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TRANSLATIONS ON ENVIRONMENTAL QUALITY

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UN ENVIRONMENTAL COUNCIL ENDS SESSION IN NAIROBI

Peking NCNA in English 1855 GMT 27 May 78 OW

[Text] Nairobi, 26 May (HSINHUA)--The sixth session of the Governing Council of the United Nations Environment Programme (UNEP) ended here yesterday.

The session, which opened on May 9, discussed the current international environment situation and items of environmental programme. Special attention was paid to the relationship between environment and development.

Representatives from many Third World countries pointed out at the session that the old international economic order based on oppression, exploitation and plunder is a heavy yoke which hinders the development of their national economies and constitutes the biggest obstacle as well to environmental improvement. Only by persevering in the effort to combat imperialism, colonialism and hegemonism and to break the old international economic order and establish a new one in its stead can they ensure their countries' independence and prosperity and create the necessary political and economic conditions for the improvement of the environment, they added.

The representative of Yugoslavia pointed out: The problems of environment are economical as well as social-political. Without full implementation of the new international economic order, there will be no narrowing of the material gap between the developed and the developing world, between the rich and the poor, nor can the environmental problems of the developing countries be tackled satisfactorily.

In his speech during the general debates, Chinese delegation leader Wang Yueh-i pointed out: In developing their national economies, the developing countries "should pay attention to and earnestly study the ways of ensuring harmony between development and environmental protection and improvement". "Experiences in many countries show that environmental problems which accompany economic development can be coped with satisfactorily if we have at heart the interests of the people and the long-term interests of the country and take appropriate preventive measures simultaneously with development."

The current session also discussed the problem of natural resources shared by two or more states. The governing council examined this problem every year with much controversy because of the complexity of the problems left over by history and the superpowers' interference and provocation. This year, the governing council discussed the 15 principles of conduct drafted by the working group of experts, yet no unanimity has been reached.

Representatives of a number of countries maintained that each nation should not cause damage to the environment of the areas beyond its jurisdiction when it exploits its own resources. All countries concerned should hold bilateral or multilateral consultations so as to reach agreements on the conservation and harmonious use of joint resources. Chu Ko-ping, deputy head of the Chinese delegation, pointed out in his speech that in handling the problem of natural resources, there should be strict respect for each other's sovereignty; consideration should be shown for the interests of neighboring countries; and solution should be sought through consultations among countries concerned. The speech of the Chinese representative was commended by the participants of the session, especially those from the Third World countries.

At the session the Soviet representative peddled the sinister stuff of "detente" and "disarmament", declaring that "an agreement should be reached to reduce by 10 percent the military budget of the states--permanent members of the UN Security Council" so as to use the funds thus released to help developing countries in the resolving of protection of environment. Representatives from numerous Third World countries showed no interest in and extremely cool response to the assertions of the Soviet representative. Chinese representative Wang Yueh-i pointed out: "Superpowers continue to carry out aggression and expansion in all parts of the world, killing lives, destroying buildings and farmlands, and polluting environment, all of which are highly detrimental to the people." He said: "If the people of all countries are to protect human environment, they must wage a resolute struggle against the rivalry for hegemony between the superpowers and their policies of aggression and war." The Chinese representative also condemned the serious crimes committed recently by social-imperialism of dispatching mercenaries to invade Zaire, killing people and destroying environment. His remarks won the praise and support of representatives from many Third World countries.

Having failed to peddle openly their hoax of sham disarmament the Soviet representatives covertly dished out a draft resolution on the convening of an all-European conference on environmental protection in the "Helsinki spirit". They stealthily tried to impose the draft resolution upon the various regional groups in a vain attempt to cajole support. Representatives from many Asian, European, African and Latin American countries saw through their trickery. Consequently, the draft resolution turned abortive before being formally tabled.

CSO: 5000

BRIEFS

TUNISIA-SWEDEN ANTIPOLLUTION ACCORD--Foreign Ministry Director of International Cooperation Ridha Bachbaouab and Swedish Ambassador to Tunis Olov Ternstrom signed a cooperation agreement between the two countries yesterday morning at the Foreign Ministry. This agreement provides for a sum of 16 million kroner (about 1.5 million dinars) to finance the construction of plants for treating waste water from Sfax and Kairouan and for improving the sanitation of Oued Gabes. Mr Bachbaouab and Mr Olov Ternstrom welcomed this major development in Tunisian-Swedish cooperation and stressed the impact this agreement would have on bilateral relations, especially in the field of urban sanitation. [Text] [Tunis L'ACTION in French 26 May 78 p 4 LD]

U.S.-USSR ENVIRONMENTAL COOPERATION--Washington, 5 Jun, TASS--TASS correspondent Mikhail Beglov reports: Joint research by Soviet and American scientists in the sphere of environmental protection provide a fine example of productive cooperation by our two countries, said P. Shostal, one of the leaders of the Environmental Protection Agency, in a talk with a TASS correspondent. Ties between the USSR and the U.S., he noted, cover a broad range of environmental questions--from the problem of air and water pollution to a study of the life of rare animal species. Of particular importance are joint works on such lines as, for example, earthquake prediction. A joint seminar on problems of sewage purification was held in Cincinnati recently. Besides, Soviet specialists took part in a symposium on industrial air contamination and studied some rare marine animals in the U.S., etc. The ties between Soviet and American scientists are developing on a reciprocally advantageous foundation, P. Shostal stressed, and for this reason, future cooperation in the sphere of environmental protection seems to be very promising indeed. [Text] [Moscow TASS in English 1833 GMT 5 Jun 78 LD]

CSO: 5000

PEOPLE'S REPUBLIC OF CHINA

ARTICLE NOTES SIGNIFICANCE OF PROTECTING ENVIRONMENT

HK191154Y Peking PEOPLE'S DAILY in Chinese 11 Jul 78 p 2 HK

[Article by PEOPLE'S DAILY commentator: "Great Importance Should Be Attached to Environmental Protection"]

[Text] Environmental protection and improvement as well as prevention and elimination of pollution by exhaust fumes, waste liquids and residues from industrial production are major issues affecting the protection of people's health, the promotion of the well-being of future generations, the consolidation of the worker-peasant alliance and the development of socialist production with greater, faster, better and more economical results. They are also important problems concerning the realization of the four modernizations.

Our country is a developing socialist country marked by public ownership of the means of production and a planned economy. This provides great possibilities for solving the environmental pollution problem. But only by doing a large amount of work under the guidance of the correct line and general and specific policies can we turn such possibilities into realities. The "gang of four," who were a bane to the state and the people, never cared about the conditions in which the laboring people worked and lived. Anyone who said anything about treating the "three wastes" and solving the pollution problem was subjected to the serious charge of "painting a dark picture of socialism" and "negating the great Cultural Revolution." This seriously interfered with and undermined the firm implementation of the line and general and specific policies for environmental protection formulated by Chairman Mao and Premier Chou. As a result, our environmental protection efforts have not been properly launched. In certain areas, "three-waste" pollution has even worsened. This has an adverse effect on people's health and the development of agriculture, afforestation, stockraising, fishing, industry, communications and transportation. In some cases, serious harm has been done.

