Kabardinians	1,273	0.3	303,829	77.7	474	0.1	1,052	0.3	84,186	21.5
Kazakhs	40,606	0.5	4,916,763	60.4	132,312	1.6	59,022	0.7	2,987,115	36.7
Kalmyks	1,791	1.0	148,216	85.3	472	0.3	325	0.2	23,017	13.2
Karaites	52	2.0	375	14.4	477	18.3	52	2.0	1,646	63.3
Karakalpaks	1,314	0.3	87,217	20.6	46,754	11.0	417	0.1	287,818	68.0
Karachays	620	0.4	123,571	79.2	524	0.3	344	0.2	30,877	89.1
Karelians	12,742	13.6	59,561	45.5	763	0.6	894	0.7	51,969	39.7
Kets	62	5.6	493	44.3	2	0.2	10	0.9	546	49.1
Kirghiz	5,261	0.2	890,201	35.2	108,663	4.3	2,379	0.1	1,522,442	60.2
Chinese	—	—	3,468	30.5	394	3.5	180	1.6	7,313	64.4
Komis	19,516	5.7	214,235	62.2	915	0.3	752	0.2	109,101	31.7
	7.4	93,142	61.3	393	0.3	586	0.4	46,737	30.7	

**Distribution of the Peoples of the USSR by Nationality, Native and Second Language
(According to 1989 Census Data) (Continued)**

Peoples	Fluent in a Second Language of Peoples of the USSR								Not Fluent in a Second Language	
	Language of Their Own Nationality		Russian Language		Languages of Formed Union Republics		Other Languages			
	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage
Koreans	—	—	189,929	43.3	10,178	2.3	6,039	1.4	232,504	53.0
Koryaks	493	5.3	4,304	46.6	43	0.5	60	0.6	4,342	47.0
Crimeans	68	4.7	438	30.2	84	5.8	40	2.8	818	56.5
Cubans	—	—	2,057	73.2	41	1.5	23	0.8	690	24.5
Kumyks	741	0.3	210,063	74.5	284	0.1	1,955	0.7	68,890	24.4
Kurds	—	—	43,889	28.7	59,349	38.9	2,334	1.5	47,145	30.9
Laks	649	0.5	90,268	76.5	1,195	1.0	1,554	1.3	24,408	20.7
Latvians	1.8	939,884	64.4	8,576	0.6	2,252	0.2	482,343	33.1	
	4,072	0.9	248,765	53.4	83,117	17.8	5,419	1.2	124,633	26.7
Livs	30	13.3	77	34.1	43	19.0	6	2.7	70	31.0
Lithuanians	18,247	0.6	1,162,942	37.9	30,074	1.0	1,959	0.1	1,854,168	60.4
Mansi	252	3.0	2,788	32.9	41	0.5	85	1.0	5,308	62.6
Maris	22,733	3.4	461,655	68.8	1,448	0.2	14,835	2.2	170,197	25.4
Moldavians	83,651	2.5	1,804,969	53.8	58,164	1.7	6,039	0.2	1,399,529	41.7
Mordovians	91,353	7.9	721,629	62.5	4,520	0.4	6,487	0.6	329,998	28.6
Nanaians	630	5.2	4,816	40.1	16	0.1	109	0.9	6,452	53.7
Peoples of India and Pakistan	—	—	754	43.6	53	3.1	35	2.0	886	51.3
Nganasans	33	2.6	722	56.5	3	0.2	15	1.2	505	39.5
Negidals	29	4.7	147	23.6	6	1.0	12	1.9	428	68.8
Germans	—	—	917,852	45.0	23,068	1.1	8,878	0.4	1,088,805	53.4
Nentsy	543	1.6	21,377	61.7	65	0.2	455	1.3	12,225	35.3
Nivkhi	126	2.7	931	19.9	2	—	54	1.2	3,560	76.2
Nogays	405	0.5	59,618	79.3	152	0.2	516	0.7	14,490	19.3
Oroki	4	2.1	76	40.0	1	0.5	1	0.5	108	56.8
Orochi	25	2.7	128	14.0	3	0.3	1	0.1	758	82.8
Osetians	12,790	2.1	412,104	68.9	56,191	9.4	4,142	0.7	112,771	18.9
Persians	—	—	18,419	45.8	6,909	17.2	453	1.1	14,395	35.8
Poles	—	—	494,803	43.9	190,392	16.9	4,784	0.4	436,355	38.7
Romanians	—	—	74,249	50.8	16,278	11.1	600	0.4	54,944	37.6
Russians	219,286	0.2	—	—	5,332,156	3.7	404,826	0.3	39,199,221	95.9
Rutuls	108	0.5	12,857	63.1	176	0.9	1,400	6.9	5,847	28.7
Lapps	133	7.0	771	40.8	9	0.5	35	1.9	942	49.8
Selkups	96	2.7	1,537	42.6	6	0.2	47	1.3	1,926	53.3
Serbs	—	—	1,372	51.1	191	7.1	40	1.5	1,082	40.3
Slovaks	—	—	4,698	51.9	2,310	25.5	31	0.3	2,021	22.3
Tabasarans	355	0.4	60,981	62.5	246	0.3	4,608	4.7	31,341	32.1
Tajiks	14,564	0.3	1,165,916	27.7	496,103	11.8	4,163	0.1	2,534,626	60.1
Talysh	170	0.8	1,180	5.5	15,507	71.8	205	0.9	4,540	21.0
Tatars	241,277	3.6	4,705,949	70.8	87,668	1.3	24,832	0.4	1,589,034	23.9

**Distribution of the Peoples of the USSR by Nationality, Native and Second Language
(According to 1989 Census Data) (Continued)**

Peoples	Fluent in a Second Language of Peoples of the USSR								Not Fluent in a Second Language	
	Language of Their Own Nationality		Russian Language		Languages of Formed Union Republics		Other Languages			
	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage
Crimean Tatars	1,872	0.7	206,853	76.1	17,089	6.3	2,655	1.0	43,246	15.9
Tats	550	1.8	19,652	64.1	3,019	9.8	503	1.6	6,945	22.6
Tofalars	14	1.9	286	39.1	2	0.3	11	1.5	418	57.2
Tuvins	403	0.2	122,257	59.2	63	—	314	0.2	83,592	40.5
Turks	—	—	83,591	40.3	62,090	29.9	1,395	0.7	60,436	29.1
Turkmens	5,597	0.2	756,558	27.7	42,718	1.6	5,009	0.2	1,919,083	70.3
Udins	229	2.9	4,086	51.3	1,847	23.2	100	1.3	1,709	21.4
Udmurts	—	5.4	458,004	61.3	2,045	0.3	10,506	1.4	235,591	31.5
Udegeys	137	6.8	376	18.7	22	1.1	25	1.2	1,451	72.2
Uzbeks	57,000	0.3	3,980,736	23.8	531,856	3.2	33,955	0.2	12,094,278	72.4
Uighurs	—	—	153,163	58.3	27,685	10.5	682	0.3	81,113	30.9
Ukrainians	3,513,626	8.0	24,819,655	56.2	186,060	0.4	35,049	0.1	15,631,616	35.4
Ulchis	140	4.3	776	24.0	12	0.4	106	3.3	2,199	68.0
Finns	—	—	23,850	35.4	6,038	9.0	1,204	1.8	36,267	53.8
French	—	—	309	44.1	90	12.8	12	1.7	290	41.4
Khakass	2,336	2.9	53,675	66.8	215	0.3	305	0.4	23,797	29.6
Khalkha-Mongolians	—	—	2,208	74.8	18	0.6	13	0.4	711	24.1
Khanty	487	2.2	11,395	50.6	22	0.1	166	0.7	10,451	46.4
Croats	—	—	332	42.6	51	6.5	9	1.2	388	49.7
Tsakhurs	150	0.8	4,691	23.5	9,999	50.1	692	3.5	4,440	22.2
Tsygans	9,379	3.6	165,854	63.3	25,166	9.6	1,682	0.6	59,934	22.9
Circassians	395	0.8	39,970	76.3	202	0.4	547	1.0	11,249	21.5
Czechs	—	—	5,925	36.8	3,570	22.2	110	0.7	6,497	40.3
Chechens	1,987	0.2	708,026	74.0	2,149	0.2	3,783	0.4	240,934	25.2
Chuvans	57	3.8	404	26.7	17	1.1	44	2.9	989	65.5
Chuvash	85,251	4.6	1,198,952	65.1	4,535	0.2	18,305	1.0	535,303	29.1
Chukchi	532	3.5	9,296	61.2	7	—	51	0.3	5,298	34.9
Shors	998	6.0	8,769	52.7	68	0.4	111	0.7	6,706	40.3
Evenkis	768	2.5	16,723	55.4	36	0.1	790	2.6	11,846	39.3
Evens	380	2.2	9,034	52.5	21	0.1	1,252	7.3	6,512	37.9
Entsy	15	7.2	100	47.8	2	1.0	4	1.9	88	42.1
Eskimos	57	3.3	832	48.4	—	—	21	1.2	809	47.1
Estonians	13,237	1.3	347,556	33.9	3,399	0.3	1,499	0.1	660,958	64.4
Yukagirs	42	3.7	428	37.5	1	0.1	147	12.9	524	45.9
Yakuts	5,158	1.4	247,827	64.9	223	0.1	330	0.1	128,384	33.6
Japanese	—	—	266	38.9	13	1.9	8	1.2	396	58.0
Other nationalities	119	0.8	6,480	42.7	4,073	26.9	196	1.3	4,300	28.3
Nationality not indicated	—	—	1,138	6.6	184	1.1	143	0.8	15,814	91.5

**Distribution of the Peoples of the USSR by Nationality, Native and Second Language
(According to 1989 Census Data) (Continued)**

Peoples	Fluent in a Second Language of Peoples of the USSR								Not Fluent in a Second Language	
	Language of Their Own Nationality		Russian Language		Languages of Formed Union Republics		Other Languages			
	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage
Total	5,854,296	2.0	68,790,641	24.1	8,586,242	3.0	838,028	0.3	201,673,304	70.6

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[Article by I.Frolov under the rubric: "Theory and Humanitarian Problems:" "The Preeminence of Man"]

[Text] Last December a meeting was held in Moscow called: "Man, Society, and Science: A Comprehensive Study." Participants represented a wide array of scientific disciplines—philosophers, psychologists, sociologists, geneticists, physiologists, ecologists, demographers, and health care professionals (present were academicians N. Bekhtereva, R. Petrov, P. Simonov, among others); they also included spokesmen for political science and culture.

The conference served to demonstrate once again the great resources that exist in the USSR for the study of man. Conference participants focused particular interest on the conceptual implications of forming an Institute for the Study of Man, together with a number of practical steps to develop it as an integrated field of scientific inquiry.

The document published below, an appeal by scholars proposing the establishment of a foundation for the study of man, sets forth the findings of certain theoretical, organizational, and scientific work that has been going on in our country for at least a quarter century. As a result an all-Union center for the scientific study of human nature has been established and it has begun its coordinating efforts. The Institute for the Study of Man, despite great difficulties, is now being organized. Nevertheless, these very difficulties may mark the beginning of a new era in the theoretical and applied aspects of the science of man and the realization of the principles of humanism.

Perestroika has emancipated people; it has awakened their political sense and forced them to think about the fate of their country and world civilization. This is the greatest achievement of our time. To sustain the creative energies of people and to nurture their cultural aspirations—that is the strategic task.

The policy of perestroika began by setting the task of overcoming certain negative tendencies in our country that arose during the stage that preceded it in the form of authoritarian distortions of socialism. But the more extensive perestroika became as it steadily developed, the more it affected the fundamental principles inherent in the life of our society. Now we may recognize the

process of perestroika as a profound qualitative transformation of all phases of our national life.

We maintain that we are building anew socialist relations on humane and democratic foundations.

We maintain that in the course of perestroika we are progressing towards a society of genuine humanism.

We maintain the necessity of complete harmony between humane means and the pursuit of humanitarian ends.

It has become recognized that humanism without democracy remains a lovely but idle dream; whereas democracy without humanism degenerates into a soulless political formalism.

All these principles were established by the finest minds of mankind—the founders of humanistic thought. "Man is the measure of all things." This precept was formulated in antiquity.

According to legend, when the philosopher Diogenes of Sinope in ancient Greece was asked why he was wandering about with a lantern, he replied: "I am looking for a[n honest] man." The Spanish artist Giuseppe Ribera (1591-1652) depicted this scene in his painting: "Diogenes With a Lantern." The philosopher is shown staring intently into the eyes of the viewer, holding out his lantern, as if to inquire, "Truly, are you a man?"

"Know thyself." This dictum, ascribed to Socrates, is apropos today. In a certain sense, it is even more profoundly relevant for us. How much we have achieved and lost, and how much remains to be achieved, not simply to make up for our losses, but to press on in pursuit of that great mystery, as Dostoyevskiy expressed it, that is man!

Today, under the threat of extinction that hangs over mankind, we place our hopes in reason, and in its greatest offspring, human culture, which is characterized by unity and diversity like the world in which we live, and which confirms man as the ultimate concern of history.

As Bertrand Russell said, "It is easier to hate enemies, and more rewarding, that to love friends. From those people who are more concerned with destroying enemies than improving the world, little good is to be expected."

It is in pursuit of humanitarian ideals that the conditions are created in which it becomes possible for man to exert

a rational influence upon nature and to restore the lost balance between man and the biosphere.

The resolution of the global problems that affect mankind requires the unified efforts of many countries with diverse social and economic systems. This need for unity is a universal human problem. It is therefore essential to develop ideas which provide a humanitarian orientation for public policy.

As we overcome the oppressive heritage of "barracks socialism," we advance in the direction of ideals bequeathed to us by the whole of world culture, towards a society in which the individual person will become the ultimate concern in terms of social development. The new political thinking, which affirms the preeminence of universal human values, orients us to this end. And science has a vital role to play in this regard.

During the period of the country's comprehensive renovation, the question of man—his nature, the new circumstances surrounding his daily life, and the new relations between the individual and society—moves to center stage. This is therefore an opportune time to devise a single strategy for achieving a scientific understanding of man and to organize a comprehensive program of basic research. The task as proposed is conditioned by the fact that the study of man in our time has gone far beyond the bounds of the specialized fields of science that deal with it and has turned into a common problem for the entire system of science.

