# F.A.S. PUBLIC INTEREST REPORT

Formerly the FAS Newsletter

Vol. 32, No. 9

November, 1979

### **VIETNAM & CAMBODIA & SCIENTIFIC EXCHANGE**

On the strategic level, it was as if a breakout in an elaborate game of Go. From the Soviet point of view, the United States was threatening the encirclement of the Soviet Union by befriending China. The Soviet Union had allied itself with Vietnam so as to outlank China. China, in turn, was supporting Pol Pot in Cambodia to outflank Vietnam. But from an historical point of view, it was business as usual notwithstanding socialist rhetoric about brotherhood: Sino-Soviet rivalry; Sino-Vietnamese rivalry; and Vietnamese-Khmer rivalry.

Pol Pot's decision to break relations with the Vietnamese (see page 3) gave Hanoi a justification to break its encirclement by completing its long-desired hegemony over Indochina. The Chinese response was to invade Vietnam to teach Hanoi a lesson. And the Soviet response, fortunately, was to rise above the Chinese action, thereby terminating escalation. No world war, so far.

### Intense Suffering

Just intense suffering of the cruelist sort. Worst of all, perhaps, was the torment inflicted on the Khmer by one of their own, Pol Pot. Apparently Pol Pot was the Jim Jones of Cambodia and, using reducto ad absurdums of socialist ideas, he destroyed virtually all of its intellectuals. From his point of view, perhaps, control was most easily maintained by destroying everyone whose mind was trained and/or those who had the possibility of contacting the outside world.

In preparation for its invasion, Hanoi decided to strengthen itself against the economic, and other influence of ethnic Chinese in their country. Efforts to resettle the ethnic Chinese in, or induce them to leave, the country were accelerated by the Chinese attack on Vietnam, producing the saga of the Boat People. The Vietnamese indifference to the fate of their Chinese counterparts, and their readiness to extort exit taxes from them, shocked the conscience of the world. During this period, FAS officials wrote Hanoi a sharp letter, characterized its activities as genocide, and said that the FAS visit, then contemplated, would have to be delayed indefinitely if the uncontrolled exodus continued. Some months later, after an international outcry, it stopped.

A few months after the invasion of Cambodia in January 1979, it became obvious to food experts that famine might ensue in Cambodia. The fighting between Pol Pot and the Vietnamese had disrupted the planting of the rice and the population exhaustion induced by Pol Pot was taking its toll. In September, international agencies began to negotiate for permission to provide relief supplies. At this point, inexplicably, the Vietnamese controlled regime of Heng Samrin objected that no relief would be permitted unless all was sent through Phnom Penh. This was echoed in a speech by the Vietnamese Ambassador to the U.N.

FAS officials thereupon called upon the Ambassador in New York on October 3, and complained that FAS could not cooperate in scientific exchange with the Vietnamese if they became party to refusing aid to the starving Khmer. The Vietnamese could not prevent aid from moving across the Thai border to areas controlled by Pol Pot; they could only deny it to

### FAS PRESS CONFERENCE CALLS AID EFFORTS INADEQUATE

On October 17, FAS held a press conference at which America's most experienced specialist of famine, Dr. Jean Mayer, President of Tufts University, deplored existing efforts in Cambodian relief as "wholly inadequate—financially, logistically, and diplomatically."

Dr. Mayer observed that relief agency goals of approximately 1,000 tons per day were being met only at less than the 5% level of 50 tons per day.

At his suggestion, FAS wrote Secretary-General Waldheim urging him to convene representatives of U.S., U.S.S.R., and

the People's Republic of China along with representatives of relevant international relief agencies to resolve diplomatic problems. On the logistic level, the proposal was made to divert to Cambodia grain ships now on the high seas.

FAS is working to ensure that the U.S. provide at least \$35 million, but is observing that even the \$110 million requested by UNICEF and the International Red Cross comes only to about \$25 per Khmer in a country that is suffering not only from famine but from the destruction of everything that characterizes modern society.

the Khmer in their areas. Did they want Cambodia without the Cambodians? Residual American sympathy for the Vietnamese was ebbing rapidly; they could get a reputation for great cruelty.

Their response, that week, was: that there was no famine, only "food shortage"; that Vietnam had cut its rice ration 15 kilos per month to 13 kilos to help the Cambodians; that relief to both sides was a plot by insidious forces desiring to support Pol Pot; and that we were misled by the mass media. Five FAS Sponsors, including four Nobel Prize winners cabled the Heng Samrin government and Hanoi urging that relief be permitted without political considerations. And we prepared to complain harder—much harder.