In his government work report delivered at the fifth NPC, wise leader Chairman Hua pointed out: "Elimination of pollution and environmental protection are major issues affecting the health of the masses which must receive serious attention." Since the smashing of the "gang of four," the major responsible comrades of the party committees of certain areas and units have carried on and developed our party's fine tradition of caring for the lives of the masses. They have gone deep into factories, enterprises and residential areas to investigate and study the conditions of environmental pollution, and have adopted decisive measures to treat the "three wastes." But certain leading comrades still shut their eyes to this major issue affecting the interests of the masses and the state. They have not bothered to study or take effective measures, assuming a blase attitude.

"We are up to our ears in production work. How can there be time for environmental protection?" This is an often-heard excuse. Those comrades who have such an idea fail to understand the dialectical relationship between the development of industrial production and environmental protection: the rapid development of industrial production brings with it the problem of environmental pollution. In turn, environmental protection and improvement help create the necessary conditions for the development of industrial production. In our country, the development of production is for the people. So is environmental protection. Two aspects of a problem are involved. Environmental protection and improvement basically amount to protecting and stimulating the development of the productive forces. If we do not view problems from the standpoint of the relationships between things and their development, and only pay attention to current production and no attention to environmental protection, we will end up with no progress in production. To combine the development of production with serious handling of environmental protection is the socialist enterprises' obligation to the people. We must not take the view that our industry today is not well developed enough to justify attention to environmental protection. If we take this matter lightly, serious pollution will result with the high-speed development of industrial construction. What is worth noting is that environmental pollution often appears quickly and its elimination takes a relatively long period of time. We must take firm and practical environmental protection measures. We must act early.

Environmental pollution in certain areas of our country is now mainly caused by the "three wastes" from factories. An effective way to prevent and eliminate industrial pollution is to energetically promote the comprehensive utilization of the "three wastes." Marx said long ago: "Residues from production, i.e. wastes, are turned into new production elements of the same or another production department." ("DAS CAPITAL," 1st part, Vol. 3, p 95) At present, many raw materials and resources are far from being adequately utilized in the industrial boilers reaches only 20 percent, with 80 percent being wasted in the form of dust, slag or waste heat. The utilization rate of wood used for pulp in the paper-making industry is only 45 percent, with large quantities of useful substances emptied into the river with the waste liquid. Much can still be done in turning what is harmful into something useful and waste into treasure.

The proper handling of comprehensive utilization is an important link in the effort to effect the high-speed development of socialist industry. The greater the degree of comprehensive utilization, the greater the benefits to society and people. This kind of work is by no means what certain comrades describe as a case of "saving the seeds only to lose the watermelon." All industrial and mining enterprises must foster the concept of viewing the overall situation, break barriers between trades, energetically develop socialist cooperation and try in every way to do a good job of comprehensive utilization. Those units which discharge large quantities of the "three wastes" should strengthen control of operations, strive to improve production technology, and do everything possible to eliminate the "three wastes" in the production process and the harm done to surrounding areas and agricultural production. An inclination to find money to compensate for losses caused by "three wastes" pollution but no money to treat "three wastes" is a phenomenon that should be quickly changed. We must strictly implement the state's policy of encouraging comprehensive utilization. Those "three wastes" which can be utilized by other units before they can be treated and utilized by those enterprises generating them should generally be offered for free. In regard to such undertakings as new construction, reconstruction, expansion and modifying by tapping potentials that discharge the "three wastes" and pollute environments, we must

strictly implement those stipulations requiring that facilities for treating the "three wastes" and the key projects be simultaneously designed, worked on and put into production. Otherwise, these things cannot be worked on or put into production. Those units which fail to adhere to such stipulations and cause environmental pollution must be held responsible and severely dealt with. We must do this to prevent pollution in the future.

It is clearly stated in our constitution: "The state protects the environment and natural resources and guards against pollution and other pests to the public." The party committees at all levels must put environmental protection on their agendas and take practical measures to strengthen leadership so that the thorough implementation of the state decrees and stipulations on environmental protection can be insured.

They must energetically reorganize and strengthen environmental protection organs and entrust them with supervision and inspection powers. All production processes by factories and mines must not exceed the pollution limits set by the state. Those enterprises that fail to actively treat the "three wastes" are disqualified from being cited as advanced units in learning from Taching. Those enterprises that cause serious pollution must stop production until they have solved the pollution problem within a stipulated period of time. We must actively do a good job of planning for environmental protection so that industry and agriculture, production and life, and economic development and environmental protection can advance side by side and develop in harmony. We must strengthen scientific research, supervision and surveying in regard to environmental protection, speed up the training of technical personnel, and energetically disseminate and popularize scientific knowledge on environmental protection.

The masses in various areas complain about pollution. It has reached intolerable proportions in some areas. Many commendable articles have been written about this problem. In addition, many good plans have been drawn up and systems formulated. How are they being carried out? All departments, areas and units should strictly check on whether they are being properly carried out. Those units that have failed to take proper action should be ordered to do so within a stipulated period of time. If they repeatedly fail to go along, we may consider the transfer of those in charge, and let those who cannot eat or sleep in peace without getting a job done take over. In line with the spirit of the instructions of Chairman Hua and the party Central Committee, we must carry forward the party's fine tradition of seeking truth from fact. Deeds are better than words. Now is the time to solve the pollution problem in a down-to-earth manner.

We firmly believe that under the leadership of the party Central Committee headed by Chairman Hua, we can surely do a good job of environmental protection so long as we firmly grasp the key link of exposing and criticizing the "gang of four" and seriously adhere to the principle calling for "overall planning, rational arrangements, comprehensive utilization, turning the harmful into the useful, relying on the masses, going all out, and protecting the environment for the good of the people."

CSO: 5000

PEOPLE'S REPUBLIC OF CHINA

SIAN PAPER REVEALS POLLUTION IN CHANG RIVER

Sian Shensi Provincial Service in Mandarin 2330 GMT 28 Jun 78 HK

[Report on Sian Daily 28 June frontpage: "Rescue the Chang River"]

[Summary] One of the eight main rivers in the Sian area, the Chang River, is becoming more seriously polluted.

Over the past many years and particularly when the "gang of four" were running rampant, anarchism prevailed. The factories along the river did not properly treat the three industrial wastes and brought disasters to the Chang River and changed its natural state. The clear water in the river is filled with pollution. The fresh air along the river is now polluted with all kinds of smoke and dirt. The unobstructed river bed is almost blocked by waste in some places. According to reports by the comrades of Sian Municipality and the suburban area of Sian, "Some of the large factories along the Chang River, such as the state (Chin Chuan) machinery works and the No. 1 Northwest Cotton Mill, have not treated industrial waste water but simply released it into the Chang River, increasing the [word indistinct] of the water in the river. The lower reaches have risen considerably higher than the upper reaches and the quantity of harmful materials has also increased considerably. Aquatic animals including fish and prawns in the lower reaches can no longer survive."

Some people worry that the situation will become very serious if people have no water to drink. Some 50 percent of the tributaries of the Chang River are filled with garbage. The water in the river can no longer flow smoothly. It is not difficult to imagine that floods will occur. The people along the river worry that the river, which was formerly beneficial, will soon become harmful.

