China, North America to be affected by fallout

Oil fires to plunge earth into unnatural winter

from burning Kuwaiti oilfields, some of which were set ablaze this week by Iraqi troops would spread as far as China and North America within two weeks . Australian scientists predicted on Thursday, reports Reuter.

Climatologists at the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in Melbourne said projections using a cray supercomputer forecast that soot from the fires would spread through most of the northern hemisphere within 14 days.

If soot from the fires reached the stratosphere, the highest layer of the atmosphere, it could cause some darkening of the sky in regions downwind of the fires.

But Dr Willem Bouma of the CSIRO's Atmospheric Research Division said the soot was unlikely to be pushed high enough to change the climate. The true climatic effects

are far too uncertain" he said. We know the atmosphere would carry the soot far and wide and spread it over a large area, but talks about darkening skies or 'nuclear winter' is speculation."

The nuclear winter theory Europe for months. predicts that after nuclear

WASHINGTON, Jan 27: Now

that the war for the liberation

of Kuwait has begun, the

prospect of returning to their homeland is coming alive for

bombardment huge amounts of soot from fires would be thrown into the air, darkening the sky and plunging the earth into an unnatural winter.

Richard Turco of the University of California, regarded as a pioneer of theoretical computer models, told the New scientist" magazine last week that oil fires burning for a month could release three willion tonnes of black smoke into the upper a atmosphere and obscure up to a fifth of the world's skies.

CSIRO Atmosphere Research chief Dr Brian Tucker said his group's global climate prediction did not take account of rainfall, common in Africa and other areas in January, nor of smoke dispersal.Rainfall would wash the soot from the air, and winds would likely disperse smoke from the fires before they caused major climatic prob-

Some atmospheric scientists have said a huge conflagration, igniting major oilfields in Kuwait and Iraq, could give risc to conditions approaching those created by the volcanic explosion of Krakatoa in 1883, which darkened the skies of

But Tucker disagrees: "In

problem. If the soot does get up (into the stratosphere)

Egypt

Turkey

Syria

Jordan.

Baghdad Iraq

Riyadh

there could be some locialised, short-term climatic effects. But I don't think that will hap-

A U.S. military spokesman on Tuesday said Arial photographs showed



WASHINGTON, Jan 27:-Saudi Arabia is to contribute 13.5 billion dollars to help the United States defray military costs in the Gulf war Secretary of State James Baker announced last night, report Xinhua.

Already some soot may have

\$ 13.5b more

Saudi aid to

meet US

military costs

Baker announced the contibution underscored the strength and determination of the U.S. led multinational

An Eye-witness Account

I went crazy, says a Baghdad housewife

TORONTO, Jan 27: A dad told a Canadian Press reporter how her family's breakast time turned into a chaos of ioise and destruction when Desert Storm Warplanes stormed the Iraqf's capital.

We heard no stren," Maria Daoud was quoted as saying 17+5 CP report. There was no air raid warning. We heard and we all rushed outside. The second missile hit the house and it crumpled before our

She and her family were not injured, she said, but now "we have nowhere to go".

The CP correspondent, Leila Deeb, a Jordanian, was taken to the Daoud house and other damaged areas of Baghdad on Thursday by Iraqi offi-

Canadian Press said it was not known whether the dispatch had been subjected to Iraqi censorship.

Correspondent Peter Arnett of the Cable News Network one of the other remaining loreign correspondents in Baghdad, has said their movements are limited and their work overseen by Iraqi authorities, but few changes are made in their reports.

The Iraqi contend many attacks by U.S. and allied warplanes have damaged residential and other non-military locations in Iraq. The command of Operation Desert Storm, the anti-Iraq coalition, says it has

targeted only military and other strategic sites, a officers acknowledge that civil tans tnevttably will suffer to

such widespread bombing Mrs. Daoud was asked what hopened when her rented house was hit. I went crazy', the CP report quoted her as saying. "I didn't know where to go, where to look for may daughters, my sons. couldn't see the light".