Within this system of scientific understanding, the process of reconsidering the conventional assumptions with which we look upon the world has already begun. A vigorous search is now underway to determine man's proper place in the world. The preeminence of man is being affirmed in everything: in economic activity, in political affairs, in cultural life. Yet in practice for the present, unfortunately, we are very far from such affirmation. Man has not ceased to be a "cog"—a mere means to an end, including inhuman ends. Man himself is unable to believe that he is not merely a means but the ultimate end of history. For him to be able to believe this, it is necessary for him to change his way of life and his consciousness. There is no task that is more important or more difficult to achieve. Its achievement would signify the entrance of civilization into a new era—a true Renaissance of man as wise and humane (*homo sapiens et humanus*).

We propose to make new steps in this direction while in no way ignoring the urgent problems and human concerns which are so difficult for us to conceptualize today and which are even more difficult to resolve. These are the tasks confronted by the Institute for the Study of Man, which should conduct research in the following fields:

- Human relations (covering problems of interaction between peoples of different nationalities, value systems, and thought patterns; theory and methods of effective communication, especially in situations of

political, national, industrial, or family conflict).

- Human development (research and planning of proper conditions for stimulating individual intellectual growth and creativity; methods of identifying and exploiting human aptitudes and potential).
- Man and labor (devising the scientific principles involved in the organization and management of labor activity and effective means of motivating people to work).
- Man and the applications of science, including close association with the newest fields of high technology (microelectronics, information science, robotics, biotechnology, among others).
- Man in extraordinary situations (problems of dealing with economic, social, and political crises; social and psychological techniques to assist in overcoming crisis situations).
- Man and culture (study of culture patterns and cultural dynamics; cultural intercommunication in the modern world; prospects for man and the future of human race).

Together with the study of these scientific problems, the activities of the Institute will be directed at developing and performing social and humanitarian work with regard to:

The human dimension of large-scale social and economic projects by evaluating their potential consequences for people's lives;

Systems for the psychological selection and professional training of cadres in current methods of instruction;

Social and psychological services for resolving crises in the lives of individuals and groups.

The Institute will also foster the development of integrated scientific programs in support of humanitarian and social projects undertaken by state agencies and management bodies; preparing scientific studies, predictions, and proposals; conducting scientific research; and serving in a consultant capacity.

I have mentioned specifically only certain, for the most part practical, aspects of the comprehensive study of man. But there remains one area of basic research, which until now has barely been touched upon, at the very juncture of the natural, social, and applied sciences. In this area lie problems of psychology in its relation to physiology; of human genetics and ecology; of medicine and gerontology; and of demography; in association with social, cultural, and moral considerations that affect human life, its meaning, and significance. Herein lie new secrets, new heretofore undiscovered continents of knowledge, which in future will turn upside down the so-called "pyramid of science" and human culture in its entirety. Then will man really assert his humanity and preeminence in all things, proving his uniqueness on earth and in the universe. To achieve this, there is much to be done now, so that we may move forward step by step. Unfortunately, for the present, obstacles of various kinds are to be encountered at each step of the way.

These obstacles we can and must overcome. This subject is addressed in the document published below.

(The fee for this article is being contributed to the Foundation for the Study of Man.)

Appeal of the Scientists

Two years ago at the instigation of the USSR Academy of Sciences a priority program of research was developed with the title: "Man, Society, and Science: A Comprehensive Study," and measures were taken to organize its establishment. The program, which is interdisciplinary in its design, combines the efforts of scholars from both the humanities and natural sciences, and it provides a solid foundation for cooperation between persons in the academic and teaching community as well as in fields of applied science.

Teams of research scholars, including some of the leading scholars in the country, have been formed and are not actively at work. The journal MAN has been established, in which some of the more interesting results of this research are published. The academic standing of the program among Soviet scholars is growing, as borne out by an increasing number of applications to participate in it. Interest in the program is also growing among the scientific community abroad.

Right at this time, however, as the research program gains momentum, the fate of this single program in the humanities among the priority projects of the Academy of Sciences is being subjected to questioning. In 1990 the USSR Council of Ministers did not earmark funds for research conducted in departments of the regional institutes or of the regional branches of the Academy of Sciences. The same is true of funds for 1991. For this period up to the present, financing is yet to be determined, and even further cutbacks may be expected.

Such a shortsighted scientific policy will inevitably lead to:

- A weakening of the ties that integrate efforts in the academic, teaching and applied sciences;
- A breakdown of the international cooperation that has been achieved;
- Elimination of the very possibility of achieving a breakthrough in those fields of research currently opening up new promising new directions in world science;
- Deepening the present shortage of humanitarian culture throughout our society.

It would be an extraordinary mistake—and a step backward—to cut this program at a time when a tendency to seek technocratic solutions to problems predominates, constituting a real obstacle for our society as it seeks to extricate itself from the critical situation that has developed. The following specific measures must be taken:

1. Extend program financing, with due allowance for the increasing scale of research, as previously called for by the leaders of the USSR Academy Sciences Presidium.

2. Open an Institute for the Study of Man attached to the USSR Academy of Sciences Institute of Human Sciences, the need for which was attested to by the USSR Academy of Sciences Presidium in January 1989.

3. Establish a department of human sciences at the USSR Academy of Sciences. This is considered necessary to extend and intensify the study of man and to conduct a strategy of integrated research in this field. This department should serve to unite the efforts of specialists with diverse backgrounds engaged in studying human nature.

4. Strengthen the material, technical, publishing, and printing capabilities of the journal MAN, organ of the Center of Human Sciences.

It is necessary also to take what specific measures are needed to establish a special Foundation for the Study of Man in the plans for international cooperation of the USSR Academy of Sciences and the State Committee of the USSR Council of Ministers for Science and Technology. This appeal was approved at the all-Union conference of "Man, Society, and Science: A Comprehensive Study" held on 13 December 1990.

1.2 Million Muscovites Said To Be Living Below Poverty Line

Reader's Complaint

91US0236A Moscow TRUD in Russian 16 Jan 91 p 2

[Letter from reader V. Mojayev published under the general heading: "Life Below the Poverty Line": "Letter to the Editor"]

[Text] I often ask myself: Do I have a life? The fact that I have nobody on this earth, except a homeless dog, is not the main point. It is hard, of course, to be alone, but poverty is even harder. I know what the notorious "poverty line" is, not from the newspapers, but from my own bitter experience. I live below that line. I will tell you about my budget, all income and expenses, without concealing anything. To start with, my salary is 85 rubles [R] (incidentally, millions of people have this level of income).

Now, the expenses. I pay R12.37 in rent. Electricity—R3 on average. Public transportation—R6 so far (universal farecard), television—R4, laundry—R4, and cigarettes—R3...

I am 52 years old and, unfortunately, no longer in robust health. I need medicines, but it is hard to find even elementary medications—analgin, raunatin, klofelin [names as transliterated]—in the pharmacy... They are not available at the pharmacy, but right there, outside the pharmacy's door, one can buy them at a premium. I

have no choice but to buy these medications from speculators. So far it has been costing me R12 (however, black market prices are going up fast).

More. Soap and toothpaste—R2. In the not so distant past I used to be a journalist, so I cannot do without a newspaper. Actually, can a newspaper be considered a luxury? This takes R3 a month on average. That is about it. I used to go to a barber shop. Now I cut my hair myself. Have not been to a movie for about two years—trying to save money...

Let us, however, sum up my expenses. They come to about R50. That leaves R35 for food (for a month) and unforeseen expenses (for instance, shoe repair). As a rule, there is less than R1 a day for food. This means semi-starvation.

I normally have tea and bread for breakfast and supper. Sometimes there is no tea; then I drink hot water with my bread. I do not have dinner every day. If I am lucky, I can buy in a cafeteria (they already know me there) meat bones that people usually buy for dogs, and make a "broth" from them. Then I add some bread crumbs and my dinner is ready. The bare bones go to my furry friend of humble origins to chew on.

I do not even mention clothes, shoes, and underwear. I have not bought anything in three years. My suit, by the way, shows a lot of wear, and it would be good to buy a new one, any kind. But, first, there are no more cheap suits in the stores, and, second, it is impossible to save even a relatively modest sum.

Before I ended up in such a sorry state, I worked for 14 years as a senior correspondent at the USSR Minyugstroy [Ministry of Construction in the Southern Regions of the USSR] press center. But in 1987 the press center was closed, and I was not able to find a job in my profession. And, frankly, it would be hard for me to hold such a high pressure job—I have high blood pressure and other medical conditions. I have found a job (thank God!) in the fire protection unit of the Pushkin Theater. And now, having worked full time for 30 years, sick, and not needed by anyone, I am straining to understand: What harm have I done to the state that is making me starve now? Why should I furtively collect cigarette butts near metro stations? I am not alone in that... Where is our fault? And how are we going to live under conditions of transition to a market economy, which has started this wild rise in prices and a mad spiral in the cost of living? Actually, can anyone call this miserly existence (mine and that of others like me) a living?

[signed] V. Mozhaevy, a man who exists below the "poverty line."

Newspaper Commentary

91US0236B Moscow TRUD in Russian 16 Jan 91 p 2

[Commentary by TRUD Political Commentator V. Golovachev published under the general heading: "Life Below the Poverty Line": "Our Commentary"]

[Text] In his letter Valeriy Vladimirovich Mojavey enclosed his home address and a clipping of one of his articles which was published in TRUD in 1978. He had a good job and interesting plans then, and he could not have imagined that some 10 years later he would be living in poverty, ashamed of his condition, and suffering silently...

The saddest, or one might even say, the tragic part is that this is not the only letter in our mail. A moan of despair, a white flag of being defeated by life, a confession of hopelessness—this is what our mail brings us. The proportional share of such letters is increasing, and this is a serious sign of trouble.

Yes, the country is in a difficult crisis, and it is hard, very hard for many, but here we are not talking about those for whom it is merely hard; we are talking about those who have been thrown out onto the shoulders of the road of life, those who are forced to lead a miserly existence, those, who can no longer stay on the surface... They wallow with their last shreds of strength, they send us all an SOS, not really believing that someone will hear. And, it is true, quite often these signals disappear into the nowhere...

Meanwhile, life is fast becoming more expensive. Some specialists believe that inflation is now running at 18 percent; others, according to KOMMERSANT, put it even higher—at 23 percent. The official estimate is lower, but any housewife can tell which figures are closer to reality.

Last fall, with the help of specialists, the trade unions conducted calculations of the minimum subsistence level in a number of cities around the country. For those who work, it came to R150 in Moscow, R173 in Valdivostok, and about R130 as a nationwide average for the working man...

That was in October. But prices continued to race up. In November, according to some research, inflation in major cities came to 5.7 percent. The total shortage of goods grabs one by the throat—the premiums paid to speculators, according to USSR Goskomstat [State Committee for Statistics], last year totaled between R3 billion and R4 billion; others calculate it at R30 billion.

All of this is just a foretaste of the things to come.

In a recently published interview, A. Komin, first deputy chairman of the USSR State Committee on Prices, firmly stated: "Prices will go up. I cannot tell you an exact date; I can only tell you that it will be soon... Prices on goods that determine the population's standard of living should all be raised simultaneously. I mean meat, milk, sugar, bread, and among nonfood items basic clothing, footwear, fabrics, and children items..." As we can see, the government program rejected by the parliament last May is nevertheless still on the table, waiting to be implemented. I think that some compensation is due in this case, but, first, what kind of compensation, and,

second, why is it that the people whose interests all these projects affect very closely, know nothing about it?

Last November I saw a draft USSR law on monetary compensation for the population (income indexing) related to the rising prices for consumer goods and services. I also read a draft document on a minimum consumer budget. It seems that these drafts have sunk or gotten derailed somewhere; meanwhile, poverty is strangling millions and millions of our compatriots.

I would like to remind the reader of the following axiom: Transition to a market is unthinkable (unless we want to have a severe social cataclysm) without an effective mechanism for the social protection of the population—first of all for people with low-income, those who live near the poverty line or who have already sunk below it. But where is this line? What is the subsistence minimum in different regions, for different population groups? How can one calculate this minimum? What is to be included in the “consumer basket?” What kind of compensation mechanism should be designed to compensate for the rising prices? There are no answers to these questions. They are discussed somewhere in the quiet of the offices, while time does not wait. Social tensions in society grow, and it may lead to unforetold consequences. Should we not learn from the lessons of Lithuania, where everything started with the population’s negative reaction to price increases?

The determination of a minimum consumer budget and a mechanism for compensation are the first steps, the point from which transition to a market economy should start. Many republics are already actively involved in this. According to Yu. Luzhnikov, chairman of the Moscow City Soviet Executive Committee, the 450,000 poorest residents of Moscow are already receiving subsidies that bring their income to R85. (This figure is much lower than the subsistence minimum. Actually, calculations show that 1.2 million people in Moscow live below poverty line.) We should welcome the efforts of local and republic authorities in this direction, but, at the same time, does it not prove that the passage of appropriate legislative acts on a national level (in coordination with the republics) is catastrophically lagging behind? This is how the whole idea of a market is being discredited; negative attitudes towards the market are being formed among the working masses. This may eventually turn out to be the heaviest blow to perestroika...

I have heard this: There is no money in the country, we can barely make ends meet in the budget, so it is too early, and too complicated an issue, to talk about compensation and the subsistence minimum. Yes, there is no money, but even knowing that, society cannot let millions of its members live in misery. This is immoral and inhumane. And besides, eventually we will all pay an enormous price for this... Is it not strange: We consider it normal to dump R250 billion into unfinished construction projects, while we cannot find much, much lesser sums to protect at least the poorest? Is it that we cannot do it, or do not want to?

Much is said and written today about the population’s income growing at an unheard of pace. If we take it as a whole, it is probably true. But if we analyze it by separate population groups, it will become clear that for many the standard of living is going down. The research, recently conducted by the All-Union Center for Public Opinion Studies, showed that for a quarter of all families income has actually gone down during the last six months, and that for half it has not changed (while prices go up). This means that the standard of living is going down.