"The leadership of some factories along the Chang River have begun to pay serious attention to this issue. The Sian Chang River Chemical Factory absorbed its past experience and has actively launched comprehensive treatment programs for slag and residues."

Another factory has also scored certain achievement in treating industrial waste water. However, there are still some factories which are not paying serious attention to this issue and are still releasing poison into the river.

With the development of industry, the environmental protection departments in Sian have formulated plans to harness the Chang River. The people along the Chang River and the people throughout the municipality are concerned about this task. They are anxious to eliminate the harm and bring happiness to the people. They also anxiously hope the condition of the Chang River will improve as soon as possible.

CSO: 5000

HUNGARY

BRIEFS

HEAD OF ENVIRONMENTAL PROTECTION--Budapest, 26 Jun, (MTI)--The Hungarian Council of Ministers has appointed Dr Gyorgy Gonda president of the Hungarian National Office for Environmental and Nature Protection, and simultaneously the Presidential Council of the Hungarian People's Republic nominated him to be under-secretary. [Text] [Budapest MTI in English 1036 GMT 26 Jun 78 LD]

CSO: 5000

POLAND

'TRYBUNA LUDU' REPORTS CARTER'S ANNAPOLIS SPEECH

AU091421Y Warsaw TRYBUNA LUDU in Polish 8 Jun 78 p 2 AU

["U.S. President About Talks With the USSR--J. Carter's Speech in the Annapolis Naval Academy"--PAP headline]

[Text] WASHINGTON PAP--ON 7 JUNE PRESIDENT JIMMY CARTER VISITED THE NAVAL ACADEMY IN ANNAPOLIS NEAR WASHINGTON AND DELIVERED A SPEECH, WHICH WAS ENTIRELY DEDICATED TO AMERICAN-SOVIET RELATIONS AND DISARMAMENT TALKS.

IN THE FIRST PART OF HIS SPEECH, J. CARTER MADE A NUMBER OF POSITIVE STATEMENTS ABOUT RELATIONS WITH THE USSR AND HIS ADMINISTRATION'S ESTIMATES IN THIS SPHERE, UNEQUIVOCALLY CALCULATED TO APPEASE AMERICAN OPINION.

We must be aware, the President said, that rivalry will still be long characteristic of our country's relations with the Soviet Union. If this rivalry is to be constructive in nature, and not characterized by danger and filled with potential disaster, our relations must be built on cooperation. Proceeding from this thesis, CARTER EMPHASIZED THAT DETENTE IN AMERICAN-SOVIET RELATIONS WAS THE CENTRAL PROBLEM OF WORLD PEACE. While defining the administration's stand, he added that it was striving for peace and, to strengthen it, for broad cooperation with the Soviet Union.

Proceeding to disarmament issues, the President said: "The number and potential of nuclear weapons have been increasing at an alarming rate. That is why it is important to reach an agreement on the limitation of strategic armaments (SALT), and this will enhance the security for both our countries. Both we and the Soviet Union are negotiating in good faith and with the awareness that a failure in the talks will bring about the resumption of a massive nuclear arms race."

However, the President also leveled attacks at the Soviet Union, literally asserting that it was endeavoring to exploit detente for political advantage and for expanding its influence. He repeated the old American Propaganda thesis about the rapid growth of Soviet military potential and about the USSR's aspiration to "export" its political forms.

CARTER ANNOUNCED THAT HIS ADMINISTRATION WILL CONTINUE TO INCREASE ARMAMENTS IN THE UNITED STATES AND WITH ITS NATO ALLIES. This part of the speech was undoubtedly addressed to the American conservative right wing and was intended to mitigate its fears that the Washington administration was becoming too "soft and conciliatory."

CSO: 5000

POLAND

JABLONSKI RECEIVES ENVIRONMENTAL ACTIVISTS

LD052233Y Warsaw PAP in English 2121 GMT 5 Jun 78 LD

[Text] Warsaw, 5 June, PAP--Today, on the occasion of the world day of environmental protection, Henryk Jablonski--member of the PUPP CC Political Bureau, president of the Polish Council of State and chairman of the All-Poland Committee of the National Unity Front--received a group of the National Unity Front activists dealing with the problems of the protection of natural environment. The participants in the meeting informed Henryk Jablonski about the activity of their organization in this field.

A commission of the National Unity Front committee for the protection of natural environment and afforestation carry out extensive propaganda and organizational activity among the public, initiate the steps in this field by various social, economic and youth organizations and research institutions. They organize voluntary work connected with environmental protection, whose main aim is to afforest, plant with shrubs and adorn with flowers various areas, to build protective belts near industrial centres. The actions initiated by the National Unity Front have resulted in the planting of 230 million trees and 280 million shrubs in the past twenty years. The question of small water reservoirs is (?now) the focus of attention of the interested commissions.

CSO: 5000

POLAND

BRIEFS

UN CONVENTION ON ENVIRONMENT RATIFIED--Poland's permanent representative at the United Nations, Ambassador Henryk Jaroszek, has deposited at UN headquarters a document ratifying the convention banning the use of technological means of affecting the natural environment for military purposes. Poland's ratification of this convention is one more expression of the importance which Poland attaches to progress in the limitation of the arms race and disarmament. [Text] [Warsaw Domestic Service in Polish 0300 GMT 9 Jun 78 LD]

CSO: 5000

YUGOSLAVIA

DJURANOVIC LAUDS ENVIRONMENTAL PROTECTION MEASURES

LDO41446Y Belgrade TANJUG Domestic Service in Serbo-Croatian 0928 GMT 4 Jun 78 LD

[Text] Belgrade--On the occasion of the world day of man's environment, which is marked every year on 5 June, and on the anniversary of the first conference organized by the United Nations devoted to the protection of man's environment, Veselin Djuranovic, president of the Federal Executive Council, made the following statement:

"Marking 5 June, the world day of man's environment, this year as well with 10 days of activities under the title of nature-health-beauty, we may stress with satisfaction that the working people and citizens, organizations of associated labor, sociopolitical communities, local communities and other self-management organizations and communities of our country are realizing with increasing success their constitutional right and obligation to guarantee the conditions for the protection and advancement of man's environment.

"In its postwar accelerated industrial and technical development, our country faces the danger of pollution of man's environment which can, if the relevant measures are not forthcoming, threaten even more the health and general conditions of life and work of the people and in this way social progress in general. The awareness is increasingly growing that accelerated economic, and in particular industrial, development should be accompanied by measures for the protection of man's environment. The solution of these questions must, as Comrade Tito has stressed, be the constant concern of our self-management society. For this reason special place is given in all the social plans of our country's development to tasks in connection with the protection and advancement of man's environment. Even now we can state that all the sociopolitical communities and organizations of associated labor have undertaken and are undertaking a series of measures and activities for the advancement and protection of man's environment.

"The social compact and self-management agreement-reaching by the producers is also acquiring increasing significance in the solving of problems related to man's environment. There are more and more examples of organizations of associated labor which attach increasing importance to improving the work environment and the living conditions of workers and their families, aware that only in this way can the free creative activity and all-round manifestation of all other human values be developed.