She said she is worried now that her soldier son may hear of the attack and try to return to the family. "We'd have to stry here 24 hours a day" waiting for him, she was quoted as saying pointing to the pile of

lrogi officials said two other houses were destroyed in the same raid.

Other buildings on the gov ernment-guided tour had less' damage, Deeb reported.

Some rooms of Khatoun Mosque were destroyed at a clinic near the al-Mukhtar rehabilitation and psychiatric hospital, the CP report said No one was reported hurt there, it said, but authorities reported that two civil defense officers were killed at the Baghdad area civil desense headquarters, responsible for helping civilians.

Despite the bombing raids. some shops were still provid ing food and other necessities, Deeb reported. She said houses and hotels were still without electricity, and Al Rashid Hotel, where she was

Task Force planning rebuilding of Kuwait

Kuwait, from sewers to airport the thousands of Kuwaitis in communications system. extle since August 2. This is

especially true for a group of The task force is staffed Kuwaitis in Washington who with about 50 Kuwaitis, who are planning for the rebuilding represent a wide range of secof a free Kuwait, reports USIS. tors -- communications, oil, electricity, water, transporta-The Rebuilding Kuwait Task tion, education, health and Force was formed in October. food, airports and ports, public 1990 to organize the replaceworks, information and legal ment of what the Iraqis have stolen, damaged or destroyed and judicial sectors. The task in the six months they have force is also drawing on assisoccupied kuwait. The task tance from the United States Army Corps of Engineers and force is planning for the reconstruction of everything in Civil Allairs Corps, the Commerce and State Departments, the Federal Emergency Management Agency and members of the American business community.

The Kuwaitis are working on a short-term emergency plan and a long-term recovery plan. The emergency plan covers the first 90 days from the day the Kuwaitis are able to reenter Kuwait. The long-term recovery period is expected to last two to five years, depending on the severity of damage to the country, according to Ibrahim Al-Shaheen, director of the task force and former director of Kuwait's Housing Authority.

Saudi Arabia

The emergency plan focuses on meeting the minimum level of services required by the Kuwaiti population, Al-Shaheen said. This will include providing bottled water, electricity, food, medical treatment, communications linkups, transportation and

Some of the equipment needed during the emergency stage has been shipped to arcas in eastern Saudi Arabia. Bahrain and elsewhere, to be available as soon as the multinational forces free Kuwait, Al-

Shaheen said. Beyond the immediate essentials, the list of what must be replaced or fixed in Kuwait is a long one. Eyewitness accounts of the damage and looting done by the Iraqi occupying forces make it clear

that everything from school desks and blackboards, hospital supplies, office files and furniture, street lamp posts, park benches, sewer pipes, telephone lines, office computers, public buscs and police cars, to oil refinery equipment and tankers will have to be replaced or fixed .

Taking Saddam Husscin's repeated threats to destroy Kuwaiti oil facilities seriously. the task force has made prepa rations to rebuild Kuwaits oil industry from top to bottom.

Kuwait Oil Company's group manager for production and development, Abdul karim Rabah, said his first goal is to restore Kuwait's capacity to export oil and meet the country's internal demands for electricity and water desalinization. Production facilities for both sectors run on oil.

At present, the planners can only guess at when they will be able to return to Kuwaft and what they may be facing when the war is over. This poses a unique challenge to the planners.

"We are planning from scratch. We do not know when we are going (back) in, and do not know what we will find, Al-Shaheen stressed.

Extles were able to smuggle out finger print records and information on computer disks from Kuwait. Most property and banking records and census data were contained on these computer disks. Fingerprint records will be used to reissue individual identifica . confise ited by Iraqi

=Feature

M ORE children will be born during the Nin-eties than in any other decade in history. The kind of life those children will lead - if they live to lead one at all depends on the determination of the world's leaders to carry through a sweeping series of promises to improve the welfare of this planet's next generation.