But, by next week, the same person admitted that there was famine "on the Pol Pot side". And, on October 14, a planeload of relief supplies was admitted to Phnom Penh, and agreement seemed to have been reached by the regime with UNICEF and the International Red Cross. We have thereupon turned to monitoring what other bottlenecks may exist in the aid process, and shall do whatever we can for the Khmer.

So what small leverage we have with the Vietnamese, who have invited us to send a scientific delegation to Vietnam, has now been used twice already: for the Boat People and the Khmer, both times in a vigorous and timely fashion. The Council hopes and expects that members will approve.

### What To Do?

But what to do now? We have no illusions that the Vietnamese, the Chinese, the Soviets or many other states are suddenly going to apply standards of respect for individuals or minority groups which they have never shown in their respective millenia long history. Anyway, Man's inhumanity to Man is universal. Nothing will be improved by failing to communicate with one another. And scientific exchange, notwithstanding political differences, is an axiom of FAS behavior so we must move forward to improving relations.

Moreover, this failure to "recognize" is becoming a dangerous American madness. America's quarrel with Cuba—where we have been encouraged, by a failure of diplomatic recognition, to maintain an anachronistic, pointless and immoral economic blockage—has already: led to disaster in the Bay of Pigs; risked world war in the missile crisis; and become enraveled in the assassination of an American president.

The same U.S. tendency to avoid recognition of unpleasant realities has, in the case of Vietnam, encouraged the Chinese in their analogous quarrel with Vietnam (their Cuba), and made easier their pointless invasion of Vietnam with its gratuitous risk of Sino-Soviet war.

We recognize that members have widely different feelings about Vietnam ranging from condemnation, on the one hand, to feelings of American guilt arising from the war. But, perhaps, all can agree that nothing good can be achieved by policies of ignoring the fate of the Vietnamese and the fate of the groups they control, in and out of Vietnam.

With this in mind, we plan now to move ahead to investigate conditions in Vietnam, to explore the possibilities of exchanges of scientific and technical information with the Vietnamese, and to urge the U.S. Government to establish an embassy in Hanoi from which it can pursue normal diplomatic exchange.

-Reviewed and Approved by the FAS Council

### **FAS**

Chairman: Frank von Hippel Secretary: John T. Edsall Treasurer: John P. Holdren Director: Jeremy J. Stone

The Federation of American Scientists is a unique, non-profit, civic organization, licensed to lobby in the public interest, and composed of 5,000 natural and social scientists and engineers who are concerned with problems of science and society. Democratically organized with an elected National Council of 24 members, FAS was first organized in 1945 as the Federation of Atomic Scientists and has functioned as a conscience of the scientific community for more than a quarter century.

#### **SPONSORS**

Christian B. Anfinsen (Biochem.) \*Kenneth J. Arrow (Economics) \*Julius Axelrod (Biochemistry)
\*David Baltimore (Biochem.)
Leona Baumgartner (Pub. Health)
Paul Beeson (Medicine) \*Hans A. Bethe (Physics)

\*Konrad Bloch (Chemistry)

\*Norman E. Borlaug (Wheat) Anne Pitts Carter (Economics) Owen Chamberlain (Physics)
Abram Chayes (Law) Morris Cohen (Engineering) Morris Collen (Engineering)
Mildred Cohn (Biochemistry)
Leon N. Cooper (Physics)
Carl F. Cori (Biochemistry)
Paul B. Cornely (Medicine)
Andre Cournand (Medicine)
Max Delbruck (Biology)
Carl Djerassi (Organic Chem.)
Rennus Dallbecon (Micmbiology) Renato Dulbecco (Microbiology) Paul R. Ehrlich (Biology)
\*John F. Enders (Biochemistry)
\*Paul J. Flory (Chemistry)
Jerome D. Frank (Psychology) John Kenneth Galbraith (Econ.) Richard L. Garwin (Physics) Walter Gilbert (Biochem.) Edward L. Ginzton (Envincering) Marvin L. Goldberger (Physics)
\*Donald A. Glaser (Physics-Biol.)
\*H.K. Hartline (Physiology)
Walter W. Heller (Economics) \*Alfred D. Hershey (Biology)
Hudson Hoagland (Biology)
\*Robert W. Holley (Biochemistry) Marc Kac (Mathematics) Henry S. Kaplan (Medicine)
Carl Kaysen (Economics)
\*H. Gobind Khorana (Biochemistry) George B, Kistiakowsky (Chem.)