"Important successes have been achieved in reforestation, the improvement of river basins, the planting of vegetation and the enhancement of residential areas and the preservation of the natural and architectural heritage in general.

"However, it should be noted that constant efforts must be made in developing responsibility for the fulfillment of commitments regarding the protection and advancement of man's environment. This is so because, although important, the results achieved thus far are not such that we can be completely satisfied; there are still many misconceptions regarding the need to undertake measures in this respect and there are many manifestations of irresponsibility.

"An important contribution to the struggle for the organized solution of problems concerning the threatened environment is contained in nature-health-beauty, an action which is organized in our country every year on the occasion of 5 June, the world day of man's environment. It is not by chance that the start of the celebration of this world day is linked with youth day, for the contribution by the youth and Pioneers to the struggle for the protection and advancement of man's environment is particularly great.

"This year's action, by which our working people mark the world day of man's environment, has also produced good results which will certainly be a further stimulation to strengthening concern for the advancement of the living and work environment of our citizens and by this fact to the further intensified struggle for man's welfare in general."

CSO: 5000

YUGOSLAVIA

MEASURES TO CLEAR POLLUTION IN MEZA VALLEY PAYING OFF

Ljubljana DELO in Slovenian 21 Jul 78 p 8

/Article by Ivan Praprotnik: "The Air is Clearing Up Over the Meza Valley"/

/Text/ Zerjav, 20 July--The people in the upper Meza valley look with satisfaction into the air. This just didn't happen by itself. Those who are familiar with the "history" of the smoky polluted valley know how important the filters in the Zerjav Smelter are. There is practically no more lead dust in the air. The sulphur dioxide, the evil which did the greatest harm to vegetation, has been rarified and passes at great speed to the higher layers of the atmosphere. The people and all the rest of nature with them are now breathing easier.

It wasn't too long ago that people were protesting against the bad pollution and threatened to come out and demonstrate if nothing were done about it. Now something has happened. In Zerjav, a lead dust filter is already in operation. At the mine which is in the forefront of economic development in the upper Meza valley, considerable labor and funds have been invested in this project. Gone are those many difficult moments when under the pressure of public opinion it was necessary to explain one's plans, only to hear people in Crna state that they would believe these plans only when they become a reality.

"We did a lot of work," stressed Peter Souvent, leader of the purification equipment project in the Zerjav Lead Smelter. "It turns out that we did the right thing, even though in the efforts to install the lead dust filters, it was necessary to overcome countless roadblocks, both technological and bureaucratic. So the filter is here today and we are only releasing some 150 kg of lead dust into the atmosphere per day. Formerly, some 10 tons were going into the air. Let us make some more comparisons: the republic decree permits the release of 150 milligrams of dust into the atmosphere. However, after we replace the other half of the filter bags in it, our new filter will pass only 10 milligrams of dust per cubic meter of atmosphere."

"The atmosphere among the workers themselves, who are mainly local people including residents of the upper Meza valley, is incomparably better," says Andrej Fajmut, leader of the Metalurgija Basic Organization of Associated Labor at the Zerjav Smelter. "Now when we have finally solved the problem of the lead dust, we are concerning ourselves with the problem of how to deal on a daily basis with the influence of sulphur dioxide, which has already been moderated considerably. There are many alternatives such as high stacks or some kind of chemical variant. Nevertheless considerable research, even meteorological research will be needed before we come to a final decision," explained Andrej Fajmut, who worked on this problem for his master's thesis.

Along with the construction of the lead dust filter, which together with certain more modern technical devices has also aided in reducing the quantity of SO₂ in the atmosphere, at the roasting facilities in Zerjav, for 2 hours per day--usually in the morning when the cold air is being dispersed and the stack gases do not reach the "atmospheric ceiling," (--) production is stopped in order to keep down the amount of pollutants.

CSO: 2800

IRRIGATION PROJECTS COULD TRANSFORM NORTH AND SOUTH

Lima EL COMERCIO in Spanish 9 Jul 78 Sunday Supplement pp 4-5

[Article by MAV]

[Text] At two extreme points in the desert belt of the country, groups of human beings are trying to channel the solution to problems of regional and local development--each in its own way--into two irrigation projects. In the North, officials of La Libertad, meeting at the Departmental Club in the Capital, have once again informed the appropriate ministry of the crystallization of the Chao-Viru irrigation project. And in the South, 3,000 Mistians are proposed to irrigate about 68,000 hectares of Ocona land. The first group is being put off for lack of financial resources; and the second group, which has offers of financing, is being held up by bureaucratic delays.

North: Chao-Viru

The Chao-Viru irrigation project is perhaps only a lovely dream today. But if the project were to be carried out within a reasonable time frame, its beneficial effects would be felt throughout the nation. It would quench the thirst of 116,800 hectares of land (85,000 hectares of arid and 31,400 hectares of infertile land). Crops would germinate in the bowels of that mother earth expanded to an area of 142,200 hectares per year, through irrigation, crop rotation and the two-harvest system.

Visionary calculations indicate that agricultural production will increase from 4,879,000 to 7,468,000 tons and livestock production from 27,000 to 180,000 tons. And if a decision is made to harness hydroelectric energy, "at the high end, the generation of 64,000 kilowatts will be permitted at the Pampa Blanca Hydroelectric Plant. To do this, it will be necessary to consider harnessing the Santa River." The Chao-Viru irrigation project, obviously, will permit the settlement of thousands of new families (3,500) and will benefit thousands of families (30,000) already settled.

The valleys included in the Chao-Viru Irrigation Project clearly would be the principal beneficiaries of this basic work in the development of the

northern region. The Chicama Valley would benefit the most, relatively, through the improvement of greater hectareage (65,000 hectares). The land area of the Viru-Chao Valley would be expanded (12,300 hectares) through the incorporation of new lands. And Moche would receive a somewhat balanced benefit: the incorporation of new lands (10,700 hectares) and land improvement (10,5000 hectares).

But, the drafting of projects costs less than their execution, as we have observed recently. The Chao-Viru Irrigation Project is not an exception to the rule. At the end of 1976, the estimated cost of the project, involving the development for irrigation and hydroelectric purposes option, cost exactly 22,541,000,000 soles. And the option of development exclusively for irrigation purposes was estimated at 20,287,000,000 soles. These costs were estimated at a rate of exchange of 1 dollar to 70 soles, as of 31 December 1976.

Now, with the present rate of exchange far from 70 soles, the financing of the Chao-Viru Irrigation Project appears to have moved to the horizon of the desert. Thus, a comment was made after a briefing on the Project at the La Libertad Club that "the government had once earmarked 40 million; then it lowered the figure to 20 million and recently to 10 million, so that the office could continue to exist. However," it was emphasized, "there is no financing. Of course, a Japanese mission came to the country; recently a Korean mission; etc; but in the end, nothing was finalized. The important thing would be for the government to permit private capital to provide the financing." This comment was made on that occasion by the president of the La Libertad Club, Arturo Rodriguez.