The United Nations Children's Fund (UNICEF) has set a goal: to end mass child deaths and child malnutrition by the year 2000. Some 250,000 children in developing countries die every week from common illnesses and one child in three is stunted by malnutrition.

At an unprecedented gathering of world leaders last September in New York, 71 presidents and prime ministers put their signatures to a document agreeing to carry out UNICEF's goals - and more.

The result of the summit was a checklist of challenges for the decade ahead, highlighted by six basic goals: cut deaths among children under five by one-third, halve maternal mortality, halve malnutrition among the world's underfives, provide safe water and sanitation for all families, provide basic education and see to the protection of children with the implementation of the UN Convention on the Rights of the Child.

Cynics saw the promises as so much hot air. Even UNICEF executive director James Grant warned: "A great promise has been made to the children of the 1990s. Whether the promise will be kept is a question which will be answered not by the declarations of a day but by the deeds of a decade.

But the latest UNICEF report on the state of the world's children heralds the success of a goal of similar scope set in 1980 - to immunise 80 per cent of the developing world's children by the end of 1990. That success has given new credence to the idea that the world can set goals and meet

When in 1980 the World Health Organisation (WHO) made the 80 per cent immunisation challenge, only 15-20 per cent of such children were being immunised. Because of that, five million were dying every year from common diseases like measies, tetanus and whooping cough and half a million were being crippled annually by polio.

Final data available in early 1991 is expected to confirm that the 80 per cent immuni-

Six Targets for 2000 to Save the Children

In 1980 the World Health Organisation set a target for 1990: the immunisation of 80 per cent of the children in developing countries. Figures to be released soon are expected to show that the target was achieved and as a result 12 million young lives were saved. Now UNICEF has set an equally ambitious target for the year 2000: to end mass child deaths and child malnutrition. What happened in the Eighties, reports Gemini News Service, provides every reason to hope that the new target, too, will be achieved. by Alian Thompson

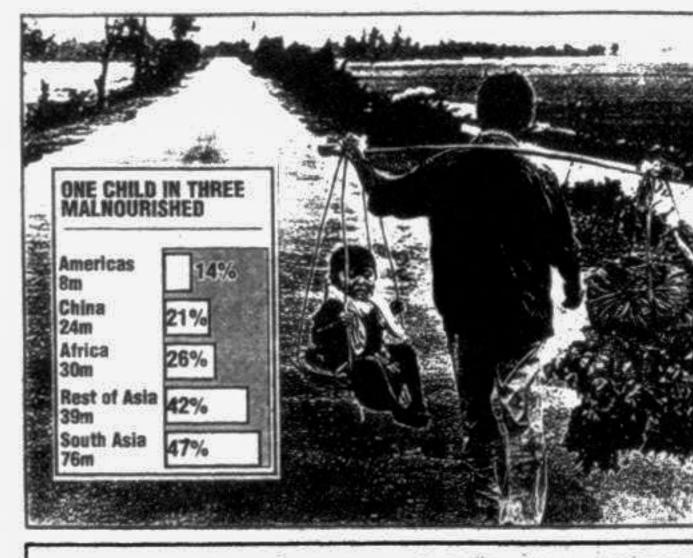
sation goal sct in 1980 will have been reached.