As can be seen from one of the drafts, the law on compensation for price increases should have been in effect starting 1 January 1991. That date has passed, but nothing is heard from the authors, from the USSR Goskomtrud [State Committee On Labor], and, judging by all the signs, parliament is not particularly worried about it either. Hopefully, we will not be too late...

1989-1990 Drug Use Statistics Compared; Trafficking Increase Noted

*91WD0335A Moscow EKONOMIKA I ZHIZN
in Russian No 49, Dec 90 p 17*

[Article by A. Valentey: “From Cowardice to Avarice, From Avarice to...”]

[Text] He has dull eyes, a nonsensical stare, and the face of an old man, though he is only 30-some years old... This is a portrait of a drug addict “with tenure.” Most of them have no future. They live for just one thing—to lay their hands on yet another portion of the poison in order to once again forget their troubles.

Criminal chronicles. On 6 October 1990, a functionary of the mobile patrol service apprehended two drug addicts—residents of Krasnodar, not employed anywhere—in the hemp-field of the “Forty Years of October” kolkhoz in Timashevskiy Rayon, Krasnodar Kray. When being apprehended, one of them tried to stab the militiaman with a knife. The militiaman was forced to use his weapon, wounding the drug addict in the chest.

[Begin boxed passage] **From the records of the RSFSR MVD [Ministry of Internal Affairs] Administration for Drug Addiction Control (published for the first time):** This year, state areas sown to hemp in Krasnodar Kray took up 5,000 hectares. Forty-four militia employees have been assigned to guard them. They have apprehended more than 50 violators of the law. Thirty-seven criminal cases have been filed. Three hundred kilos of raw materials for drugs were confiscated.[end boxed passage]

Can this small militia force “cover” huge areas and avert “leaks” of the immensely lethal poison to the black market? How are the growths of wild hemp to be reliably protected against raids (according to estimates by specialists, in Russia alone it grows on an area of about 100,000 hectares)?

Chief of the RSFSR MVD Administration for Drug Addiction Control Yu. Astakhov states with alarm: "Drug addiction is spreading across the territory of the republic. In the first half of the year, we confiscated 2.6 times more narcotic substances and raw materials for their manufacture than in the corresponding period of last year."

[Begin boxed passage] **From the records of the Administration for Drug Addiction Control (published for the first time):** As of 1 July of this year, the organs of internal affairs registered 48,700 drug users. More than 25,000 of them have been diagnosed as "drug addicts." [end boxed passage]

Western specialists believe that only one-tenth of the drug addicts in the world are detected. If we apply long-proven methods, there should be about 500,000 of them in Russia. However, it cannot be ruled out that there are many more. After all, over there, "in their countries," considerable experience in combating this social evil has been accumulated. The drug trade has been fought by state structures for decades, whereas, frankly, we have so far taken merely the first steps, even if successful.

Look at the map that shows the routes of worldwide migration of drugs and locations where they are grown. It was published last year in the United States in the journal COCAINE, OPIUM, AND MARIJUANA. Our country appears on the map as one big "blank spot." Why? Because for many years we tried to persuade everyone that, as they say, drug addiction does not present a problem here. Meanwhile, the West united for a war on the drug business. We isolated ourselves, and were forced to pay dearly for this.

I have many times asked people known and unknown to me the following question: What troubles you the most? In response, most people talked about rampant crime rather than economic dislocations, the growth of prices, and comprehensive shortages. They answered: "Life has become a frightening experience."

The mass media have been screaming about the growth of the crime rate. Explanations are found for this phenomenon. However, do many people know that drug addiction in one form or another is precisely the main reason why a tremendous number of crimes, including the most egregious ones, are committed?

Yu. Astakhov:

"Unfortunately, the social danger posed by drug addiction is underestimated for some reason at present, including by law-enforcement organs. Meanwhile, surveys taken in a number of regions of the Russian Federation indicate that drug addiction is becoming intertwined with professional crime. An overwhelming majority of 'career thieves,' authorities, and leaders of the criminal underworld are hard-core drug users."

[Begin boxed passage] **From the records of the Administration for Drug Addiction Control (published for the first time):** In Krasnodar, one of every two apartment burglars apprehended is a drug user. Objects "obtained" in 37 burglaries, muggings, and bandit attacks were confiscated from just one unmasked drug seller. This is how payments for drugs were made to him.

Through a survey of repeat-offender convicts who are inmates at the corrective labor facilities in Rostov Oblast and are registered drug users, it was determined that obtaining funds for the acquisition of narcotic substances was the motive for commissioning two-thirds of crimes for monetary gain. [end boxed passage]

A drug addict will stop at nothing when he needs to rustle up money for buying yet another dose of his "delight." Traders in the goods in short supply that bring madness and death grasped this keenly: Drug prices in the black market have been growing continuously.

[Begin boxed passage] **From the records of the Administration for Drug Addiction Control (published for the first time):** The state price for one gram of codeine is 40 kopeks, and in the "black" market—250 rubles [R]; a gram of cocaine—20 kopeks and R500; a gram of morphine—57 kopeks and R1,800. Some hard drugs manufactured in underground laboratories are valued at R600 to R800 per gram. [end boxed passage]

Given such prices, small and large drug pushers are not deterred even by the fear of possible severe penalties. Alas, we must state that the "befuddling" money is a lure even for those who at one point solemnly took the Hippocratic oath.

Criminal chronicles. In Krasnodar, criminal charges were filed against a physician of ambulance substation No. 1 who had repeatedly stolen drugs by resealing the ampules. He injected patients with a physiological solution of dimedrol and analgine instead of the drug.

Three criminals who had stolen more than 18,000 ampules of morphine were apprehended in the course of an operation at the Tuapse railway station.

One recalls the words of Bulgakov: Cowardice is the main vice of people. Indeed, it was specifically cowardice that "held sway" in our society for many years and interfered with acknowledging that we had fully partaken in the pool of universal vice. However, we reconciled ourselves to this: It was easier to live that way. Cowardice led many people to the main vice of the present time—avarice: grabbing as much as possible, as soon as possible, by any means, even to the detriment of the health and life of people and the entire society. Drugs turned out to be the honey pie for our avaricious homegrown mafia.

[Begin boxed passage] **From the records of the Administration for Drug Addiction Control (published for the first time):** At present, there is a clear-cut division of responsibilities between procurers, haulers, and sellers of drugs

in the system of drug trade in Russia. They are becoming united with consumers in deep-cover criminal groups that are interregional in nature. This is particularly clearly visible in the North Caucasus and the Far East. [end boxed passage]

Criminal chronicles. A criminal case is under investigation in Amur Oblast that is associated with the murder of two residents of Khabarovsk Kray who arrived in "someone else's" hemp field. In the same oblast, three drug pushers killed their associate for merely stealing 12 bags of wild hemp they had harvested together. Another criminal group killed their confederate when splitting proceeds from drug sales, along with his son who witnessed the tragedy.

Here it is, our addition of drug addiction. Everything is similar to the situation "over there": the struggle for spheres of influence and power and the killings of the undesirables. It is not all that difficult to "launder" "dirty" money in the environment of chaos that so far has accompanied our transition to market relations. Proponents of such an approach are found, including among deputies of a democratic stripe, who are prepared to admit "shadow-economy operators" to the ranks of business people. The possibility of this is discussed in earnest in the "radical" press.

So, are we to consider those who have poisoned the bodies and souls of thousands of their fellow citizens to be upstanding individuals and to respect them?

Yu. Astakhov:

"We are combating drug addiction by both 'surgical' and preventive methods, and this does not mean just propaganda and agitation. Thus, during the period of the ripening of poppies and hemp we conduct in the republic a campaign to eradicate the growth of these plants. We called it Operation 'Poppy.' Another operation, 'Doping,' is aimed at stopping the leaks of drugs from production and storage facilities. Naturally, we search

for underground drug-producing laboratories. For example, this year we 'got' two of those in Leningrad."

Criminal chronicles. Between July and September, military units, border guards, and special equipment, including helicopters, were extensively used in the Far East in Operation 'Poppy.' The results of the operation are:

Maritime Kray: Four hundred and eighty hectares of illegal hemp fields were destroyed, 722 violators of the law were apprehended, 274 criminal cases were initiated, and 733 kilograms of drugs were confiscated.

Khabarovsk Kray: Five hundred and fifty hectares of wild hemp were eradicated, 345 violators of the law were apprehended, 434 kilograms of drugs were confiscated, and 128 criminal cases were initiated.

Amur Oblast: One thousand one hundred and eighty-seven hectares of wild hemp were eradicated, 406 violators of the law were apprehended, 1,107 kilograms of drugs were confiscated, and 99 criminal cases were initiated.

The people are giving thought more and more frequently to the eternal question: Who lives well in Russia? They are coming up with an answer: Our homegrown mafia. This is who people's deputies and various public organizations and parties should use their efforts and power against. They should unite for a war on crime, primarily organized crime, with one of its most terrifying manifestations—the drug trade—rather than fight each other for cozy positions.

As far as the militia is concerned, it is fighting with increasing vigor. However, it also expects help from the people, from all of us, including financial aid within the framework of charity. It is our common duty to help the militia.

Published for the First Time

Drug Addiction in the First Half of 1989 and 1990 as Reflected in Statistics

Indicators	RSFSR		USSR	
	1989	1990	1989	1990
Drug-related crimes, total	4,453	5,918	10,114	13,688
Out of Which:				
Stealing drugs by means of theft, mugging, and assault	164	163	256	250
Illegal manufacture, use, storage, and sale of drugs	3,135	4,584	7,209	9,881
of which drug sales	413	584	982	1,180
Encouragement of the use of drugs	59	94	117	153
Organization or maintenance of dens for the consumption of drugs	70	102	150	196
Forging prescriptions with a view to obtaining drugs	68	142	119	165
Illegal planting of poppies or hemp	14	33	651	1,585
Theft of drugs by officials	60	43	99	79

Drug Addiction in the First Half of 1989 and 1990 as Reflected in Statistics (Continued)

Indicators	RSFSR		USSR	
	1989	1990	1989	1990
Violation of established drug storage procedures	438	373	707	491
Total statutory penalties imposed	3,829	4,649	29,369	19,696
Confiscated drugs and raw materials for manufacturing them (tons)	1.8	4.7	4.5	18.1
Compulsory referrals for treatment to treatment and labor preventive facilities and VD treatment facilities	358	407	896	844
Registered drug users	52,362	48,703	121,757	116,305
out of which minors	4,695	4,074	8,324	7,096
with the diagnosis "drug addicts"	24,660	25,425	59,887	63,863
out of which minors	719	636	1,340	1,150

Difficulties of Anti-Narcotics Police in Novosibirsk Reported

91WD0342A Novosibirsk SOVETSKAYA SIBIR
in Russian 29 Sep 90 p 12

[Article by N. Zubritskaya: "'The Pit'; Against Drug Dealing"]

[Text] For some time the servers of the narcotics business have called our oblast city a "yama" [pit]. In their slang, this is a dangerous, wretched place for the drug mafia. However, it is also an especially attractive one. This is where the most expensive drugs are found, which are brought here from Central Asia and Kazakhstan. Novosibirsk ranks among the top 10 cities in the Soviet Union in the sale of drugs. It is surrounded by a triple ring of zones, where marijuana goes at a five-time higher rate than on the outside. The boundaries of the "pit" have extended beyond the oblast. It is the territory of the West Siberian Transport Internal Affairs Administration. Five years ago, in connection with the anti-alcohol directive, interest in narcotics began to grow, and an official in charge of organizing the struggle against drug addiction was appointed there. Prior to this, Eduard Petrovich Smirnov had dealt with the most dangerous transgressors of the law, for whom killing was a joke. Consequently, courage became a professional trait for him. Therefore, the management had hoped that he would be able to cope with this situation as well, being the sole official in the entire district under his jurisdiction and having no funds for assuming a new direction. Because of the staff shortage, he at first continued to also investigate serious crimes.

Without Fear and Reproach

Any reliable person is his own manager. Smirnov conducted matters on a broad scale. One could not expect results otherwise. Having compiled a work plan, Eduard Petrovich also included in it his dream of building a kennel for work dogs. The idea was an attractive one but, as they say, it sounded like gibberish, since there had

never been anything like it before in the field of transportation. But, having received this plan, the punctual militia management began demanding fulfillment of every point. Thus, Eduard Petrovich had dug himself into a "debt hole" in order to dig the "pit" which was later cursed by drug dealers.

The attitude toward the militia on the part of the civilian population in recent years has not carried the best overtones. Cursing the state, the people are taking out their anger on its "keepers", who, in fact, do not always blamelessly perform their service. And we feel sorry for many of the accusers, as well as for those who do not hesitate to risk their lives, yet are unjustifiably accused. This is acutely felt when one encounters the character of a knight without fear or reproach, a person such as Eduard Petrovich. Tall and thin, he even reminds us of Don Quixote by his very appearance, except without the characteristic moustache and beard. Yet at the same time he really has a superman quality about him: With the quickness of a foxhound, with muscles of steel, and with the face of a courageous hero from an old French movie. By education Smirnov is a jurist, and by title—a major.

Here is how things went with the kennel. He sent a letter of application to the Rostov militia school where the dogs are trained, and asked that they reserve 10 spaces for him. Yet at that time he did not have even a single dog. When the application was approved and he was faced with the need to move ahead, he and his friends and colleagues rushed to get some dogs. There was no money, and they did not know where to get the funds to purchase the dogs. Then he thought of a way: He took the money from the mutual aid fund. In selecting the dogs, preference was given to German shepherds since they were the most hardy. After all, they would have to spend the winter in the cold, as the kennel had not yet been built. Everything took place in a fantastically short time, during the holidays—from the 1 through 10 May. The selection of candidates for dog handlers for the railroad stations of Novosibirsk, Barnaul, Omsk, Rubtsovsk, and the major airports was conducted. They were to be

appointed without hiring any additional staff, by redistribution of the officials in charge of operations. Great force of persuasion, almost hypnosis, was needed for people to believe that this was really necessary.