Well, the insistence of the La Libertad group upon the execution of the Chao-Viru Irrigation Project is not a new concern and much less a restricted proposal. Officially, the project studies started in 1936 in the Waters and Irrigation Office. Even today, there is recognition of the fact that the most complete study of the project was done by the Peruvian Corporation of Santa between 1957 and 1961. However, the study is now so old it needs revision. Ministry of Agriculture officials, in a special publication on the project, state that "it requires updating and broadening in many aspects, particularly engineering, hydrology, agricultural boundaries, changes in land ownership, interference to the digging of the canal from towns, etc."

As for specific plans, these are multiple, as regards the Chao-Viru Irrigation Project. The very first in importance is irrigation. This covers the harnessing of the water resources of the Rio Santa Basin and those of the Chao, Viru, Moche and Chicama Rivers. In this manner, improved irrigation is being sought and the incorporation of new lands in the valleys, as mentioned above.

Another of the very important plans in the Chao-Viru Irrigation Project is utilization of the hydroelectric potential. This objective already involves multisectional coordination, as the Ministry of Mines and Energy figures in the definition and execution of this developmental sector. This notwithstanding, the CHAVIMOCHIC [Chao-Viru-Moche-Chicama] Technical Committee in 1972 suggested "that consideration be given to the exclusive use of the waters for irrigation by diverting the Santa River 295 meters above sea level."

And, despite the passing of time since the Chao-Viru Irrigation Project studies, the so-called general concept of the project has remained irrigation. The two options for the utilization of the waters of the Santa river for the Chao-Viru Project are still around: irrigation and hydroelectric purposes and irrigation purposes exclusively. The lack of financing is also still around.

South: Ocona

The initiative of a famous Characato, Simeon Tejada, a veteran developer of irrigation projects, in less than 2 years has tapped the savings of 3,000 Peruvians, 85 percent of whom are from Arequipa and 15 percent from various regions of the country. What is the purpose of this private initiative which has spread so rapidly and has touched the collective spirit of enterprise? Nothing less than the promising pampas of Ocona, Arequipa. The "Ocona Irrigation Association" [ASIOC] is already at work on an ambitious plan to irrigate some 68,000 hectares in two stages. And here is something which is perhaps surprising: It has technical-financial offers from international companies, which became interested in the Ocona Irrigation Project, after reading national publications.

Once the lands of Ocona are irrigated, the "bold contribution" of the ASIOC will culminate in the production stage in 1980. However, leaving the promising pampas of Ocona and stepping into the offices of the appropriate organizations, the required legal and administrative proceedings have slowed down the enterprising association. Three months after the founding of the association by 57 subscribers, "960,000 soles were deposited in the Banco de la Nacion for concession rights to 96,000 hectares of state lands and waters."

According to the ASIOC, the Ocona lands for which it is seeking concession rights will be irrigated with water from the Chichas Dam and the diversion of the Cotahuasi River. Also, in its charter the association states the right of its subscribers: "to receive title to an 11-hectare tract of irrigable land which they will use for agricultural or livestock purposes or related activities, in accordance with the provisions of the conditions of sale, which are to be established."

As of 31 May 1978, the Ocona Irrigation Association had funds totaling 15 million soles, the product of the monthly contributions of subscribers or intangible capital. With a subscription quota of 1,300 soles per person, a total of 3.9 million soles was derived from 3,000 subscribers. Some 3 million soles are earmarked for the payment of concessions and prefeasibility studies. The remaining 900,000 soles are being spent on association installations. "We are now working with the Peruvian Cooperatives Bank, in Arequipa, where we have four accounts." This information was provided by the treasurer, Orlando Torres.

What then is worrying the ASIOC directorship? The lands and waters concession paperwork submitted to the Sixth Arequipa Agrarian Region. "One year and 5 months have already gone by, despite the fact that the law calls for a period of 8 days for publication and posting. They are putting obstacles in our way without thinking what the Ocona Irrigation Project is going to contribute to expansion of agricultural boundaries, and without committing state funds, for thus far only association monies have been spent. It has been argued that the concession is very wide and the price high; therefore, the Sixth Region is not authorized to make a decision on the concession."

The secretary for organization of the ASIOC, Oscar Ali, spoke about the trials and tribulations of the Ocona Concession. "Recently," he said, "a decree was issued which limits concessions for the private sector to 5,000 hectares. It could be said that the decree was issued for Ocona. We are not in the fifth stage of association action, namely an initiative to the Ministry of Agriculture to obtain approval of the concession with the publication and posting required by law. Only in this way can we go ahead with the feasibility studies. In 18 months as an organized entity, as a legal person, we have made advances that in other cases of irrigation development have taken years. It is an unprecedented case. And we already have a source of financing."

What are the conditions for foreign financing of the Ocona Irrigation Project? "We have," the treasurer replies, "an offer from the Bernert International Engineers Co. of California. An agreement has been signed. The company is very interested in conducting the feasibility study, the execution and the general financing of the project. They have given an estimate of \$100 million for the project. They estimate the feasibility study will cost \$1 million. The approximate time for the completion of the project is 5 years. The president of the financing company, Bogdan Bernert, considers the project quite feasible because of the abundance of water and the quality of the land."

The developer of [several irrigation projects], Solavaya (1936), Characato (1939), La Cano, "with water from the old La Joya (1950," Atico (1957), "With underground water," and Ocona (1976), Simeon Tejada, comments:

"Many years ago, a study was made of Ocona lands. Financed by the state in 1954, the Executive Engineers Co determined that this project is feasible. What is more, the pioneer of irrigations in Peru, Carlos Sutton, recommended Ocona as one of the most feasible projects. Now it is being said that this project is not feasible. The association also conducted a erimetric survey of the 96,000 hectares for the concession [application]. Ocona would cost from 600,000 to 700,000 soles per hectare."

And what will be the final appeal to the limitation decree? The legal counsel of the association emphasizes: "I am confident that the government will issue a ministerial resolution in favor of Ocona, granting the association these lands. That would be the only solution. Rights have already been acquired, and the law cannot be retroactive."

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CSO: 5000

MAURITANIA

PALM GROVES' DETERIORATION IN ADRAR, ESPECIALLY IN ATAR

Nouakchott CHAAB in French 5 Jul 78 p 3

[Article by Brahim O. Sid'Ahmed, Agriculture Director, Atar]

[Text] Problems Encountered in Growing Date Palms in Atar

The deterioration of the Adrar palm rows, especially those in Atar, is not a new phenomenon that can be imputed solely to the climatic consequences of the recent drought years.

We are confronted with a very complex phenomenon, the basic element of which goes back to the time when irrigation was mechanized and intensified. That situation led to the critical point we are now noting, that is:

General loss of fronds from the alluvial sheaths.

Higher salt water level.

Disappearance of plant cover.

Silting in the wadis.

Drying up of palm trees.

Proliferation of parasitic infections.

Rural exodus.