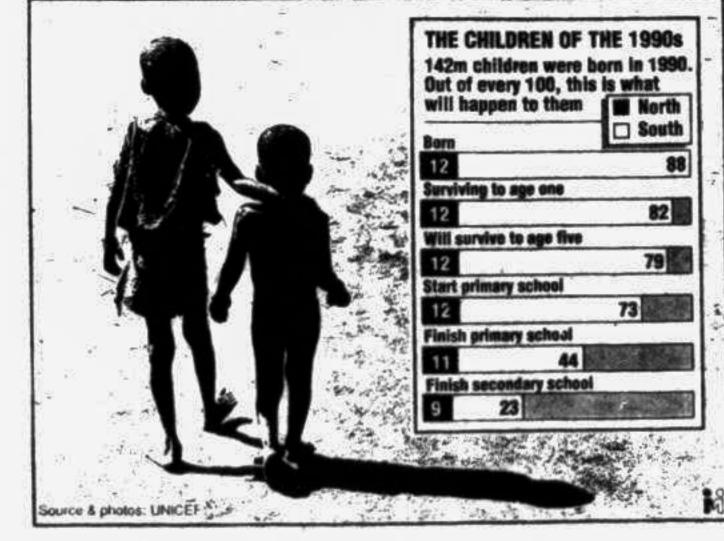
Says UNICEF: "That extraordinary achievement has not only saved 12 million young lives, it has also given the world new hope by showing what can be achieved when the international community commits itself to a great en-

The State of the World's Children report also documents the tentative success of

other efforts to promote the welfare of children, such as the concept of providing corridors of safety to protect children caught up in warfare.

Since 1985, fighting in the El Salvador civil war has stopped for three days every year to allow all children to be immunised. Corridors of peace have been established in Sudan so essential supplies can reach civilians and children. The policy has been recommended





to all members of the Organisation of African Unity and may be applied in Angola and

But despite those successes, the UNICEF report outlines in detail the huge task ahead. And it condemns the irony that simple solutions already exist to most of the problems targetted.

"The question at the centre of the World Summit was therefore whether morality would keep step with capacity, whether what could not be done would now be done," the report says.

The \$20 billion that would be required each year to bring about all the proposed changes is about one-eighth of one per cent of the world's annual income, half as much as Germany will spend in 1991 on unification and as much as the world spends each 10 days on the military.

The task is to make today's low-cost technologies - vaccines, oral rehydration salts, antibiotics, growth charts, iron tablets, family planning and blindness-preventing vitamin A tablets - available to all.

Today only about three per cent of the industrialised world's aid is devoted to such basics as rural water supply, primary education and health The report says the current

spending priorities simply do not make sense. Point by point, the report describes what would have to

be done to fulfill the World Summit's six basic goals. 1 - Cut by one-third death rates among children under

Right now 14 million children under five die each year in the developing world; the main causes: diarrhoea, measles, tetanus, whooping cough and pneumonia - all of which can now be treated at very low cost.

2 - Cut by half maternal mortality rates.

Right now, some 500,000 women die in pregnancy or childbirth. Half the deaths could be prevented with lowcost help.

3 - Cut by half severe and moderate malnutrition among children under five.

At present, one child in three is stunted by malnutrition; the most frequent cause being lack of knowledge of the special feeding needs of a young child.

4 - Provide safe water and sanitation for all families.

One-third of families in rural areas of the developing world do not have access to clean water and half do not have safe sanitation. The average initial investment needed to provide both is less than \$30 per person. The system could be kept up for about \$2 per person, per year.

5 - Provide basic education for all children and completion of primary education by 80 per

Right now only 55 per cent of children in the developing world complete four years of primary education and boys fare twice as well as girls. Lowcost remedies exist.

6 - Ensure observance of the UN Convention on the Rights of the Child, particularly regarding protection of children in situations of armed conflict.

Some 80 million children are exploited in the workplace and 30 million live on the streets. Implementing the Chil-

dren's Summit goals will cost

money. UNICEF suggests several straightforward methods of covering some of the cost. The report concludes that developing nations as a whole are now spending more on the

military than on education and health combined. A five per cent cut in military spending would provide half the money needed annually to met the year 2000 goals.