When the future dog handlers set off for Rostov, Smirnov sat down to his socio-economic computations and sent to the USSR Ministry of Internal Affairs a brief scientific treatise with a request for an exceptional allocation of funds for keeping the dogs. The financiers did not have the heart to refuse, and soon a favorable reply followed. When the dogs received their "education", they, and that meant Smirnov too, were put to the test at the transport administration. Drugs were hidden in the bus which transported personnel. The examiners looked through the windows, watching to see how the German shepherd sat down in the center of the bus, "thought" for a minute, then walked down the aisle with flair and pointed out the last seat on the bus. They also tested the dogs in the garage, where oil, gas and stuffiness created great difficulties. The mixed breed shepherd "Vostochnik" did not fail even under these circumstances. On his face, smeared with oil, was an expression of duty fulfilled—he had found the drugs.

...A man was transporting hashish. He had already heard about the Novosibirsk dogs and, approaching the railroad station, had sprayed the sleeping car with French cologne. Then he calmly went to sleep on the top berth, and woke up nose to nose with a German shepherd which was reaching its nose up to him. It was accompanied by handler Lena Denisova. "Excuse me, the dog is pointing you out. We have to get to the bottom of this."

A Dog's Work

Taking risks at first, Smirnov spun the wheel of fortune and got lucky. The managers helped him. He found an amateur dog breeder, militia Captain Viktor Konstantinovich Kochkin, who knew where well-bred dogs could be found in numerous oblasts of the country. He became the chief of the future kennel. At first the dogs were kept in open-air cages at the extra-departmental guard command post. Then they built a kennel with their own hands. Open-air cages [dog runs] were installed also in the places where the decision had been made to establish posts, in Rubtsovsk and Barnaul.

The mixed breed dog Buyan is cheerful and friendly. He salutes his friends and rides on a motorcycle together with his handler. To protect his head, the dog wears a helmet. He served in Rubtsovsk, which is the gateway to entry of drugs from the republics of Central Asia. He, like other dogs, can smell the scent of hashish in a can with closed lid which has been boiled in water. Once a switching steam engine which was going to the zone of the corrective-labor institutions was scrupulously examined by military servicemen for 3 hours, and then a dog found drugs in the storage battery compartment. Together with handler Anatoliy Pavlovich Chyev, Buyan conducted a search of the prisoners as they went from the

industrial zone to the residence and "pointed out" 11 people. The others, seeing this, threw their packets of hashish in the snow.

Dogs work at railroad stations, airports, and post offices—where there are many people, and where someone might hurt them or pull their tails. In this case, the dog will only give a reproachful look—it is taught to be courteous. The dog and the handler are the objects of increased attention. Therefore, for example, in the Tolmachevsk airport they work unseen by the passengers. The spaniels which were purchased later may be carried in a tote bag, especially since they are inclined to have fun. They even work "playfully". They do not go straight to where the drugs which they have already sniffed out are. Rather, they play with the handler a while, as if giving him the opportunity of demonstrating his "sense of smell".

The German shepherd is just as reliable in its work as a soldier. Linda, whose passport shows that she has inspected around 200 trains, 70,000 automatic storage lockers, and 24,000 packages, is very restrained. She has an especially secretive manner of pointing out drugs: She will scrape her paw lightly or will poke her nose at the handler and give him a meaningful look. She is already old, since dogs who sniff out drugs become quickly worn out from stress. But the rumors of ruined addict-dogs who are "put on the needle" are idle fabrications, since the dogs are trained by the command "aport" [fetch]: They fetch a stick which smells of potion.

Boyard, who was born the same year that Smirnov was appointed to this district, has also grown tired. The black German shepherd gets perfect marks all around. In personal matters there is a notation: He is a "choleric". Boyard is a prizewinner of the All-Russian Exhibition. Last year he was listed in the catalog, "Best Dogs in the USSR". He is kind, but knows his value. He does not like to be treated in a familiar or sharp manner. Lena Denisova says to Boyard: "Be so kind as to...". He walks around one level, then a second—3,000 storage lockers. This dog, which is courted like a German baron, is like a class worker on an assembly line. He is a bit bored, since for some time now the lockers have smelled of many things—rotten meat, spoiled fruit, but there are none of the smells which he is supposed to sniff out. The drug traffickers, having encountered this obstacle, have changed their routes.

Handcuffs of the Law

Criminals have a heightened sense of danger, but the one who is successful in catching them reasons as follows: "If everything is calm, that means we have overlooked something". Within the territory of this administration the traffickers have changed over to automobile and bicycle transport, and to creeping along on their hands and knees.

Last year the oblast ispolkom adopted the following resolution: "Authorized officials of internal affairs agencies are to perform inspection of transport means,

drivers and passengers, as well as pedestrians, and inspection of their articles and luggage". It is true, all this is to be done only in those cases if the internal affairs officials are sure that drugs are present. And if they are not sure—they should not inspect. If nothing is found, the worker may be punished if a complaint is filed. The fulfillment of such a law requires that the agencies have telepathic powers.

A seller may deal in small portions. One small packet of several grams is not enough to detain a person. At the same time, the "touring actors" have a set of "plays" rehearsed just in case: "It was planted on me", "This is not my jacket", "This is my first time", or "I am going to turn myself in". The versions change one after another. They have a prepared statement just in case, saying that they are voluntarily handing themselves over to the militia and the doctors. Here the law retreats, and that is just what the dealers in white death need. A search warrant, necessary evidence, immediate confirmation by an expert that the drug was found—all this often ties the hands of the militia.

In the line of drug dealing, every second case of detainment is associated with active resistance, but as yet there is no legal statute which protects the militia worker. The criminal threatens the investigator and the members of his family, and tries to compromise everyone who is involved in the investigation. Legislation has not yet provided norms which would protect the victim and the witness against threats and blackmail. They would come right to Smirnov's house for this, especially since he now lives in a shabby pre-revolutionary house in a dangerous microrayon. And when he was investigating serious crimes, he was without housing altogether. He wandered about like a real bum. There is no law under which a person valuable to society would be insured a normal apartment.

The dogs also suffer from inadequacies in the law. The directive regulating their feeding was issued in 1971. Food prices have changed in 20 years. The amount of money allotted for feeding a dog during trips is 58 kopeks a day, while the daily feeding of the animal, to whom the giving of table scraps is categorically forbidden, costs a minimum of 3 rubles [R]. On trips the handler must feed the dog in public dining facilities: Five helpings of soup, an entree, gruel, and vegetables. The supplemental payment to the handler who keeps the dog at home is only [R]15 a month. He is paid a like amount for care and training. Tired from the trip, he cannot rest until he walks, grooms and feeds his charge. And when the dog gets sick the handler spends the night in the kennel or brings the dog home. The care required is like that of a child, and therefore handlers are selected with a special education, yet only the fanatics stay.

There is no legal protection of the dogs on public transport. Train conductors may not let the handler with his "technical equipment" onto the train: "Militia man come in, but leave the dog outside!" For some conductors it is not profitable to help the militia, since they

engage in drug dealing. Drugs were found also on some locomotive machinists, who "got high" during the performance of their work responsibilities.

The Advance of Super-Criminality

A nice-looking old man in a presentable suit and dark glasses was strolling quietly through the railroad station in Novosibirsk. He carried two suitcases. The blind man was accompanied by two little boys serving as guides. Over 50 kilograms of drugs, almost [R]100,000 worth, were confiscated from this invalid. This is about how much one kilogram of opium costs today, which several years ago cost only several thousand.

The drug dealing corporations have introduced narrow specialization. They have gatherers of hemp and poppies, storekeepers, transporters, and sellers. These are primarily healthy people. They are prohibited from taking drugs, since it is well known that "a drug addict is capable of lying, deceit and treachery; he is capable of anything". Last year at the First All-Union Scientific-Practical Conference on Combatting Drug Addition it was stated that in our country, as well as abroad, the "super-profits" have given rise to a "super-organization". The top echelons of the drug business are "super-criminals", but they are also "supra-criminal" [above the law]. In other words, they are in a position where their activity is not covered by the effects of the Criminal Code.

Far from all of Smirnov's clients end up in jail. In Georgia, where the dog handlers from here were sent at the request of this republic, the militia lets detainees go all the time: "Bah! This is a good person". Finally, they caught one student who was selling shoes with hashish hidden in the toe.

This is frightening, since the bosses plan hundreds and thousands of deaths of their fellow citizens ahead of time. In the fall, when the gathering of "grass" is performed, the dealers usually catch the youngest ones, offering the youths drugs free of charge. Then the young people organize a group of 4-5 more people. This is the so-called "proselytism of drug addicts", the desire to persistently draw in newcomers. Drug addicts rarely live longer than 40. Nine out of 10 are practically incurable. And the one who is saved is crippled: Every day, every hour, he must overcome the craving for the "high", and the regular "withdrawal symptoms" do not cease until the very end. The unpromising treatment of each drug addict costs the state no less than 1,000 rubles.

Our economic and other mutual relations with the USA, where one out of every five persons has tried drugs, where there are 23 million drug addicts, and where this evil is combatted with the aid of the latest technology and helicopters, will evidently have a dual effect: A negative effect as well as experience in the struggle. The market and the convertible Soviet ruble may make our drug mafia a "trans-border" operation. Drugs will become even more expensive. In order to ensure for themselves their daily few grams, drug addicts will rob

more apartments than they do today. Yet there are only 900 independent officials in charge of operations in our country, and far from all of them are like Smirnov. Some are capable only of keeping records and investigating complaints.

Perhaps even the fearless Smirnov is today a bit frightened to look at tomorrow. We need a comprehensive governmental program for combatting the drug business, but judging by the latest domestic and foreign events, it is still far from becoming a reality.

'Migration' Association To Help Russian Nationals Leaving Tajikistan

91US0224A Moscow *RABOCHAYA TRIBUNA*
in Russian 5 Jan 91 p 1

[Interview with Galina Nikolayevna Belgorodskaya, candidate of technical sciences, deputy of the Dushanbe City Soviet, and president of the Migration Society, by M. Nikolayeva: "What the Migration Society Has To Offer"]

[Text] [M. Nikolayeva] What gave rise to the society that bears this name?

[G. N. Belgorodskaya] The events of February 1990, accompanied by an outbreak of violence and nationalist sentiment. Over a nine-month period last year, according to our information, 78,000 people emigrated from the Tajik SSR. This exodus of the Russian-speaking population has the character of a natural calamity. It was to give this process a civilized form by pressuring the governments of the RSFSR and the TaSSR to help resolve the fate of these involuntary settlers that the Migration Society was formed.

[M. Nikolayeva] How many people are there in your society?

[G. N. Belgorodskaya] More than 4,000 families—approximately 20,000 people. The society's application for registration was denied and the city Public Prosecutor's Office has warned the society to curb its activities.

[M. Nikolayeva] What is it accused of?

[G. N. Belgorodskaya] The principal allegation against us is that we have been organizing a massive exodus from the republic. Those who make this charge must realize that scarcely more than four or five hundred people have left with any guidance from us. These people received orientation from us about employment opportunities in other regions: Krasnodarskiy Kray and Altay Kray; Novosibirsk, Kursk, Voronezh, Belgorod, Volgograd oblasts; and Energodar in Zaporozhye Oblast.

We are not conducting any agitation to resettle; we are simply assisting those who have decided to go. The main mission of the society is to achieve the status of involuntary settlers for those residents of Tajikistan who are leaving the republic, and to bring about the establishment of migration centers (a Russian center and its

counterpart in the TaSSR). With the use of a card-index file, compiled on the basis of a questionnaire survey, the society is now engaged in this effort.

Oblast authorities in some cities of the RSFSR are ready to accept refugees (Orlov, Smolensk, Kaluga, Belgorod, and Tula oblasts) and to give us permission to build refugee settlements (microrayons) if they are allotted the technological means to produce the building materials, particularly bricks and mortar, etc. as well as the resources to process agricultural products. Our sole asset is the desire of the RSFSR Supreme Soviet to help us resolve these problems and the promise of the RSFSR Council of Ministers to consider the question of allotting the equipment to produce building materials "for the refugees."

PRC Nationality Policy Concerning Kirghiz

91US0077B

[Editorial Report] Frunze SOVETNIK KYRGYZSTAN in Kirghiz 3 Aug 90 carries on page 3 a 1300-word article by Almanbet Otorbay uulu, worker of the Kirghiz department of the Sinkiang-Uighur Autonomous Region radio, headlined, "What and How Many Peoples Live in the PRC?" The article surveys the non-Chinese nationalities in general and provides detailed information on the Kirghiz minority. According to the 1982 census, there are more than 113 thousand Kirghiz in Sinkiang, eighty percent of whom live in the Kyzyl-Suu Kirghiz Autonomous Oblast. There are also six Kirghiz villages in Sinkiang: Kok-Terek in Tekes district; Shaty in Monggulkuro district; Kok-Jar in the Tashkorgan Tajik Autonomous District; Kengkir in Guma district of Khotan Province of Sinkiang; Jaman-Suu in the Uch-Turpan district of Ak-Suu Province; and Boz-Dong in the city of Ak-Suu in Ak-Suu Province. Otorbay uulu adds that the Kyzyl-Suu Kirghiz Autonomous Oblast was established on 14 July 1954 and is now divided into three districts (Akchiy, Uluuchat and Aktoo) and one city (Artysh).

Kirghiz Life in Sinkiang Highlighted

91US0077A

[Editorial Report] Frunze SOVETNIK KYRGYZSTAN in Kirghiz 1 Aug 90 carries on page 3 a 2500-word article headlined, "The Situation of Our Compatriots: News of the Kirghiz in China," compiled by T. Nasirdintegin from reports in the KYZYLSUU GEZITI, which is published in the Kyzylsuu Kirghiz Autonomous Oblast in the Sinkiang-Uighur Autonomous Region in the PRC. The article concerns the April 1990 Muslim uprising which took place in Sinkiang. An editorial introduction states that readers of SOVETNIK KYRGYZSTAN, after having heard about the uprising over Radio Liberty, requested more information on the event because "the central press, news agencies, television and radio of our country did not cover the event." The coverage opens with a statement by Sulayman, chairman of the autonomous oblast, in which he claims that on 5 April an

"armed uprising" led by "revolutionary alarmists" took place in the village of Baar in the Aktoo district; the instigators, "cloaking themselves in religious garb," directed the uprising "against the party leadership and the socialist order." Sulayman added that the uprising was quickly put down by security forces. On 28 April KYZYLSUU GEZITI highlighted a number of mass meetings at which the instigators, identified as members of the East Turkestan Islam Party, were denounced by members of the intelligentsia and clergy. Subsequently, the newspaper SHINJANG repeated Sulayman's allegations and expressed the belief that the masses, "no matter of what nationality," would reject calls to action by such "revolutionary alarmists" in the future.