The situation is the sechema type of desertification and the process can only get worse. There are many people who once were familiar with the enchanting sites of Kana Wal who can no longer identify them. What remains of this palm grove (South Atar), where it is not just clumps of dried-up palm trees about to disappear entirely, similar to the palm groves situated on secondary wadis such Tayarett in the northeast, or Soujeft, appear to be flourishing by comparison. But we should not delude ourselves, specialists who have practised in these regions for a long time are noting precursor signs indicating that

there, too, the process is going on and nothing will stop it unless we fight energetically to safeguard what is still alive. To lack of water is added parasitic infections and diseases that find propitious terrain in which to proliferate, beginning with:

Termites.

Cockchafer grubs.

Taka (mites) caused by a mite named *Oligonicus Afrasiatiens*--a white

White scale (caused by the toria *Blanchardi*).

The loss of fronds from the sheaths is generalized. The sweet or brackish sheath is currently at depths varying from 3 to 22 mm.

Silting represents a short-term danger it may be possible to stop. The palm grove west of Chinghetti has entirely recovered, some single trees 10 meters high are emerging from the dunes.

The absence of palm-growing statistics today makes it impossible to present figures that would not be likely to alarm people.

The rural exodus, such as has been noted chiefly in Chinghetti, sums up the dramatic situation of those oases which can no longer ensure the survival of their populations.

Water Quality

In a general way, except for Atar, it is impossible to estimate the quality of well water acceptable from the point of view of its use for irrigating palm groves.

Review

The work is long, we agree, but it represents the indispensable tool, necessary for the region's economy. Until now everything has been done by more or less accurate estimates, altered to taste. It would be desirable to work as rapidly as possible with concrete figures, especially if the results of the methods put in motion to relaunch Adrar's principal activity are to be followed. Currently we estimate annual production at 4,500 to 6,000 tons per year.

In conclusion, as we can confirm, the problems at the level of the Adrar palm region are numerous and complex. Some of them can be resolved rapidly or at least over the middle term. Others seem more complicated, but are not unsolvable.

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CSO: 5000

GABON

BRIEFS

GEOLOGICAL SURVEY--The minister of State for Transportation and the Merchant Marine, Georges Rawiri talked with a business man representing two Brazilian companies on Thursday 4 May. During his talk with the minister of State Marcos Ribeiro Dantas, technical director of "Lasa", a Brazilian engineering and prospecting company, and also speaking on behalf of the Vale Rio Doce Company (CVRD), told of a plan for a topographic survey of the Gabonese territory, covering an area of 225,000 square km, not including the seacoast. The operation would be done by means of aerial photography from equipment flying at low altitude (about 150 meters) and scoring the ground with parallel lines 1 km apart. The plane picks up all ground curves, thanks to a radio altimeter, and records all indications of minerals on tape by means of magnetic and radiometric equipment that particularly measures radiation. According to Mr Dantas magnetic anomalies have characteristics that make it possible to determine the nature of the minerals; but, he stated, unfortunately not all minerals produce magnetic phenomena. The survey would make possible completion of Gabon's geophysical map and the minister of State showed he was "interested" in the Brazilian proposals. Interrogated about financing such an operation, the Brazilian representative indicated that his government would be disposed to put credits at the disposal of the Gabonese government if the latter so desired. The CVRD is in the top world rank of companies exporting iron.
[Text] [Libreville L'UNION in French 5 May 78 p 4] 8946

CSO: 5000

DROUGHT CONDITIONS FORCE SALE OF CATTLE

Windhoek THE WINDHOEK ADVERTISER in English 23 Jun 78 p 1

[Text]

Drought conditions in Kaokoveld have reached such a dimension that the office of the Administrator General, Mr Justice M.T. Steyn, has decided to make R30 000 available for the purchasing of food for the inhabitants.

Mr M.D.T. Steenkamp, assistant to Mr Justice Steyn, is pictured in discussion with Chief Johannes Ruyter at one of the many scenes of devastation in Kaokoland.

FAMINE

The drought, which is one of the worst in the history of Kaokoland, has brought famine to the doors of most of the inhabi-

tants, while the cattle have to live from the Mopani leaves.

At a meeting last week at Opuwa between the chiefs in Kaokoland, the office of the Administrator General and the Corporation for Economic Development, the Chief Manager of the Corporation, Mr Johan Lerm, said the Corporation would immediately start buying cattle from the farmers. These would be slaughtered at the meat factory of the Ovamboland Development Corporation at Oshakati.

Mr Lerm said the factory, which has international status, can at present slaughter 500 cattle per month, but if "negotiations with overseas countries are

successful, up to 1 200 can be slaughtered per month. We shall be able to handle the total offer."

By selling the cattle, the people of Kaokoland will once again have money to buy flour.

Mr Lerm also said that the possibility of a supermarket, selling a wide range of products, was being considered. The matter is being investigated.

He pointed out that most of the shopowners in Kaokoland had loans from the corporation. "There is, however, no competition and the people are being exploited with huge profits. A supermarket could bring about more realistic prices."

CSO: 5000

SOUTH AFRICA

BRIEFS

KELVIN POLLUTES AIR--For months now residents in Cresslawn and Croydon, Kempton Park have been complaining about soot and dust, and a "black rain" which falls on their suburbs even on clear winter days. The culprit, they say, is Kelvin Power Station. Power station precipitators are well known for their periodic breakdowns, but somehow those at Kelvin seem to have more than their share of faults. Johannesburg electricity department says the precipitators are working, which raises a cynical laugh from residents. About 4 weeks ago the chief air control officer from the Department of Health promised to investigate. But the fallout continues and residents complain weekly to CARE. [Text] [Johannesburg THE STAR in English 18 Jul 78 p 16]

AIR POLLUTION LAW--South Africa's air pollution law relies on industry's conscience to keep the air clean. There are only 11 air pollution inspectors so if factories want to cheat the chances are they will get away with it. Fortunately there are those, such as Lucas Battery at Roodepoort, who realize their responsibility towards the public. At a cost of R150,000 they installed two filter and air extraction units. Not only do they stop about 230 kg of lead dust being pumped into the air each month, but Lucas recycles the dust. What worries marketing manager, Mr Peter Talbot, is that there are many small battery manufacturers who have no conscience about their lead emissions into the air, or about releasing acid into the sewage works. [Text] [Johannesburg THE STAR in English 18 Jul 78 p 16]

CSO: 5000

USSR

NEW PLANS FOR LAND IMPROVEMENT, WATER CONSERVATION

LD021555Y Moscow TASS International Service in Russian 1128 GMT 2 Jun 78 LD

[Summary] Moscow--"Over 2 million hectares of land will be irrigated or drained this year in the USSR, a TASS correspondent was told in the USSR Ministry of Land Improvement and Water Conservancy in connection with Land Improvement Day, which is marked on 4 June. "This is several hundred thousand hectares more than a year ago. In the present 5-year-period Soviet land improvement is developing at a rate unprecedented in the industry. Over this period, improved land will produce almost 1/3 of all agricultural products. About 10 million hectares of land will be irrigated or drained. Over 37 million hectares of desert and mountain pasture will be renovated. Over R40 billion will be allocated for this. The same amount was spent in the previous 10 years."

Land improvement is being carried out in many areas of the country. Previously irrigated land was used mainly for cotton and other technical crops and vegetables. Now much irrigated land is being allocated for grain crops, mainly wheat, rice and corn.