It also recommends spending shifts from high per capita cost services, which generally serve the better off, to low per capita strategies for the poor. The World Summit also

urged debt-swapping arrangements through which debt relief schemes could be formulated in such a way so that debt could be swapped for investment in social development beams were cracks and fracprogrammes. tures in the tooth enamel and irreversible damage to the

- CEMINI NEWS

Faulty protein holds clue to Alzheimer's disease

Phyllida Brown

COMMON protein in the blood may help to explain why some people develop Alzheimer's diseasc. a fatal form of dementia. In particular, the protein may explain why people suffering from this disease have abnornmally high levels of

aluninium in their brains. Researchers have found that people with Alzheimer's have a defective form of the proten, which is normally responsible for binding alu minium and removing it from the bloodstream. Because of this defect, the researchers believe, increased amounts of the metal are free to circulate in a form that can enter the brain.

The discovery, announced by a British team, has two important implications: first, it opens up the possibilities in future for a simple blood test. and even a treatment, for people with the defective protein. who may be susceptible to Alzheimer's disease. Secondly it offers the first explanation of why some people seem to be much more vulnerable to aluminium poisoning that others.

Paul Altmann at The Lonson Hospital, Gillian Farrar and

John Blair at the University of Aston in Birmingham, and their colleagues, say there is a lot more research to be done. "Now we may be able to open an important door into the study of Alzheimer's," says Altmann.

Scientists have been hampered by their lack of knowledge about the eauses of Alzheimer's disease, for which there is currently no cure. The disease is also difficult to diagnose. Certainly, aluminium is involed: but the link between the metal and the disease has remained unclear. The incidence of

Alzheimer's disease appears to be higheer in areas where the concentration of aluninium in drinking water is high. In addition, several studies have shown that the brains of people with Alzhetmer's contain large amounts of the metal.

More recently, work by Altmann and Blair has shown that alumunium affects certain neurotransmitters-the chemical messengers between nerve cells-in the brain, causing specific changes in the nerve signals. These changes are simolar in people with aluminium poisoning and

Alzheimer's. But if the metal had a direct, causal relationship with the disease, scientists would expect to find a higher rate of Alzheimer's in certain groups exposed to very large amounts of aluminium, such as kidney patients and others who have to take drugs containing the metal. But these groups ar no more likely to develop Alzheimr's disease.

Now . the team has compared blood samples from var tous groups of people to see how well the protein transferrin in their blood binds the metal. Aluminium is difficult to observe in biological experiments, so the team substituted another metal that behaves in a very similar way, galltum.

Transferrin's normal function is to bind fron and other metals and transport them to specific transferrin receptors on cells. Once bound, the complex of protein and metal is very larg-too big to cross the blood-brain barrier. The transferrin-metal complex "docks" on the cell receptor, to be taken into a compartment inside the cell where conditions are acid enough to detach the metal

No more Fear of the Dentist's Drill

almost no pain - this secret fantasy of all dental patients will perhaps soon be a reality. The new "miracle instrument" developed at the University of Ulm is now being clinically tested

lasted far too long up to now and heated up the tooth being treated too severely. This problem was solved by Dr. Raimund Hibst of the Institute for Laser Technologies in Medicine and Dr. Ulrich Deller

also necessary as the carious substance is evaporated by the heat. At the same time an overheating pressure is produced in the tooth substance. which discharges in tiny ca plosions a portion of the caries is thus "blown away". As

A laser system which can be used carefully and painlesly in dental treatment has been developed by researchers tately

there; laser technology has made it all possible.

For a quarter of a century attempts have been made to realize the dream of a laser drill which causes less pain. But they have always fatled up to now on account of the existing devices. The unpleasant side-effects of their laser

of the Keller fo Clinic for Dental Surgery and Radiology at the University of Ulm through the development of a new laser drill, which operates with pulses of only 250 millienths of a second duration. and which are emitted at in-

Of course the tooth warms up in this process too, because the energy is transformed immediately after impact: this is

tervals of one second.

teeth conduct heat only poorly. the temperature of not quite 100 degrees Celsius measured at the point of treatment does not represent a danger to the tooth's nerve.

Hibst and Keller are now treating patients in clinical tests. If the laser drill proves to be a success, a rapid marketting of the product can be anticipated. - Dieter Schwab (GRS)