Statistics on Latvian Women, Families Reported

91UN0663A Riga BALTIYSKOYE VREMYA
in Russian No 49, 18 Dec 90 p 3

[Article by "Lauku Avize": "The Latvian Woman (Statistics)"]

[Text] According to the latest statistical data, there are 1,430,000 women living in Latvia. Of that number, 299,000 (21 percent) are under the age of 16; 730,000 (51 percent) are between the ages of 16 and 54; and 401,000 (28 percent) are over age 55. There are 700,000 women employed in social production; 3,000 of them manage enterprises, institutions, and organizations, and 8,000 manage shops, sections, and departments. Some 240,000 or 63 percent of the specialists with a higher or secondary special education are women; 1,700 of them are candidates of sciences, and 79 are doctors of sciences. There are 70,000 women employed in production involving manual labor, and 32,000 employed in production involving hazardous working conditions. The wages of one out of every five women do not exceed 100 rubles a month.

According to results of the 1989 census, there were 732,000 families in the republic, 7,496 of them large families. There were 24,496 marriages in 1989. The average age of those getting married for the first time is 23 years for women and 24 years for men. One-third of all women getting married are under the age of 20. The number of young people getting married before age 18 is increasing. In 1989 this number was already 166 men and 631 women. Almost 80 percent of the women get married before the age of 25. According to 1989 census data, 74,000 women and 67,000 men under the age of 25 have never been married. Each year, 36-37 percent of the marriages are interethnic marriages. On the average, one out of every five representatives of the indigenous nationality marries a person of a different nationality.

The birth rate in the Latvian Republic is one of the lowest compared to other neighboring states and republics of the USSR—38,900 in 1989. Whereas in 1980 there were 7,869 single mothers receiving benefits in our republic, in 1989 there were 24,557. Lately, the number of children born to Latvian families has increased—52

percent in 1989. Approximately one out of every six babies had a Latvian mother and a father of a different nationality. Women live an average of 10 years longer than men (75.2 and 65.3 years, respectively).

Poll Shows Pessimism, Fatalism Prevalent Among Soviet Women

91US0221A Moscow PRAVDA in Russian 5 Jan 91
Second Edition p 4

[Article by Professor Galina Sillaste, doctor of philosophical sciences: "The Propaganda of Fatalism"]

[Text] Since ancient times wise men have considered men the generators of civilization, while women were their stabilizers. Such is life: women (by their nature) are interested in stability, tranquility and peace—so that children can grow and the human species be perpetuated.

As for men—it is sufficient to turn on the television in order to see the heat of male passions beyond which the final limit is boiling. Let's take a closer look at women. Let's do it as objectively as possible, relying not on emotions but on figures: on the basis of the data from an all-union survey titled: "Women and Democratization," which was conducted last year by the Sociology Department of the CPSU Central Committee's Academy of Social Sciences.

Back in 1986 public opinion surveys recorded women's active support for perestroika. The "weak" sex (which has always had things harder everywhere than the "strong" sex) responded to the appeal for perestroika with hope. The psychological state of millions of women was defined by social optimism.

Five years have past. Just what sort of attitudes predominate among women today? Anxiety and tension (in one in two); uncertainty, disappointment and anger (in one in four); and confusion, pessimism and depression (in one in 10). Less than one-third of those surveyed maintained faith and hope for a better future, and upbeat feelings, tranquility and even enthusiasm were encountered in from 0.4 to 1.0 percent.

This cheerless arithmetic clearly requires comment. Let's try to assess the situation in women's words and to seek untapped reserves for enlisting this large group of the population in the ranks of active supporters of social transformations.

And so, let's reflect on the question: what has perestroika (or, as it is frequently called in women's groups, "destructuring" [perelomka]) given to women? According to information provided by the survey, one-third of our female compatriots recognizes certain positive changes in societal life. However, women's situation at work and in everyday life has deteriorated in comparison to the past. Stagnation in the services sector. Less attention is being shown to the protection of women's health. Inequality persists in the socioeconomic sphere. Female employees' lot consists of night vigils at work

and strenuous physical labor. The changeover to a market economy will undoubtedly result in mass dismissals of women. If one adds to that such bad signs of the time as endless waiting lines, the scarcity of goods and, as a result, the increased difficulties of child care, the picture becomes even gloomier. The time of "great expectations" is clearly past.

But it is not even the decline in the quality of life, not the practical problems of maintaining a household, and not the decline in the value of the ruble before our very eyes—these are not the chief ingredients of women's increasingly conspicuous discontent. The primary reason is the loss of the principal human right, the right to life. That already occurred, but we did not immediately recognize that the social Bacchanalia in a number of national regions was depriving mothers of peace of mind concerning their families. Rising crime and the extremists' increasingly dangerous political games are narrowing the elementary guarantees of the existence of each of us. And in this connection all of the institutions of authority are remaining silent. As though they do not want to see the present situation in that truly tragic perspective.

The propaganda of fatalism has literally swept our society. It is contrary to the creative principle that is so firmly implanted in women. For them it is difficult, and often simply unthinkable, to agree with the fact that the pages of our history need to be turned 70 years back. Women are frightened by assertions that society has no alternative besides, say, the aforementioned market. That is not a scientific approach at all: an alternative always exists, and to deny it merely because we have been driven into a corner is far from the best occupation.

Attitudes of pessimism and hopelessness are an excellent background for propaganda acts by nationalists and separatists, who have a great stake in winning women's support. The opponents of perestroika, and even open anticommunists, are striving to draw them into their ranks: "Only with us can you solve your problems and achieve a tranquil tomorrow." I am certain that in alliance with the extremists women will not be able to create that "tomorrow" that is so much desired—moreover, the situation will only grow more difficult.

Nationality problems (which, it is claimed, have unpredictably overwhelmed the country in an avalanche) could have been anticipated, and countermeasures prepared, in women's opinion. It would be naive to think that democracy, which has opened up all the previously closed floodgates, could have bypassed the nationality sphere. And it was 1987, when the "underground tremors" had already started to be clearly felt, that was the time to define the ways and forms in which to harmonize nationality and all-union interests. No one attempted to untangle the ball of interethnic contradictions by pulling one thread after another out of it (and that is precisely how any woman proceeds, unlike a man, who looks for the end of the ball and thereby tangles it even worse).

Woman, as we know, is trustful by nature, but if she becomes disenchanted, she does so decisively and drastically. It is absolutely essential for her to believe the person she follows. Leaders' actions, the persuasiveness of their arguments and, most importantly, the consequences of the decisions they make—all that is submitted to general scrutiny, and any miscalculations by authorities are grouped along with negative events and phenomena in the mass consciousness. To this group, women clearly assign the indefinite and tortuous nature of the route along which the leaders of perestroika are taking them. Our female contemporaries are becoming increasingly convinced that many of the slogans of perestroika that were so attractive at first have proved to be general and often lacking in any actual content. And so, the goal was seemingly a good one: to live better. But at what price? Today the magnitude of the price is becoming clear. It is a high price. We do not know whether mothers would have agreed to it at the beginning of the road.

Even now women lack clear guideposts. They hear assurances by the country's leadership of their faithfulness to socialist ideals and, at the same time, see a good many steps in the opposite direction. Many women (up to 40 percent) had difficulty answering the question as to what sort of society had been built in our country. One in four believed that present-day Soviet reality has little in common with socialism. Approximately an equal percentage believed that we are at one of the stages of building socialism. Two percent of those questioned had no doubt that ours is a socialist society. The old ideas and guideposts are being destroyed in the public mind (and by no means in a spontaneous, unplanned fashion), and new ones do not exist.

In general, our contemporary woman, overwhelmed by verbosity, has a lot of questions that are not being answered. She turns this way and that in a frightened search for a way out. She is angered by the "play at words." For example, by the word "privatization," which is used so often everywhere nowadays. All you have to do is look in a dictionary of foreign words to read that it means "the transfer (or sale) of state-owned enterprises, means of transportation, apartment buildings, etc. into private ownership." You don't have to be a genius to understand why a foreign word, rather than a Russian one, is used at the official level.

Women's criticism of the authorities has intensified. Yet as we know, they have always had a more respectful and stable attitude than men toward institutions of authority. However, whereas the prestige of the USSR Supreme Soviet among women was the very highest just two years ago, today only five percent of them give it high marks, while 18 percent give it low marks, and 34 percent rate it average. Seven percent of women categorically deny the country's supreme body of authority any prestige (36 percent decline to give any response). The local soviets' marks are even lower: 16 percent of women totally deny

them any prestige, while 31 percent believe it is low, 15 percent believe it is average, and only two percent consider it high.

What sort of prestige does the CPSU enjoy among women? The number of those who are uncertain has increased. Nonetheless, more than 19 percent of those questioned who were not party members supported it. 10 percent of the women nonmembers of the party expressed a desire to join the CPSU, but 6 percent of the Communists wanted to withdraw from the party ranks. On the whole, the support for the CPSU among women is higher than among men.

The CPSU needs to fight for influence among women. After all, political and ideological pluralism are opening the way for women to new political parties and movements. Only four percent of the respondents believed that "the political struggle was no concern" of theirs. But about three percent of the women, according to their own estimation, were already participants in political rallies, picketing and strikes. Moreover, the trend is toward the expansion, rather than reduction, of such participation. Approximately 13 percent of those surveyed would "agree to do so, but no suitable occasion has yet arisen," while 26 percent stated that it was "possible that they would take such steps." Fifty-eight percent took the opposite position. Thus, nearly 40 percent of the women questioned manifested potential readiness to involve themselves in acute forms of social protest. There is something for society to seriously reflect on.

In this situation the organizer of perestroika, the CPSU, needed to involve itself in the solution of the main, strategic problems. Among them, public opinion among women focuses attention on three oversights. The first is the delay in preparing the Union Treaty. The second is that the CPSU, failing to take the logic of the democratization process into account, clearly dragged out recognition of a multiparty system, instead of initiating it. The third area in which perestroika came too late was that of army reform.

A little more detail about the army. For it is past time to state that, at root, the anti-army sentiments and everything negative that is happening today with regard to the Soviet Army by no means have to do with the military department. This movement was born and developed for a long time as a purely women's movement. Incidentally, on the basis of this example political scientists may observe the movement's potential and its turns. It may be that the army would have remained in the shadows for a certain time if it were not for the interethnic conflicts, which have trampled the right to life. Hence the mothers' reaction.

The starting point was early 1989. A women's congress in Estonia demanded: "To legislatively put a stop to the compulsory assignment of servicemen performing mandatory service beyond the boundaries of their native republic." A little later, under the influence of interested

political and nationalistic forces, this demand was taken to a perfectly specific conclusion: "We do not want our sons serving in the occupation army." Women need allies. They have been holding rallies in front of the military commissariats, but their anti-army slogans and placards are directed to the street, to people. The anti-army movement is being joined by the mothers of soldiers who have been injured and humiliated in the army.

I think that if the country's leadership had forecasted the development of events (had foreseen them), it would have taken preventive measures. The adversaries of perestroika must not be allowed to make the army their trump card. The army should have immediately been placed under protection, and the question of military reform raised right away. Moreover, it was possible and necessary to use every means to disclose (as in the situation in Tajikistan) the role of the army as the protector of people and guarantor of their right to life. Since that was not done, an anti-army stereotype started to take shape in the minds of a significant part of society.

The most powerful energy—the energy of motherhood—could have been directed into a constructive channel. Yet we have aroused a sense of vengeance in women and are belatedly trying to cope with its grave consequences today.

However, even today, as always, our society is utilizing a purely male standard. All our priorities are male in gender, so to speak. Yet it is precisely woman who is a reliable indicator of all social changes and the most sensitive political barometer. Authorities at various levels have failed to take that into account. The market strategy, for example, is geared only to the strong, that is, to men. And by not even thinking about a corrective coefficient, and not doing anything but take primitive steps to protect women, we are laying a time bomb under the new economic building we are erecting.

Western politicians behave differently. They have learned quite well that it is women who speak the "last word," and they therefore strive to win women's trust not with the large-scale projects that are enjoyed by men, but with partial but concrete programs. And what has been proposed to our women? So far nothing that is palpable and realistic.

Everything, of course, is more complex, fuller and more contradictory than has been shown in this article. In politics nothing is ever monochrome. But one can speak about the trends and patterns in women's reactions.

Just as one can say that the recently proposed presidential program is finding the most positive response among women. One would like for these measures to become reality and for the warm ray of hope to dawn.

Hope, as we know, is the last to die.

New Belorussian Youth Leaders Define Goals

91UN0291A Minsk ZNAMYA YUNOSTI in Russian
28 Oct 90 p 1

[Interview with Aleksey Krivdenko, first secretary of the Belorussian Komsomol's Central Committee, and Valeriy Ukhnaiev, chairman of the Belorussian Komsomol's Central Control Commission, by Yelena Baranova: "The Election Is Over"; date and place not given]

[Text] The election of the first secretary of the Central Committee of the LKSMB [Belorussian Komsomol] at the 29th Congress turned into a real marathon. Aleksey Krivdenko, now already the "ex"-second secretary of the Belorussian Komsomol's Central Committee, has been elected the leader of the Belorussian Komsomol as a result of the fourth round of voting.

The 29th Congress of the Leninist Communist Youth League of Belorussia Has Completed its Work

On 25 October, at the morning and afternoon meetings, the delegates discussed and adopted the Charter of the Belorussian Komsomol, the "Program Goals and Basic Directions of the Belorussian Komsomol's Activities" and the "Regulations Regarding Control Within the Belorussian Komsomol."