"In former arid areas of the country major regions are being created to obtain guaranteed grain harvests. In the 5-year-period it is intended to double its production on such lands and raise it to 26-27 million tons.

"Specialists understand that the water resources of the central and southern part of the European territory of the country and of Central Asia will be insufficient for the intensive development of land improvement. In this connection the project is being developed for the transfer to the south of part of the flow of the Pechora, Ob and Yenisey Rivers, which flow into the Arctic Ocean."

CSO: 5000

USSR

BRIEFS

ENVIRONMENTAL CONVENTION INSTRUMENT--New York, 31 May, TASS--The instrument of ratification by the Presidium of the USSR Supreme Soviet of the convention on the prohibition of action to influence the environment and climate for military and other purposes incompatible with the maintenance of international security, human wellbeing and health was deposited here with the United Nations secretary-general. [Text] [Moscow TASS in English 1934 GMT 31 May 78 LD]

SCIENTISTS STUDY SEA POLLUTION--An expedition of scientists from the Ukrainian Academy of Sciences Institute of the Biology of the Southern Seas has begun work in the Black Sea on board the research vessel Miklukho-Maklay according to a program based on the party and government decision on combatting pollution in the Black and Azov sea basins. [Moscow Domestic Service in Russian 1400 GMT 8 Jun 78 LD]

CSO: 5000

DENMARK

UNION BOYCOTTS EPOXY USE, FEARS CANCER CONNECTION

Copenhagen BERLINGSKE TIDENDE in Danish 16 Jun 78 p 6

[Article by Birgitte Henriksen]

[Text] The Construction Workers' Union lacks the backing of both LO [Danish Federation of Trade Unions] and the Bricklayers' Union in its boycott of epoxy. Everyone -- including the importers -- agrees that it is dangerous. But for one thing it has not been proved to be a carcinogen. And for another, the use of gloves, creams and ventilation can prevent any discomfort caused by using it.

Secretary Ole Knudsen of the Copenhagen Bricklayers' Union said the epoxy issue is just one part of a larger action. "This boycott is just the first step in a number of protests against dangerous substances on the job site. PVC will probably be the next material on the boycott list."

The union will not be satisfied to have the 35,000 members of the Construction Workers' Union excused from working with the substance. "We simply want dangerous substances removed from the job site. It wouldn't help to hire special firms to do the work, since as taxpayers we have to pay for patching up workers who become sick. And we won't go along with that nonsense about protection."

But just how dangerous is epoxy? BERLINGSKE TIDENDE asked the scientific group at the College of Pharmacy who started the debate that question.

"We have shown there is a probability that the material is a carcinogen. Epoxy can change the genetic structure of one-celled bacteria in the same way radiation does. And substances that can affect genes are often carcinogenic. But we cannot say that this is definitely so, we can only point out the possibility. Epoxy belongs to the chemical group called 'epoxides' and we definitely know that these can produce cancer. For instance, this is true of a substance in tobacco smoke that is changed into epoxides in the liver," said pharmacist Jette Maxild.

The scientists said that if a person is exposed to the substance he is at risk. But no one knows how large an exposure over how long a period of time it would take to produce an effect or how the substance is absorbed into the body, whether you would have to actually ingest it or if inhalation alone is enough. That is why it is impossible to say whether workers could be given sufficient protection.

The scientists have no plans for further research into epoxides. "It is difficult, since normally it takes between 10 and 30 years after one is first exposed to a substance to discover whether or not it is cancer-producing. This means that people will be used as guinea pigs and that is a very dubious practice," said Jette Maxild.

The study was made at the request of the Bricklayers' Union and LO. The union had noticed that many members were complaining of rashes, queasiness, headaches and breathing difficulties while working with epoxy. So in 1975 the bricklayers asked LO to look into the matter. LO took the problem to the Job Environment Council, an advisory committee for the minister and in 1977 a special committee was appointed to look into epoxy.

In September the results of the committee's work will probably go into effect. Labor Minister Svend Auken will issue a statement on how to work with epoxy to avoid rashes and breathing problems. But possible long-term problems such as cancer were not taken into account. The regulations concern hygienic practices, the use of protective creams and gloves, ventilation systems and clean clothes. Employers must provide bathing facilities with hot and cold water.

One of the many importers of epoxy products, Forsgaard, Sapolite, Inc., said that for several years contractors have been given instructions concerning these precautions: "In our modern society we use many dangerous substances. When a wall is built, we get a saltpeter deposit that must be removed with hydrochloric acid. Every bricklayer learned as an apprentice to be careful when using hydrochloric acid, which can produce painful sores. Epoxy is also dangerous but the substance is so new that it is not yet part of the apprenticeship program. It is easily obtained and can be used in many ways. Any housewife can buy a tube of Araldit glue -- that is an epoxy too, but not dangerous in small quantities. Industries use it for a wide variety of purposes -- electronic components are cast in epoxy, it is used to glue glass. It is the strongest glue in the world, it can be used to glue cement and you can paint with it, but people have to learn how to use it correctly. The product has been available since the last war but it was not much used in this country until new building methods were introduced in the 1960's."

L. Forsgaard would prefer to see all work with the substance turned over to special firms that have been given detailed instructions in how to

work with it. The firm currently uses the Swedish regulations for the use of epoxy: 1. Avoid use if possible. 2. If its use cannot be avoided, the work should be performed by trained people.

LO consultant Jorgen Elikofer said that if work can be performed equally well with other substances, epoxy should be prohibited. But he felt it was putting it too strongly to say that epoxy produces cancer. There are some indications in that direction, but it is necessary to perform further research. In addition, the somewhat complicated regulations now being introduced will affect work efficiency. Epoxy will become more difficult to use and for that reason its use will be limited to the most essential jobs. That view was also supported by Adolph Sorensen, chairman of Danish Master Builders.

"I don't care for the campaign of terror started by the Construction Workers' Union. They are creating a smear campaign against a single substance, but there are many other dangerous substances," said Jorgen Elikofer. "Take ordinary gasoline, for instance, which contains a substance we know for a fact can produce leukemia. But we don't ban gasoline for that reason. I am also against finding a substitute for epoxy, since we might be told 5 or 10 years from now that it too produces cancer."

LO feels that the problems involved in dangerous substances should be solved through a change in the law. In the fall the labor minister will present a bill aimed at changing the Environmental Protection Act. The minister wants prior approval before a new substance can be used. A similar arrangement is already being used in the drug industry.

"If this is implemented, a grace period of many years must be allowed if the bill is to be realistic. Say, for example, that all new substances must have prior approval in 5 years and that all substances must be investigated and approved within 15 years. In the long run this would mean that we would be working with much fewer materials and that we would have better controls over chemical substances," said Jorgen Elikofer.

But LO also favors more research. This is both expensive and time-consuming and Denmark cannot handle it alone. We must make use of international studies and request EEC assistance.

The Construction Workers' Union went around its head organization and the Bricklayers' Union when it decided to introduce the boycott. The reason for the action wasn't just the pharmaceutical report, which just "hit the nail on the head." People in the Copenhagen Bricklayers' Union are wondering why the union hasn't backed them up. Union chairman Bendt Nielsen had this to say.