\*Arthur Komberg (Biochemistry)

\*Polykarp Kusch (Physics)

\*Willis E. Lamb, Jr. (Physics)
\*Wassily W. Leontief (Economics)
\*Fritz Lipmann (Biochemistry)
\*S.E. Luria (Biology)
Roy Menninger (Psychilatry)
Robert Merton (Sociology)
Matthew S. Meselson (Biology)
Neal E. Miller (Psychology)
Hans J. Morgenthau (Pol. Science)
Philip Morrison (Physics)
\*Robert S. Mulliken (Chemistry)
Franklin A. Neva (Medicine)
\*Marshall Nirenberg (Biochem.)
Robert N. Noyce (Indust. Exec.)
\*Severo Cochoa (Biochemistry)
Charles E. Osgood (Psychology)
\*Linus Pauling (Chemistry)
Gerard Piel (Sci. Publisher)
George Polva (Mathematics)
George Polva (Mathematics)
George W. Rathjehs (Def. Policy)
\*Burton Richter (Physics)
David Ricsman, Jr. (Sociology)
Watter Orr Roberts (Solar Astron.)
\*J. Robert Schrieffer (Physics)
\*Julian Schwinger (Physics)
\*Julian Schwinger (Physics)
Herbert Scoville, Jr. (Def. Policy)
Stanley Sheinbaum (Econ.)
Alice Kimball Smith (History)
Cyril S. Smith (Metallurgy)
Robert M. Solow (Economics)
\*William H. Stein (Chemistry)
\*Albert Szent-Gyorgyi (Biochem.)
\*Howard M. Temin (Microbiology)
James Tobin (Economics)
\*Charles H. Townes (Physics)
\*Charles H. Townes (Physics)
\*Harold C. Urey (Chemistry)
\*George Wald (Biology)
Myron E. Wegman (Medicine)
Victor F. Weisskopf (Physics)
Jerome B. Wiesner (Engineering)
Robert R. Wilson (Physics)
C.S. Wu (Physics)

#### NATIONAL COUNCIL MEMBERS (elected)

Bruce Ames (Biochemistry)
Lipman Bers (Mathematics)
Harrison Brown (Chemistry)
Nina Byers (Physics)
Britton Chance (Chemistry)
Geoffrey Chew (Physics)
Hugh E. DeWitt (Physics)
Thomas Eisner (Biology)
Herman Feshbach (Physics)
Denis Hayes (Environ, Policy)
John P. Holdren (Energy Policy)
Myra Karstadt (Law-Biochemistry)

Leonard Meeker (Law)
Richard L. Meier (Env. Design)
Peter Raven-Hansen (Law)
Arthur H. Rosenfeld (Physics)
Patricia Rosenfield (Env. Health)
Carl Sagan (Astronomy)
Joseph L. Sax (Environ. Law)
Andrew M. Sessler (Physics)
Martin J. Sherwin (History)
William Shurcliff (Physics)
Robert H. Williams (Energy Policy)
Archie L. Wood (Defense)

\*Nobel Laureates

The FAS Public Interest Report (USPS 188-100) is published monthly except July and August at 307 Mass. Ave., NE, Washington, D.C. 20002. Annual subscription \$25/year. Second class postage paid at Washington, D.C. Copyright © 1979 by the Federation of American Scientists

### WAR IN CAMBODIA

Ten days after their attack in Cambodia, the Vietnamese were already threatening Phnom Penh from 30 miles away, had captured most of the East bank of the Mekong River (about one third of Cambodian land area) and were cutting Phnom Penh's links to the key port of Kompong Som. Phnom Penh fell only 14 days after the invasion began on December 25, 1978.

According to reports in Far Eastern Economic Review, the Vietnamese may have taken the decision to invade Kampuchea ten months before. A year before the invasion, on December 31, 1977, Phnom Penh broke official ties with Vietnam while accusing it of aggression. The Vietnamese authorities argued this was a sign of China's intent to use Cambodia against them. When consulted, the Soviets urged a Czechoslovakia-type operation to remove Pol Pot from power, but the Vietnamese said they would handle the matter in their own way.