On 26 October, work continued on the congress documents. Approved were the resolutions [postanovleniye] "On Overcoming the Consequences of the Catastrophe at the Chernobyl AES," "On the Procedure for the Election of Members of the Belorussian Komsomol's Central Elective Organs and the Organization of Their Work," "On the Functions and Powers of the Belorussian Komsomol's Central Committee," "On the Immediate Activities of the Belorussian Komsomol's Central Committee up to 1 April, 1991," "On Collective Membership in the Belorussian Komsomol," and the resolutions [resolyutsiya] "On the Mass Media," "On the Children's Movement" and "On the Young People Attending Schools and PTU's" [Vocational and Technical Schools]. Adopted were the "Appeal to the Belorussian SSR Supreme Soviet in Connection with the Republic's Transition to a Market Economy," the "Appeal to the Belorussian SSR Supreme Soviet and Council of Ministers on Matters of the Economic Activities of the Belorussian Komsomol" and other documents.

The congress documents will be published in the press.

At the suggestion of a group of delegates, the congress returned to the matter of the name of the league. The decision was made to refrain from renaming the LKSMB the LKSMB MPB, to discuss the proposal on the name of the league in the Komsomol organizations and to submit the matter to the 30th Belorussian Komsomol Congress.

The congress confirmed the new personnel of the Central Committee, the members of which had been nominated at plenums of the Belorussian Komsomol's raykoms, gorkoms, obkoms and Central Committee.

The elections for the first secretary of the Belorussian Komsomol's Central Committee were held on a choice basis. Five candidacies were put forward and discussed. As a result of the third round of balloting, two candidates remained on the list—A. Krivdenko, the second secretary of the Belorussian Komsomol's Central Committee, and K. Ostrinskiy, secretary of the Belorussian Komsomol's Central Committee.

A. Krivdenko was elected first secretary of the Belorussian Komsomol's Central Committee.

V. Ukhnaiev, who previously worked as the head of the Organizational and Cadre Policy Department of the Belorussian Komsomol's Central Committee, was elected chairman of the Central Control Commission of the Belorussian Komsomol's Central Committee. With this, the congress completed its work.

Epilogue to the Event

But—everything is according to procedure. And so, in accordance with the new Charter of the Belorussian Komsomol, for the first time, the first secretary was elected by the congress. The balloting was conducted on a choice basis. After two of the originally nominated candidates withdrew their own nominations, the names of Aleksey Krivdenko and Belorussian Komsomol Central Committee Secretary Konstantin Ostrinskiy were placed on the ballot. The votes were distributed nearly evenly, so no one candidate even came close to obtaining the necessary majority. Both declined to participate in the second stage of the elections.

The congress adopted a decision regarding the nomination of new candidates. Entering the marathon were Vladimir Tretyakov (who worked until recently as the first secretary of the Gomel Obkom of the Belorussian Komsomol), Mikhail Podgaynyy (a former secretary of the Belorussian Komsomol's Central Committee) and Valeriy Ukhnaiev—just elected (but more about this a bit later) chairman of the Central Control Commission. The voting had to be conducted in two stages, but, again, no one emerged the victor.

The situation heated up. A suggestion was made that the regulations be revised and the election of the "first" [secretary] be transferred to the plenum. But the majority of the delegates did not want to relinquish their authority. They knew their leaders, fought for them and, finally, demanded that A. Krivdenko and K. Ostrinskiy run for the office a second time!

They both gave their consent. Dozens of raised red credentials... Tense moments of expectation... And—congratulations on the victory.

[Baranova] Aleksey, in just the same way, in several stages, on a wave of emotions, is how the debates went on the name for the youth league. The readers of "Znamienka" [ZNAMYA YUNOSTI] have probably taken notice: in Friday's issue, it was noted that our organization was the LKSMB (MPB), while, today, it is again the

LKSMB. Tell us confidentially what occurred on that evening and during that night after the new name had been adopted all the same and then disputed again...

[Krivdenko] At the time, it occurred to a number of delegates that it would be necessary to establish a conciliation commission. Their feeling was: let's not do this today—tomorrow the whirlpool of discussions may become uncontrollable. On that same evening (or was it already the beginning of the next day?..), there were preliminary consultations. And, the next morning, the principal promoter of this action—a teacher from Grodno School No 20, Aleksandr Feduta—reported that the commission will submit its own suggestions in a “package” and asked the congress to refrain from their detailed discussions.

As a result (this time practically unanimously), it was decided, first, to restore to the Komsomol for the time being its previous name, second, to adopt a declaration about collective membership in the Belorussian Komsomol and, third, after consultations in the organizations, to examine the matter of the name at the next Komsomol forum.

[Baranova] Well, and what happens as a result? The youth league is called Leninist Communist and the program documents assume a socialist orientation, yet, based on the rights of collective members, people, who basically do not accept socialist guidelines, will become part of the organization? By what will you, as first secretary of the Central Committee, be guided under such a compromise?

[Krivdenko] By only one thing: the preservation of its unity. Please do not confuse this with uniformity. We are in favor of having each of our collective members, each committee, each primary organization and each Komsomol member have an opportunity for self-expression and for finding themselves. But we should be fused into a single force for protecting the interests of the young people. In the very contradiction of the different positions or professed ideas lies, if you will, the guarantee for our further advancement. And, with regard to formality, I can say one thing: all the opponents in the debates which have flared up are alumni of the Leninist Communist Youth League.

[Baranova] Incidentally, also in the hall were young social democrats. And representatives of the Workers Union set up their own pickets and spread out their own placards near the steps of the House of Officers where the congress was being held...

[Krivdenko] The contents of the placards were addressed more to the party and soviet organs, but the fact that they appealed to the Komsomol with them is somewhat noteworthy. Judging by appearances, our league is really not too pale on the political palette if it arouses the interest of other public movements.

[Baranova] Well, and finally, a brief bit about your own biographical data. And also, how did your family feel about your election to such an uneasy position?

[Krivdenko] I was born and grew up in Brestchin, I studied at the Belorussian State University. Upon graduation, I worked as a school teacher and later cast my lot with the Komsomol, at first in the Volkovysskiy Raykom and later in the Grodno Obkom. And now I have been on the Central Committee for several years. My latest step seems to have puzzled my wife more than it pleased her. And my oldest son, a preschooler, in response to the question “Where does your daddy work?”, answers like so: “He is always on business trips...”

* * *

Valeriy Ukhnaiev, head of a Belorussian Komsomol Central Committee organization, was almost unanimously elected chairman of the Central Control Commission. To the applause of the crowd, he very anxiously went behind the side curtains.

[Baranova] Valeriy, will it not be difficult for you to carry out independent control, if you have to have dealings with your old comrades?

[Ukhnaiev] Even I myself, to tell the truth, have pondered over this question for a long time. I have already given many years to the Komsomol and simply friendly, personal relationships have formed with the majority of the fellows. But it would not be pompous of me to state that the interests of the cause are my first priority.

[Baranova] A Central Control Commission has been established in the Belorussian Komsomol for the first time. What is the principal difference between it and the Auditing Commission which has existed for decades?

[Ukhnaiev] The Auditing Commission dealt primarily with financial matters. We, however, will participate in absolutely all aspects of Komsomol affairs. In essence, being established parallel to the existing intraleague formations are independent, and not just separate, and more precisely, control structures. We have the right not only to express our own opinion or to lodge a protest, but also to set aside one or another decision of the Komsomol organs. Here it is impossible, of course, to tolerate dizziness with power or to become a “regular opposition.” The guidelines should be extremely simple: common sense and crystal-clear integrity in the work.

[Baranova] And a little bit about yourself...

[Ukhnaiev] I started out as a worker. Then I studied at the Mogilev Machine Building Institute. In my “alma mater,” I transferred from a teaching position to the position of secretary of the Komsomol committee. Despite the complexity, to this very day, I have not been disappointed with the Komsomol activities. My wife is also a Komsomol worker. Our three-year-old son is growing up. It will be interesting to see what he will be!..

Child Labor in Tajikistan Examined

91US0241A Moscow TRUD in Russian 18 Jan 91 p 2

[Article by TRUD Special Correspondents B. Ashurov and V. Natykin: "Day Laborers in the Cotton Field: Child Labor Is Being Exploited in Tajikistan Agriculture to This Day"]

[Text] Kurgan-Tyuba Oblast, Tajik SSR: The entire way from Dushanbe to Kurgan-Tyube a wet snow, like hoarfrost, stuck to the windows of the vehicle. It was chilly and uncomfortable, as if in a house where no one lives. The fields are empty, abandoned until spring. Workers will appear on them once again when the sun warms the land. And, as usual, the majority among them will be children. Such is the age-old "custom" here, born of necessity and injustice.

We were told at the Tajik Council of Labor Unions that we were a little late with that topic. Harvest-time has ended; whom would you see in the field at this point—the children are in school...

Yes, the kids are sitting in classrooms, and they go to the fields only to gather cotton stalks for fuel and to look after the sheep and the goats. But spring is around the corner...

From a Tajik SSR Procuracy report: "...At the 'Irkutsk' farm-trade sovkhov in Leninskiy Rayon, out of the 15 individuals harvesting cabbages, the labor of seven juveniles was being used (Khiloboy Khodzhaeva, 5th-grade pupil; Abulkayum Khodzhaev, 4th-grade pupil; Zaynulo Emomov, 6th-grade pupil, and others). From early in the morning to late in the evening, these adolescents work in their parents' stead, without receiving wages. In Negmat Gaybov's brigade, 20 students from high school No 45, starting with grade 2, were working over the course of a few days. The pupils picked vegetables, transferred heavy loads, and loaded crates of vegetables into a vehicle.

"Frequently, the money is calculated to and received by adults, but their underage children are working."

There are plenty of examples of such reports from all departments. So it is not we journalists who are a little late with the topic (here it is "ever-green"), but the republic, the state that have strongly suppressed concern for the health of the "growing generation." In freezing rain or heat, from morning till night minors plow, like harnessed mules, in the vegetable or cotton fields. And the weeding, the chemical processing of the crops, and the harvest of the "white gold"—this is not work, but hell. Adults have difficulty withstanding the strain. But the children are altogether at the end of their strength; they are working at the edge. It has always been done that way. And almost no one ever complains. To whom would they complain?

There are many in the republic who sympathize with the children, and just as many defenders: the trade unions, organs for the protection of rights, the school, the press.

They are not asleep. They adopt decisions and resolutions, fine and scourge those guilty of violations of the child labor laws. The machine goes around, and the noise does not stop. And the children work in the fields as they have worked.

This author is not against inculcating work habits from an early age. Let children, according to their strength, help their elders on the farm, in the orchard, truck garden, or in the field during the time they have free from study or play. Without something to do, our "precious flowers" grow up into little princesses and princes who can neither cut grass nor hammer a nail. But we are against the exploitation of child labor, against the kolkhozes and sovkhovs making a profit off their frail shoulders, against their parents getting their labor tenure from their offspring's drudgery. We are against the kind of "labor heroism" that is still lauded to the skies.

At the Kolkhoz imeni Khasanov, we were told a story typical for these parts. Pupil Khimcha R. stopped going to classes at the height of the season. The teachers to the parents: What is the girl's problem? She is sick, they say; she will get well soon, and come to school. About 10 days later, the rayon newspaper is brought to the classroom, with a photo of Khimcha: Behold the shock worker in the battle for cotton! So much for the "defenders"...

But who is to be accused in this? The easiest thing is to cast a stone at the parents who send the child out to the cotton in place of themselves. We would not miss. Yet it would be naive to think that parents do that out of cruelty or capriciously.

The fundamental peasant masses in our country do not lead a rich life, and it is even worse in Tajikistan. The average salary here is R120. Per month, of course. While in the European part of the Soviet Union two children are almost a "large family," here, six-eight or more are quite usual. So figure out what that comes to, "per capita population." Kopecks, with which one must clothe, provide shoes, feed, and even put away something for a rainy, or even sunny day (funerals, weddings). The subsidies for large families are no salvation. So the elders also work primarily where the income is highest, on the personal plot, which will yield two or three harvests, if no one is lazy. The early vegetables can be sold at the market, and some sort of income will appear in the home. Whether we want it or not, children have to spend their days and nights in the kolkhoz field for their father and mother.

There is little if any benefit from such labor. The dekhkans' [peasants'] earnings from it are mythical, a pittance. The single "advantage" from the exploitation of child labor is a note in the record that the parent was not absent; he accrues his tenure, and will get his pension.

The breeze from this "kitchen" is one of tragedy and hopelessness. By the time they become brides, there are almost no healthy girls. S. Khakimova, a noted scientist

and director of the Tashkent Scientific Research Institute for Maternity and Pediatrics, feels that young women should not bear children with their physical condition here today. But they are giving birth, five, six, ten or more children each. Emaciated by heavy labor, they are poorly fed from infancy, breathe poisoned air, drink unsuitable water sometimes straight from ditches. And they bring weak and ill, frequently disabled people into the world. The statistics on this are ever more alarming. Last year in Kurgan-Tyuba Oblast over 2,000 children were born with defects, one-third more than in 1989. If we recall that rural residents comprise 70 percent of Tajikistan's population, then how many such unfortunate infants come into the kishlaks [villages] in order to suffer!...

During a "roundtable" at which issues of the economic and social development of Central Asia were discussed, Sofya Khafizovna Khakimova said something that sends chills down your spine: "Meeting with these women, I curse the day I became an ob-gyn, because there is nothing I can do to help them!" We note that the future for boys is not at all better than for their female classmates: While working from morning till night, they fortify themselves with tea and biscuits brought from home. When the time comes for them to join the army, there are few who can boast good health and boldness.

So who can help our successors, and how? People in the republic have recently begun to seriously oppose the exploitation of child labor. Yet it is hard to control a tragedy through prohibitions and emotional appeals. Many see a way out in a multifaceted economy, as well as the broad diversity of its branches, in a departure from the cotton monoculture that was, until recently, worshipped. It has done enormous damage to Central Asia. Cooperatives and hand-crafting were destroyed in order that the dekhkans not be "distracted"; orchards were torn up, pasture plowed over, and the hill population was settled in the valley. "White gold" became an obsession, genuine hard labor for the peasants, and hell for their children. Let's heed the words of people who are professionally concerned with with spiritual and physical health of children.