"We will do everything we can to counteract the dangers of poisonous substances. But we are reluctant to take a strong stand before it has been definitely established that epoxy produces cancer. But if it is, we would not have any hesitations. We have not prohibited work with the substance for our members because it is illegal for us to issue a ban without a factual basis."

The Construction Workers' Union says it does not yet know how many job sites are boycotting the substance. Master Builders chairman Adolph Sorensen said the union hasn't heard any reports of construction sites where the workers have stopped working because of epoxy. "But if the boycott takes hold, we will consider submitting the case to union arbitration or to the Labor Court. This is clearly at the outer limit of what is legal under the union system."

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CSO: 5000

DENMARK

PURE FOOD AGENCY WANTS TO BAN COLOR DYES FROM MEAT, DAIRY ITEMS

Copenhagen BERLINGSKE TIDENDE in Danish 28 Jun 78 pp 1, 14

[Article by Peter Kjelstrup]

[Text] In practice, all dyes in dairy and meat products must be off the Danish market by 1 July 1979. That is the view of the State Food Products Institute which simply cut the remaining dyes used in these food products out of its draft for the new approved list.

The approved list will be ready on Friday, but protests from the meat industry in particular might lead to changes in the very sweeping plan at the last minute. Both the Industrial Council and the Agricultural Council have issued sharp protests, pointing out among other things that there would be very serious consequences for Danish sausage exports.

Exports Threatened

"The consequences for exports, especially of Danish salami, are hard to calculate," said veterinarian Anton Pedersen of the Agricultural Council who pointed out that many importing countries require statements that the products can be sold in their country of origin.

"As long as it is justifiable from a health point of view and consumers are not misled by such things as inadequate product information, we feel the dyes should be treated in the same way as other additives," Anton Pedersen told BERLINGSKE TIDENDE.

Danish Salami

The very drastic requirements of the new approved list would mean a final farewell to red sausages as well as the customary appearance of Danish salami. With regard to butter, the new approved list, if it gains final acceptance on Friday, would mean that it will no longer be possible to get "Christmas butter" to the same extent as in the past, since Common Market regulations do not contain similar provisions. The

passage of the approved list would lead to inestimable control problems, however, since it goes without saying that imported products would be subject to the same regulations as Danish products.

Changes

But all indications are that the Food Products Institute will not adhere blindly to its strict plan. Last-minute changes may occur although in principle the Food Products Institute has the last word. But usually as much consideration as possible is given to both consumers and industry. This could also be a sort of trial balloon, intended to see how far industry is willing to go along.

The attempt to remove the color dyes does not have a direct link to health consequences, since the substances are on the list of products currently approved for use. It is more likely to be an attempt to cut the total amount of additives in food products. That is why they want the dyes removed from the most commonly used food products, while the same dyes might be permitted in candy and marmelade, for example.

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CSO: 5000

DENMARK

BRIEFS

DYE COMPROMISE--The State Food Products Industry has yielded to protests from agriculture and industry, so it will still be possible to use dyes in dairy and meat products. It was originally intended to ban the dyes as of 1 July 1979. However the date has merely been postponed until July 1980 and the Food Products Institute will try to arrive at a reasonable result through consultations with producers in the meantime. The regulations concerning dyes are found in a so-called approved list of the substances that may be added to food products. The latest list, which went into effect on 1 July, includes stricter requirements for the use of dyes in fruits and vegetables and in beverages and sugar products as well as for the use of nitrates. [Text] [Copenhagen POLITIKEN in Danish 6 Jul 78 p 3] 6578

CSO: 5000

FINLAND

INDUSTRIAL SULPHURIC WASTE HURTS COUNTRY'S SOIL, EUROPE'S MOST ACID

Helsinki HELSINGIN SANOMAT in Finnish 19 Jun 78 p 20

[Article by Prof Paavo Elonen]

[Text] Vaasa (HS) Finnish soil is the most acid of the Nordic countries. "Eighty percent of our fields are in need of a basic lime treatment," said Prof Paavo Elonen from the Agricultural Research Center at the Vimpele seminar on lime.

Less than half of the fields in Sweden and Norway need a basic lime treatment and Denmark is starting to manage with annual maintenance lime treatments.

In Finnish fields, maintenance lime treatments are sufficient only to prevent further acidity. The increased use of fertilizers is one of the most important reasons for the rising acidity levels of the soil.

In a maintenance treatment, 300 kg of ground limestone per hectare is spread on our fields annually. In Denmark the corresponding figure is 500 kg and in Sweden 400 kg. The purpose of maintenance lime treatments is to prevent the soil from turning more acid by applying small amounts of lime every 5 to 10 years.

When he talked about maintenance lime treatments, Elonen gave some reasons for the increased acidity of the soil. He mentioned the use of fertilizers, especially the use of the ammonium types, as one of the most important factors. To offset the acidic effect of the fertilizer, 2 kg of lime is needed per 1 kg of fertilizer.

The need for lime in our soil is primarily increased by the depletion of calcium, magnesium and potassium from the soil due to either being washed off or used by plants as nutrients.

The sulphur settling down from the air as well as industrial, transportation and residential wastes increase the need for maintenance lime treatments.

A significant amount of Finland's sulphuric waste comes with air currents from the industrial countries of central Europe. In southern and southwestern Finland the amount of the waste is more than 10 kg of sulphur per hectare a year. In central and northern Finland 5-10 kg per hectare and in Lapland under 5 kg per hectare. To neutralize the sulphuric waste, 30 kg of lime per hectare would be needed.

"Although the amount does not seem too large, we have to bear in mind that our entire country, our forests and our lakes are affected; their acidity levels are gradually rising because of the sulphuric waste," Elonen pointed out.

Quality of Farms Improves

Agronomist Jouko Uola from the Agricultural Center of Southern Ostrobothnia talked about area lime treatments and the results achieved. In the area owned by the Agricultural Center, more than 100 area lime treatments have been given since 1964. An area lime treatment means a simultaneous treatment with lime of the fields of an entire village.

According to Uola, in calculating the feasibility of a lime treatment the first thing to consider is what crops are to be grown in the area. Lime is needed especially by the following: sugar beet, clover, barley, wheat, pea, carrot, beet, rutabaga, cabbage, onion, tomato and cucumber.

The feasibility is also affected by the levels of acid, calcium and magnesium in the soil before the lime treatment, the cost of lime, its transport and application as well as the market price of the crops grown.

Uola pointed out that if the draining, fertilizing and crop preservation were not taken care of, lime alone could not work wonders.

In the village of Teuva, the feasibility of lime treatments has been calculated in marks. There are 10,300 hectares of fields and gardens in Teuva. During the last 5 years, 263 kg of lime per hectare has been spread on the fields of Teuva. In practice it is not possible to increase the amount of lime to 1,300 kg per hectare as suggested by the calculations. According to Uola, Teuva has adopted a realistic goal of 500 kg per hectare.

After the farmers of Teuva have spread their 500 kg of lime per hectare, it will have cost them 618,240 marks. The effect of the lime treatment will last a minimum of 10 years. It has been calculated that the monetary gain from larger crops due to treatment will be 1.9 million marks.