The Vietnamese made a February 5, 1978 peace proposal which was rejected and, in February 1978, the Vietnamese Central Committee took the decision to intervene, and at the same meeting, decided to break the economic power of the Chinese-dominated business community in the south. Hanoi radio began calls for uprisings against Pol Pot, and it formed the Kampuchean National United Front for National Salvation (KNUFNS).

The military buildup began in mid-1978 coordinated with calls to put aside, in Vietnam, food and fuel for national defense and with emergency supplies sent in from the Soviet Union. A diplomatic offensive was launched to reassure Vietnam's neighbors. This culminated in a tour by Premier Pham Van Dong proposing treaties of friendship in September-October 1978. Vietnam joined Comecon for greater protection and signed a 25 year treaty of friendship and cooperation in case the Chinese counter-attacked.

### **Invasion Was Swift**

One reason for the swift success of the invasion, despite the traditional antipathy between the Vietnamese and the Khmer, was the exhausted state of the Khmer, and their hatred of Pol Pot. Cambodians apparently advised the Vietnamese troops of the locations of Pol Pot arms caches. If the reports are correct, Pol Pot was one of history's most extreme and fanatical tyrants. (The last effort to overthrow him occurred in August, 1977 by senior officers in the North).

Under Pol Pot, the cities were evacuated and automotive transport deliberately destroyed. Families were broken up, schools abolished, children required to work at ages as young as 8, with property owned in common even including utensils and clothing. Marriages are said to have been arranged and performed in mass, with summary executions for the most minor misdemeanors. Money, markets, and religious institutions were abolished.

In the process, some fraction like one-third of the Kampuchean society was destroyed including all intellectuals down to those who spoke a foreign language. The report on page 4 from the American Friends Service Committee gives some of the flavor of the society remaining.



Heng Samrin

Following the invasion, the Vietnamese set up the People's Republic of Kampuchea (PRK) and the Pol Pot regime (Government of Democratic Kampuchea) took to the hills, having escaped the rapid dragnet efforts of the Vietnamese.

The Chinese continued to back Pol Pot. Embarrassed by his excesses, they talked of "readjustment" taking place, and his regime learning from its "experience." By April, the head-quarters radio of the Pol Pot forces was said to be silent; the voice of Democratic Kampuchea radio station is, apparently, in south China.

In Peking, Prince Norodom Sihanouk, who was only released by Pol Pot from his virtual house arrest in Kampuchea shortly before the invasion, was saying that the Pol Pot forces were "very tired". He said they were going to be supplanted by the Khmer Serei guerrillas on the Thai border, with the backing of China. He volunteered that, while the Khmer Rouge would fight for their ideals, the Khmer Serei were mercenaries and would have to be paid.

### Famine Predicted in April

Already in April, Kampuchea was awaiting disaster. A report in *Far Eastern Economic Review* quoted foreign observers as saying that:

if some order and stability are not restored and measures taken to plant rice in the few weeks before the monsoon the country may face a severe famine.

It was said that the Heng Samrin regime could only find 131 people who could be considered "intellectual" where formerly, there had been 20,000, and this severely hampered reconstruction. Its revolutionary council was forced to criticize many ruling the country for lording it over others, and for nepotism in selecting cadres and so on.

By May, the same journal quoted experts as "pessimistic about Kampuchea's chances of avoiding a major famine". The Kampuchean Government knew that it needed aid and aid from everyone. Its Vice Minister for Foreign Affairs Keo Prasat said:

We cannot rebuild our country with only our own hands. We need the help of socialist nations and peace loving peoples all over the world. So far the Soviet Union, Hungary, East Germany, and Laos have offered assistance. In order to rebuild, however, we need the assistance of all the people and organizations of the world.

Hopes for assistance were complicated by the question of legitimacy of the new government. After the invasion by the Vietnamese, the U.S. Government position was to oppose the invasion notwithstanding the excesses of Pol Pot—excesses not so fully perceived as now. In the U.N. struggle over the seating of the Heng Samrin government, the U.S. thereupon sided with the People's Republic of China in defeating the Heng Samrin government on September 21, by a vote of 71 to 35 with 34 abstaining.