T. Dodabayev, chairman of the republic Supreme Soviet Committee for the Agro-industrial Complex and Food-stuffs Issues:

The chief cause for the exploitation of child labor is the low standard of living. And until we raise it, we will not save children from misfortune by prohibitions. How can the peasants be made more prosperous? Develop viniculture, winemaking, vegetable and fruit gardening. Create a processing complex. Millions of rubles worth of wealth under our feet are being lost: fruit and vegetables are rotting; fertile lands are being used one-sidedly and ineffectively."

The old-timers say that during the fifties, there wasn't a kolkhoz or sovkhov in the republic that didn't keep bees,

for example. Canning shops were built there, little factories that produced tiles and bricks. They provided their own residents with construction materials and sent some outside the region as well. And the popular cooperatives, rug-weaving, metalworking, and pottery made the craftspeople famous, and brought money home. Nor did the public treasury suffer. And these same "cottage" industries and production lines yielded a wide choice of professions for school graduates. Today, whatever the college, they train metal craftsmen and machine operators. They have their "diplomas," but there is no work to be found in the specialty.

K. Karimov, department head, Tajik Council of Trade Unions:

"The introduction of leasing must be supported by all possible means. Experience shows that the land cultivated by leasing collectives yields a doubled, tripled harvest. It means that the incomes of the families working there also grow. True, this form of farming has its opponents; they say that too many superfluous hands will appear. Yes, but these can become requalified. Some will become handcrafters, others will get into small businesses. Or into construction: there is a great need in village for houses, and for remodeling shops, producing mass-demand good..."

We note that leasing has one advantage: The opportunity to control the utilization of child labor, as is already being done in some kolkhozes and sovkhovs of Kurgan-Tyuba Oblast. Land is allocated according to the number of family members capable of working. And the contract is required to stipulate that children may work only a limited period of time, and only after classes, and not to the detriment of their health.

...A tired Shokir Khaknazarov wiped the sweat from his forehead. He had not dug up a portion of the carrots in the leased field, and the "white bugs" are already flying. We asked, "Why haven't you called the children to help?" "They have already worked their 2 hours; they went to do their homework."

Shokir and several other peasants have leased 5 hectares. Such an allotment is not a little vegetable patch; the masters have room to apply their efforts. And they grew a good crop of cucumbers, potatoes, and now they are pulling carrots. Naturally, they are sick at heart to get everything from the field as quickly as possible, all the more so because the contract's conditions are advantageous. They give half to the kolkhoz, and can sell the rest at market themselves. The temptation to get the entire household, young and old into the harvest is great. But they know something else as well: If the rais, the kolkhoz chairman, or the managers see that the lessees' children are working from morning till night, the loss will outweigh the gains. For that, as written into the contract, the kolkhoz can either decimate the plot, or break its relations with the lessees completely. Then they will be without land, and have to go back to a hand-to-mouth kind of existence...

Praise be to Allah, as they say, if such a contract, along with economic interest, spares the local fields child labor. Even though in recent times there was no perceived shortage of obligations and regulators, but not much came of them. All the noble appeals and actions were like a wave on the sand... They did their bit, but no good comes of it. But the topic of our conversation is a particular article. If the problems associated with genuine concern over children's health are not solved, then indeed no good will come. The offshoots of the tree of life must not be cut.

Cinematographers Union Criticizes Nevzorov

91UN0745D Moscow ARGUMENTY I FAKTY
in Russian No. 3, Jan 91 p 3

[Unattributed report on letter from film directors: "Don't Believe It!"]

[Text] The USSR Union of Cinematographers believes that Aleksandr Nevzorov's coverage of the Vilnius events is a simulated fake. This fact is quite obvious to the professional eye of a director, cameraman, or reporter. We address the viewers—all those who watched that program:

Don't believe it!

You are being deceived by people who are trying to set you up against Lithuania and its people. In that way they are trying to justify the actions of the murderers and of those who are behind them.

[Signed] Film directors B. Zagryazhskiy, P. Todorovskiy, G. Chukhray, I. Belyayev, S. Zelikin, K. Lavrentyev, A. Simonov, A. Proshkin, A. Smirnov, A. Kashaganova, M. Smagulov, S. Azimov, L. Gurevich, E. Klimov, A. Sokurov, I. Maslennikov.

Displacement of Cultural Centers From Returned Churches Criticized

91UN0789A Moscow TRUD in Russian 22 Jan 91 p 2

[Article by L. Nefedenko, chairman of the Vladimir Oblast Committee of the Trade Union of Culture Workers: "Let Us Not Quarrel: How To Unite the Efforts of the Church and Cultural Workers for the Spiritual Rebirth of the Nation"]

[Text] The speech at the 19th Congress of USSR Trade Unions by Archbishop of Smolensk and Kaliningrad Kirill, who spoke about the fact that the trade unions, like the church, must fight for justice and spirituality, was greeted with warmth and understanding. I wish to continue on this subject.

In recent years religion has become our life. It comes in the form of sermons on television, teaching in Sunday schools, the festive ringing of bells, and speeches of priests in various forums and congresses. More and more of the old churches and mosques are being returned to the believers. And this can only be welcomed. It seems

that we have begun to forget the procedures of years long past when the churches were turned into vegetable storage facilities, and yet they were not destroyed at all. Now cultural workers are more and more frequently recalling these years with alarm. The process has now turned in the opposite direction. Are we really made in such a way that while restoring one thing, we immediately begin to destroy something else?

For 30 years the general director of the Vladimir-Suzdal museum-preserve, A. Aksenova, asked the local authorities for the half-destroyed church buildings, saving them from becoming warehouses and garages. Museum workers earned the money themselves by selling records, badges, and calendars so as to augment the small funds allotted by the state. With the money they received they restored buildings and opened up more and more museum exhibits. We shall not speak about the museums of Suzdal—they are widely known. But in the former sanctuaries were located the Vyasnikovskiy and Yuryev-Polskiy museums, the museum of the history of religion, the exhibit entitled "Clocks and Time," and the choral music theater, where the chamber choir performs under the leadership of the honored activist of the arts E. Markin, thanks to whom residents of our oblast have become familiar with Russian church songs. And what joy the cultural workers of the oblast experienced when the first rural school of the arts was opened in the village of Nebyloye in the restored Klyazmo-Gorodetskiy monastery. The restoration costs were almost 160,000 rubles [R] for the Voznesenskaya church in the village of Panfilovo in Muromskiy Rayon, where the only rural picture gallery in the rayon is located. And even if there was no church service in these buildings, they all served our main purpose—they brought spirituality to the people.

And suddenly there is a new wave. The church has become "fashionable." More and more frequently in their programs we see candidate deputies and candidates for leadership posts promising to contribute in all ways to the restoration of the church. They have made their promises, but how are they going to do it? Where will they get the money for the construction and restoration of churches? The "experience" of the twenties proved useful: drive the museums out of the churches and give the buildings back to the believers. And there were letters from believers from Aleksandrov, Suzdal, Gorokhovets, Gus-Khrustalnyy, and other cities. Religious figures were drawn into this struggle. Museum workers sadly joke that certain church members are just as aggressive as members of cooperatives.

For example, in the city of Gus-Khrustalnyy there are two cathedrals: Georgiyevskiy and the Church of Joachim and Anna. One of them is in a neglected condition and has long been waiting for the good people to remember it. In the other, which does not look like it did initially—it has been a club, a movie theater, a sports hall, and a music school—there is a museum of crystal at present. Certain city residents have forgotten that they are indebted to the museum workers for the construction

of the movie theater and the children's music school. They were built in order to leave Georgievskiy Cathedral free to be used as a museum. And now the museum is the center of cultural life; artists and musicians perform here, and festivals of the "Crystal Lyre" are conducted. So why have there been persistent requests for a parish not in the Church of Joachim and Anna, which is empty and decaying, but in this flourishing seat of culture?

The head architect of the Vladimirrestavratsiya administration, a corresponding member of the USSR Academy of Arts, I. Stoletov, has spent his whole life salvaging monuments of antiquity. The majority of them have been former churches, monasteries, and cathedrals. But now he has fallen into disfavor among the believers of the village of Bogolyubovo. For 15 years the administration of culture looked for an organization which would take on the restoration of the residence of Prince Andrey Bogolyubskiy, and they wanted this problem to be solved in such a way that this extremely beautiful architectural complex would be accessible to tourists and specialists. Igor Aleksandrovich managed to draw the attention of the USSR Union of Architects to it, which allotted money for the restoration of the monastery and the opening of a center for long-range architectural problems in it. The work is being completed, but now people are gathering signatures of believers on petitions demanding that the cathedral be turned over to them. Why is it that in this small village on the outskirts of a city with three active temples they need another large cathedral? Who will support this parish? If the church has money, why can it not invest in at least one of the monasteries that are standing empty in the oblast or in one of the hundreds of decaying churches?

Frequently decisions about turning buildings over to believers are made for incomprehensible reasons. For two years the trade union oblast committee appealed to various offices to have the building of the former city дума of Vladimir turned over for an oblast House of Workers of the Arts and Creative Intelligentsia. But the deputies of the city soviet decided to open up three Sunday schools in the city, and one of them was to be in this precise building, since on the outside it looks very much like a church. A "weighty" reason indeed...

It is curious that most frequently the writers of these letters and initiators of these "crusades" are not even church members. But everything is done on their behalf. Could this not lead to a situation in which workers of culture and members of the church end up on different sides of the barrier? And instead of fighting side by side for spirituality and morality, they will be fighting one another? And yet the church and culture can and should be one. Only through joint efforts is it possible to exert an influence on the minds and hearts of people who are exhausted by life, poverty, disorderliness, and instability.

In my opinion, workers of culture and church members should have one goal—to preserve the monuments of

culture, architecture, and religion. They need mutual understanding and mutual support.

Recently the traditional forms of cooperation between culture and the church, such, for example, as between the Uspenskiy Cathedral and the museum, have been enriched with new ones. On Vladimir television they have begun a television marathon for saving monuments of architecture and culture. The first program was devoted to the fate of the Vorontsov-Dashkov estate in Petushinskiy Rayon in this oblast, and two churches: of Andrey Pervozvanny and the Temple of the Resurrection of Christ. It has been decided that after the restoration one will be made into a museum and the other will be turned over to the diocese. The television marathon has brought in the first thousands of rubles.

The artists L. Fomichev and V. Nekosov are descendants of the Vladimir icon painters whose icons have adorned the churches and monasteries for many centuries—they managed to have the Bogoyavlenskiy Cathedral returned to the believers, and agreed to paint it after it is repaired. Additionally, they are working on the restoration of the Vladimir-Suzdal school of iconography...

...How are workers of culture and masters of arts to "reach" the minds and hearts of those who are called upon to defend culture from soulless privatization, wholesale commercialization, and so forth? I think the church, in its turn, can and should help culture. They have been together for ages. And it is wrong for them to come into conflict with one another today. For they have common interests: raising the moral culture of our society, which is necessary if we are not only to speak of but also intend to do something for the spiritual rebirth of the nation.

Congress of Jewish Organizations Viewed

91UN0803A Moscow SOVETSKAYA ROSSIYA
in Russian 29 Jan 91 First Edition p 4

[Article by V. Sharov: "Arguments at Their Stepmother's Place"]

[Text] The Second Congress of Jewish Organizations and Communities in the USSR (VAAD), which lasted five days, ended in Moscow.

Undoubtedly, the VAAD is the most powerful, and numerically the strongest, association of Jews residing in the territory of the USSR. As chairman of the Credentials Commission Leonid Ashkenazi said, 574 delegates were registered at the congress (283 of them with full votes) representing 283 organizations from 95 cities. It is believed that active VAAD members account for between eight and 10 percent of the Jewish population of the USSR.

These statistics alone made it possible to safely predict widely ranging opinions. In principle, this is what happened. Any journalist, regardless of his preconceived notion, pro-Semitic or anti-Semitic, could have gathered

very rich material for a corresponding article. It was difficult for those who, like myself, were most interested in issues which were declared to be a priority at the first VAAD congress (December 1989)—the cultural and spiritual rebirth of Soviet Jewry. The very first hours of the proceedings revealed that the movement has been Zionized to a considerable degree. However, unlike the purely Zionist congress which I happened to cover two months ago, political accents were much more conspicuous here.

However, a loose confederative structure and the existence of three co-chairmen make it easy for the VAAD Council to distance itself, if need be, from more than just controversial statements by a segment of the speakers. For the same reason, it was virtually impossible to figure out some kind of a resultant line reflecting the overall sentiment of the congress. However, everything should come in proper order.

The inauguration was accompanied by an emotional high which was animated by the vigorous speeches of VAAD leaders and numerous foreign guests, representatives of the largest worldwide Jewish organizations, whereas, to put it mildly, the lack of organization was increasingly apparent later. Suffice it to say that a quorum—two-thirds of voting delegates—could not be met on a single occasion when a general vote was required. One got the impression that well over half of them came to Moscow to attend to personal business.

However, it appears that the organizers were not particularly embarrassed by this. Speeches were followed by more speeches; on the last day, when it was necessary to vote for resolutions, ballots were issued to all "who consider themselves VAAD members." In this manner, they did manage to gather 249 people.

However, our readers should not get the impression that the congress was not a serious undertaking. Everything, especially the resolutions, was much more serious than could be expected...

By studying attentively the text of a report by the VAAD Council, it was easy to determine that out of a set of issues "to which VAAD was expected to pay attention... alia" (moving to Israel for permanent residence) "was a priority... last year." The reason was that "the independent Jewish movement definitely gravitates towards Zionism as the currently dominant national concept among the Jewish people, though it is not purely Zionist because it strives to pool the efforts of all social strata of the people, including those who do not subscribe to definitive Zionist positions. At the same time, the natural inclination of Jews to return to their historical motherland which was manifested in the unprecedented, large alia of 1990 has brought about the formation of purely Zionist structures both inside and outside the VAAD which, strictly speaking, may be considered a form of specialized vertical organizations."