With the dry season opening in the fall, the Vietnamese prepared to finish off the Pol Pot forces who were arranged against the Thai border to the West and North of Cambodia. News reports suggested that they were dropping from exhaustion and refugees began pouring into Thailand. The Thais were nervous about the possibility of complete defeat of Pol Pot, which would place a Vietnamese controlled government on its border; as a result, they were permitting relief supplies to go across the border to the embattled remanents.

As the battle continued, reports circulated that only 5% to 15% of the arable land in Cambodia was being farmed, which would further confirm prospects of disaster. The U.S. Government Coordinator for Refugee Affairs, Dick Clark testified on October 4 that:

There are estimates that up to three million people—out of the remaining four to six million inhabitants of Kampuchea—may die without massive infusions of outside food aid and medical assistance.

### Only 1/2 of 1% of Need Supplied

Although it is believed that Kampuchea required 900 tons of aid supplies *per day*, the Red Cross and UNICEF were able to deliver only 150 tons of supplies in the *month* of August. During this time, they got permission to set up an office in Phonm Penh, which they interpreted as meaning they could go forward with their relief plan. These international agencies feel obliged to maintain their tradition that aid be supplied to belligerents on both sides, which was rigorously opposed, at least in words, by the Vietnamese government. But their plight had been softened by the fact that the office in Phnom Penh would not itself be delivering supplies to both sides of the border. The Pol Pot areas were close to the Thai border and would be handled by their offices in Bangkok.

However, when BBC broadcasts observed that UNICEF and Red Cross representatives were assuming they had authority to go ahead, Phnom Penh put out an October 4 statement denying it, and providing a memorandum which, they said, they had given the aid authorities. It required them to "pledge to entrust the distribution of aid to the responsible authorities of the PRK" who would provide reports to ICRC and UNICEF authorities on the distribution of aid. And it also required the international agencies to "specify that the ICRC and UNICEF action is avoided (est exempte) all intervention in Kampuchea's internal affairs, especially any attempt to give aid to all the parties".

As the FAS Public Interest Report was going to press, it seemed that these polemics were not going to interfere with at least some aid, but there was said to be differences between Cambodian and Vietnamese authorities in Phnom Penh and the extent of the aid might suffer as a result.

## FRIENDS COMMITTEE VISITS PHNOM PENH

In September, the American Friends Service Committee sent a delegation to Phnom Penh. What follows are the opening paragraphs from a four page report of Edward F. Snyder, Executive Secretary of the Friends Committee on National Legislation (FCNL).

Cambodia is a devastated land with a people in a state of shock. Everywhere we traveled we saw emaciated people. We saw children with so little energy left they sat numbly staring, too weak even to cry. We saw people with bloated stomachs from eating leaves in their search for sustenance. The customary jet black hair of people was often reddish, one evidence of long-term malnutrition. Statistics indicated many fewer children in the one- to five-year age group, showing those who are especially vulnerable to deprivation.

If the only problems were lack of food, solutions would be much easier.

But Kampuchea must now live with the heritage of the four years of nightmare under the Pol Pot—Ieng Sary—Khieu Samphan government.

During that period the population of Phnom Penh was forcibly evicted and the whole populace forced to work long hours in the country. Schools were closed. The health system was dismantled. Although much food was apparently produced, little of it reached the people. Worse still, a reign of terror was conducted against students, doctors, teachers, engineers, technicians, professional people, ambassadors,-especially those who had studied abroad or spoke a foreign language. Tens of thousands were put to death or disappeared. One high school in Phnom Penh was especially notorious as a prison and death chamber. Pol Pot officials apparently kept meticulous records of their victims including photographs. Some of those pictures have been developed and hundreds are now on display on the walls of the rooms. The haunting eyes of young and old, men and women and children, look out at you as they prepared to meet their fate.

No one knows for sure how many people perished during the Pol Pot years, but estimates suggest that a population of seven to eight million may have been reduced by one-third to one-half—one of the great human rights tragedies of our time.

This experience is directly relevant now to efforts to solve the food crisis. There is a severe shortage of trained personnel and administrators. Eighty percent of the 500 medical doctors in 1975 have been killed or disappeared. The medical school was closed and its library ransacked. In the hospital at Kampong Speu which we visited there were 485 patients, 200 beds, 13 nurses, and no medical doctor.

Public transport is virtually non-existent except for a few trucks carrying produce and carrying people to work in the field. The one locomotive on the railroad from Kampong Som to Phnom Penh can't run because of a missing part. There is no currency. Rice is the medium of exchange—or gold for those few who have some.

## HOUSE DOCTORS FROM IDEA TO IMPLEMENTATION

House doctors seemed an idea whose time had come. Since the FAS news conference with Robert Williams and Marc Ross, interest had grown in developing an energy conservation program which uses house doctors to diagnose areas of heat loss in buildings, recommend corrections, and then verify that the corrections are implemented properly.

### **National Energy Act**

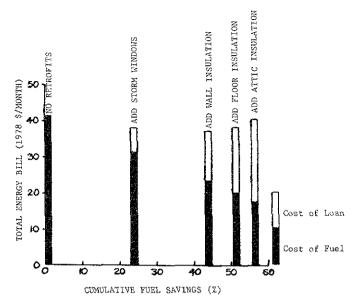
But while Congress has embraced the idea of house doctors, only two bills, sponsored by Senator Mark Hatfield and Representative Richard Ottinger, develop a comprehensive implementation program, and it is doubtful that either will be voted as law in their original form. This does not mean that bills which aim to encourage energy conservation in homes are lacking. There are a myriad of such bills, but most seek to encourage conservation merely by offering financial incentives without attempting to set up the structure which would carry out the implementation. While the intent of these bills is admirable, it is important to realize that an inadequate building energy conservation law is potentially more harmful than no law at all; if such a law does not produce the expected savings, it will only fuel the claims of many that energy conservation cannot pull us out of the energy crisis.

### Three Stage Program

A well thought-out building energy conservation program (hereafter referred to as a house doctor program) must be structured to carry each U.S. building through three stages:

- 1. DIAGNOSIS A house doctor or energy auditor must visit an individual building to determine where it is losing energy. Such diagnostic tools as infrared detectors and blower doors (which pressurize the building to locate sources of air leaks) can assist in this determination. The visit has two purposes: first, to plug as many of the discovered air leaks as possible; and second, to make suggestions for further improvements in the building, such as adding insulation. Plugging leaks will immediately reduce energy consumption by 5 to 15% and thereby whet the consumer's appetite for making additional changes. Suggesting further improvements can be attractive to the consumer if he or she can be shown that in the long run the improvements will cost less than the energy they will save.
- 2. RETROFIT The recommended improvements or "retrofit" must be made, preferably by an independent contractor to reduce conflict of interest. In older structures in the colder regions of the country, such a retrofit can reduce energy use by as much as 50%.
- 3. FOLLOW-UP The house doctor must return to the building to determine that the retrofit was completed properly.

The cost of a house doctor program is substantial, 150 to 200 billion dollars, but its implementation could result in saving 2.5 billion barrels of oil a day by the mid to late 1980s. The administration of such a program is crucial to its success and must adequately be addressed in a comprehensive piece of legislation. Unless most building owners and occupants can be reached and convinced to participate, the program will fail. For these reasons, the federal government and utilities are likely choices as administrators because they have existing access to building occupants, the former through income taxes, and the latter through utility bills.



The Economics of Saved Energy for a typical house.

Many believe that a house doctor program, even well administered, will not succeed unless the costs of the program are partially or wholly subsidized. While this may be true, offering financial incentivies without developing the structure of an energy conservation program will most assuredly ensure its failure. If the federal government were to administer a house doctor program, subsidization could easily be implemented in the form of grants, rebates, low interest loans, or tax credits. If utilities were to administer the program, subsidization could take the form of free service with the costs incurred passed on by increasing utility rates.

To date, this country has been sadly lacking in comprehensive legislation to encourage energy conservation in buildings. The National Energy Act of 1978 contains the only major legislation to encourage such conservation and its provisions are meager. It establishes a program to offer energy audits through utilities. Yet, the success of this program is doubtful because it is only the first stage of the necessary three stage program outlined previously, and there is little promise that the next two stages, namely retrofit and follow-up, will develop naturally. Specifically, this program does not allow auditors to make minor retrofits in the structures they examine. Thus, consumers see no immediate results from audits and are not likely to request them in great numbers nor to implement the recommendations of the auditors. And even if consumers implement the recommendations of the auditors, they have no means of verifying that the improvements were done properly or were effective.

The National Energy Act also contains a minimal financial incentive for implementing energy conservation on a building—a tax credit of up to \$300. This credit has several problems. First, it is not much of an incentive when the average energy conservation retrofit costs \$1500. Second, the tax credit does not go beyond single unit buildings. Most importantly, the nature of tax credits prevents them from reaching lower income households, who are in the greatest need of financial assistance and are often occupants of buildings in the greatest need of retrofit.