The veil is quite transparent. The VAAD Council is striving to bring the features of organization to spontaneous emigration. At the very least, this would justify the information on foreign trips abroad to "establish contacts" which takes up more than half of the report, despite common knowledge of the fact that the influence of the VAAD on emigration processes is still quite weak. The aspiration to find ways to fill this "gap" left almost no time for "trifles" such as culture and spiritual life, with the possible exception of proceedings in one of the sections. These issues were aired in isolated speeches from the podium and extremely rarely in microinterviews which I obtained in the lobby. In addition, the latter frequently turned to the topic of "the good mother, Land of Israel, and the wicked stepmother, the Soviet land." The same notes were heard in reports by VAAD Cochairmen I. Zisels, S. Zilberg, and M. Chlenov, in speeches by foreign guests, and in most presentations by delegates. It appears that an appeal by USSR People's Deputy Boris Oleynik, who spoke at the inauguration, for wisdom and help in stabilizing the situation in our country did not elicit a response...

How has a country in which the Jews have lived for centuries, and which half a century ago saved them from total annihilation, offended them? I attempted to find an answer to this question in the section on anti-Semitism, all the more so because on the first day sociologist Ye. Leginzon familiarized the delegates with the results of a survey commissioned by the American Jewish Society and taken by the All-Union Center for Public Opinion Research. The survey embraced 73 localities in 10 Union republics. Two percent of those who responded to the questions were determined to be active anti-Semites. Approximately 10 percent had an unfavorable attitude toward Jews but were not inclined to support actions like those of the Black Hundreds. Between 20 and 40 percent of those polled were susceptible to so-called "mundane anti-Semitism." These tendencies were the strongest in the Ukraine, Moldavia, and Belorussia, i.e., where there are many Jews. It is precisely the situation here that pushes up the average percentage. Anti-Semitism is considerably more common in older age brackets. This is why its growth over time is not in prospect.

I very much hoped to hear comments on the conclusion of the specialists at the meeting of the section and to hear an answer to the following question: How serious a threat is this phenomenon? Alas, Yakov Basin, who was in the chair, immediately dashed my hope by saying in his introductory remarks:

"It is not the purpose of these proceedings to find out whether anti-Semitism exists or not. All of us have accumulated examples over many years and can talk for days..."

He went on to prompt participants in the proceedings of the congress to "find out" in what forms "state anti-Semitism" is manifested at present.

Subsequently, a draft resolution was read which referred to "the unprecedented growth of anti-Semitism," and it was asserted that an unbridled anti-Semitic campaign is being waged in the country, and that this is happening with the authorities winking at it...

Leningrader P. Mendelevich said sharply: "This is not connivance, this is a deliberate policy aimed at stoking up anti-Semitism."

She drew vigorous support, with the examples quoted being so worn-out that they do not bear repeating. Let me mention only "the novelties of the season": They included the Soviet Army among anti-Semitic organizations. Later, S. Sorkina from Penza stated that "anti-Semitism has crept onto the pages of school textbooks" and offered as proof the textbook "Modern History" for the 11th grade in which the attitude of Israel towards the Palestinians was characterized as genocide. Historian Yuriy Logun from Chelyabinsk called his much better known colleague, Lev Gumilev, "the scientific apologist of anti-Semitism" for his work "Ancient Russia and the Great Steppe." In addition, Leningrader Ligurskiy made his contribution by saying that "anti-Semitism has penetrated many ecological movements, in particular, the Committee for Saving the Volga."

In general, I fully concur with Yakov Basin who admitted in summation that "the work of the section was not successful," and that a scientific conference on this topic should be held.

Reflections of L. Gofzman, a journalist from Moscow, were perhaps the most reasonable thing I happened to hear. I would like to quote an excerpt from an interview with him:

He said: "Let us try to imagine a situation whereby not a single line in any newspaper has been written about Vasilyev, Sychev, and Ostashvili. Who would know them? However, since they have been advertised like that... I talked to a Pamyat guy, and he even outlined their structures for me. Perhaps, they are not dangerous in and of themselves. However, this image may play the role of a powder keg, a fuse... I am troubled by the mechanism of crowd manipulation. It is utterly unimportant upon whom you loose a hungry, mad, enraged crowd—you may loose them upon the Jews, or upon Caucasian nationalities..."

I am also troubled by this mechanism, and I would very much like to smash it to pieces, so that woes will not befall anyone. However, be that as it may, I once again determined for myself that a number of the mass media have blown this issue inconceivably out of proportion instead of trying to reconcile all the peoples without exception.

Something else is grievous. For as long as the situation in the country remains unstable, people with the most varied ethnic backgrounds will emigrate. Those into whose hands emigration plays will always find ways to paint bugaboos, including the bugaboo of anti-Semitism.

It is extremely difficult to change the minds of those panicking. They are convinced: "It cannot be any worse there than it is here." It may be, because adapting to an alien social system is extremely painful. Besides, the Middle East is not the most peaceful corner of the globe. However, people are such that they will not be convinced until they see it themselves.

Attempts to infuse the VAAD with political overtones put us on our guard to no lesser degree than its Zionization.

USSR People's Deputy L. Shkolnik spoke very sharply about the need to support the "Democratic Russia" bloc and give the president [a vote of] no confidence. In the process, he remembered to sling mud at his political opponents:

"The internationalists of Baltia, a Pamyat scum, a Hero of very Socialist Labor from the Presidential Council who calls for holding the Jews accountable for the misdeeds of the revolution, all of these Kravchenkos, Polozkovs, Kunyayevs, and other latter-day Nevzorovs are merely puppets controlled by those who know well what to scare the people with, and when, and how..."

We have long since stopped referring to elementary ethics or being surprised at the speed of mimicry. Unfortunately, we have gotten used to it. It does not make sense to respond to attempts to discredit well-known political and public figures by means of tired cliches. I would only like to say that Nevzorov's own conscience is the only force which is behind him, the very conscience which an overwhelming majority of his current detractors are absolutely deprived of. If we were to engage in "witch hunting" after all, it would be more logical to look for the organizers of an unprecedented campaign of defamation against the Leningrad journalist and against his personal opinion which has incurred the dissatisfaction of "our pluralists."

With the exception of Pamyat, the real power of their organizations is indeed behind the others. A call for a confrontation with these organizations does a disservice to the Jewish movement, as well as the situation in the country as a whole.

Nor was a speech by Riga citizen Fridman useful for the VAAD: He expressed his regrets over a majority of Latvian Jews either avoiding public activities or joining the Interfront.

He said: "Freedom cannot be separate; it is necessary to urge the Jews to support national-democratic movements."

Let us give their due to participants in the section "Interaction with National-Democratic and Democratic Movements." They came to the conclusion that they should go their own way in each region, avoid radicalization, and maintain neutrality as far as possible. I believe that I. Zisels was right when he recalled that

during different moments various groups and parties "strive to play the Jewish card."

It appears that the congress succeeded in remaining within the bounds of reason on this score; however, the delegates lost the sense of moderation at times in demands on the Soviet Government which were voiced from the podium and at a rally in front of the Israeli Consulate, and which were later set forth in the resolutions of the congress.

I will try to enumerate the main demands, and will let our readers judge for themselves.

To stop anti-Zionist propaganda in the mass media. To recognize Zionism as a national-liberation movement. To liquidate the Anti-Zionist Committee of the Soviet Public, by all means. To initiate the repeal of the 1975 resolution in which the UN described Zionism as a form of racism. To close the embassy of Palestine in Moscow and to abrogate the treaty on friendship and cooperation with Iraq. To state attitude toward anti-Semitism, and so on.

An attitude toward anti-Semitism has long been stated in the constitution of our country, which condemns the fueling of ethnic enmity. Or should we perhaps adopt a special resolution regarding every ethnic group?

It is up to the government to decide whether full diplomatic relations with Israel will be restored. However, in any event this is no pretext to sever relations with Arab states.

Many demands concerned emigration: To grant the right to retain citizenship and the right to property left behind, to abolish fees charged at the time of emigration, and many others. We think that all of this will be reflected in the law on entry and exit which is now being prepared.

Certainly, any intelligent individual could sign resolutions on the issue of former prisoners of ghettos and concentration camps, on the issues of cultural development, on creating a charity section at VAAD, and some others...

At present, there is much talk about the rebirth of the ethnic self-awareness of peoples. Consolidation processes develop fastest among small peoples, and in particular among those who do not have their own ethnic entities in the territory of the USSR or have them abroad. This is a painful but legitimate process: You cannot learn to respect other peoples before you perceive yourselves as a people; you cannot grasp another culture if you do not have your own. The task of all national movements and their leaders is to see that consolidation does not advance through hatred for other peoples. We have already seen where this leads.

However, if there is one thing I will never agree with it is that notions such as internationalism have become obsolete. A multitude of streamlets have come together to form a single American nation, boundaries in Europe are being erased... May God grant us speedy passage through

the initial—wild!—stage of ethnic rebirth, so that a natural feeling of good-neighborliness and the desire of cultures to mutually enrich themselves will develop, because as history teaches, all isolation brings about degradation.

The flower of the people, their intelligentsia, has a duty to understand this right now, and to carry the light of kindness to the errant souls for this reason. After all, the ten commandments of the Bible were born by the millennia of human history; they are found not only in the Bible but also in the Koran, virtually in any faith, even in the souls of hard-boiled atheists. We should follow these commandments.

Kazakh State University Islamic Institute Planned

*91US0108A Alma-Ata LENINSHIL ZHAS in Kazakh
15 Sep 90 p 4*

[Interview with Al-Khadzhi Mukhammed-Khusayyn Usmanuly, nayb-muftiy of the Kazakhstan Muslims' Religious Administration, dean of the Short-term Higher Islamic Institute, recorded by Zh. Dwanabayev: "Worship Heaven"]

[Excerpts] [Dwanabayev:] —**Al-Khiadzhi Mukhammed-Khussayn Usmanuly! Young press workers among the ranks of Kazakhstan Muslims rejoice at the opening of an Islamic Institute.**

[Usmanuly] A thousand thanks for your good wishes. With the permission of the Religious Affairs Council under the USSR Council of ministers, we have opened a Short-term Higher Islamic Institute in our capital as a religious school for the broad masses. As a result, future imams have been receiving lessons there since the September 1.

At first, 100 citizens aged 20-35 will come to study for two years. After testing, 25 ecclesiastical school students with a middle-school education who believe in the Muslim religion, read and write Arabic, read the Koran fluently, and read books written in the languages of Turkic peoples will be chosen. After they have completed their studies, they will be given Islamic names and special diplomas, and sent out to work in republic mosques. The best students will be given certificates allowing them to gain advanced instruction in Egypt, Syria and Saudi Arabia.

[Dwanabayev]—**What subject areas will be taught in the institute, and what subjects?**

[Usmanuly]—Students will be taught the following: first, to read and teach the Koran in accordance with the orthodox interpretations; second, to write Arabic letters fluently, without error and with good style; third, to teach the Fiq, that is the Shariyat learning; fourth, to explain in Kazakh the Qurani karim (Great Khoran); fifth, to teach the Khadish Sharif; sixth, Islamic history; seventh, sociology (USSR law and state law), Kazakh

SSR history and the history of the Arabic countries; eighth, to give lectures on international and political themes.

Seven teachers are teaching the students. They are: Kh. Alsabekov, A. Amireyev, Z. Iminov, A. Saydov, K. Lazgiyev, A. Bgemqulov and N. Zhaqayev. They are persons with substantial religious knowledge.

Since we have set about establishing a Kazakhstan Muslim's Religious Administration, we have encountered many problems. One reason is our plan to build a large Mosque in Alma-Ata. The plan is now ready and we will soon begin building. The dome of the Mosque to be raised will be 23 m tall, the walls 12 m, but the bell-tower minaret will be 40 m.

At present a great deal of money will be needed to improve religious centers. There are many willing to make their contributions.

[Dwanabayev] **What do you say to those wanting to know something about the dean of the institute?**

[Usmanuly] I was born in Balqash City in 1958. I completed middle School in Alma-Ata. I completed an agricultural institute in 1987. I never gave up my study of Islam from the age of 6. Up until the present I have received lessons from 17 teachers. I was Ratbek Nysanbayuly's student for 15 years, but he has now passed away. I am completely familiar with Kazakh, Russian, Sheshen, Ingush, Arabic, Latin, and all the Turkic languages.

I received my higher education in Syria and have lived in Kipr and Saudi-Arabia, etc. I was given the title "Khazhy" [hajji] in the holy city of Mecca. During my second visit to Syria, I was received by Kadakh, deputy to national president Khafiz Asad, and we spoke with Chief Muftiy Akhmad Kif and others for two hours. The

purpose of my visit was to establish direct connections between our countries, with the Muslims of Kazakhstan. As a result other agreements were signed.

In the future an Islamic Institute will be built in conjunction with the Kazakh University. Good residence halls, food services and mosques will be established for students there. All of this has been a good undertaking for Kazakhstan Muslims devoted to God. Let us now gain the benefits from it. The Islamic religion will serve the unity of thought, solidarity and friendship of the nationalities in multi-national Kazakhstan.

Shortage of Lay Judges in Moscow Courts Noted

91P50080A Moscow KOMSOMOLSKAYA PRAVDA
in Russian 29 Jan 91 p 1

[Article by S. Blagodarov: "You Will Not Be Judged"]

[Text] It appears that these are the best of times in the capital for criminals, persons avoiding alimony payments, and others in the menagerie. The majority of Moscow's law courts are on the verge of coming to a halt. The people's court in Krasnopresnenskiy rayon ought to be the first one to close down. Criminal proceedings are in the process of being cancelled, and consultations with citizens are being halted. There are 186 out of 800 lay judges available in the court at Krasnopresnensk. The situation is no better in other courts.

"The rayon soviets are to blame," says I Kupriyanova, chairman of the people's court in Krasnopresnenskiy rayon. "As recently as January 2, I sent an appropriate letter to A. Krasnov, chairman of the Krasnopresnenskiy raysovet, but I still haven't heard a word. Specifically, it is the soviets that should elect the lay judges."

You will agree that a strange apathy exists on the part of the Soviet regime.

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