### **Proposed Energy Bills**

The Ottinger and Hatfield bills seek to correct the inadequacies of the National Energy Act. They would expand the current utility audit program to encompass the retrofit and follow-up stages now missing. Specifically, they would require utilities not only to offer audits to their customers, but also to provide independent contractors to implement the recommended improvements. In addition, utilities would be required to provide a second audit after the retrofit has been completed to verify that it was done properly.

The two bills would finance the program in different ways: the Hatfield bill would require utilities to absorb the cost by increasing their rates, while the Ottinger bill would require utilities to provide loans to consumers making use of the program. Both bills would also increase the financial incentives for implementing energy conservation in buildings by establishing grant or loan programs. While minor problems still exist in these bills, their passage would put this country on the road of a comprehensive energy conservation policy for buildings. Unfortunately, at this writing, the Hatfield bill has already been reduced to an optional pilot program, and the Ottinger bill may not even come up for a vote this year.

One other bill, sponsored by Senator William Bradley, has been introduced as a comprehensive building conservation bill. Unfortunately, it is very complex and considered by many to be unworkable. It would place the total burden of paying for energy conservation in buildings on utilities. Specifically, contractors would be hired to perform retrofits on buildings without any charge to the occupants or owners. The contractors would then be paid over the next 20 years by the federal government for the energy savings realized, and the federal government would be reimbursed by the utilities on the theory that it would be cheaper for the utilities to conserve energy than to produce it. At this writing, this bill has also been reduced to an optional pilot project.

The other bills in Congress address themselves only to increasing financial incentives for energy conservation. One, sponsored by Senator Paul Tsongas, would establish a Conservation Bank to help make available below-market, low interest rate and loans for the purchase and installation of energy conservation measures. Another, sponsored by Senators Edward Kennedy and John Durkin, would provide direct grants to residences and low interest loans to commercial buildings that retrofit for energy conservation. A third approach to encouraging energy conservation is found in a bill sponsored by Senator Robert Packwood, which would increase over current levels the amount of tax credit given for energy conservation retofits. Parts of all of these bills stand a good chance of passage.

To conclude then, it is important to enact a comprehensive law to encourage energy efficiency in buildings if we are serious about pulling ourselves out of the energy crisis with conservation. Such a house doctor law must first develop the structure that will enable every U.S. building to move through the three stages mentioned earlier—diagnosis, retrofit, and follow-up—and then, if need be, introduce financial incentives to encourage conservation. Only the bills sponsored by Richard Ottinger and Mark Hatfield seek to do this in a rational manner.

### HEALTH INSURANCE: CARTER VS KENNEDY

Last year the United States spent about \$18 billion on health services. If we do nothing, by 1983 we will be spending \$323 billion, or nearly 10 percent of the GNP. Yet despite the billions of dollars poured into our health care system, millions of uninsured and inadequately insured Americans are unable to obtain necessary medical services and many more Americans are destined to join this unfortunate group as costs continue to rise.

Today 24 million Americans have no health insurance and 60 million have inadequate coverage. 65 million Americans lack adequate protection against catastrophic illness and 50 million more live in medically under-served areas. For those without health insurance, increasingly expensive medical care is as inaccessible as it is for those living in rural areas lacking doctors, or those residing in inner city neighborhoods which either haven't a clinic or are served by a facility so grossly overcrowded as to effectively bar them from receiving the services they need.

In response to the increasing concern caused by skyrocketing health care costs, the half century old idea of comprehensive national health insurance is once again receiving considerable attention.

### **How To Ration Health Care?**

Ideally, national health insurance would cover Americans for all desired health care services. However, such a plan would presumably require far more money than Americans are prepared to commit to health care. Thus, the problem for any comprehensive insurance scheme is how to ration health care within the restrictions imposed by budgetary constraints.

Recognizing the seriousness of the situation, many legislators have written and introduced into Congress health insurance schemes which they believe to be economically feasible. This year the two major bills are President Carter's National Health Plan Act and Senator Kennedy's Health Care for All Americans

President Carter's bill, which is one of a group of bills that take a free market approach to solving the problems of the health care system, has three major components: (1) coverage guaranteed by the employer for full-time employees and their dependents; (2) HealthCare—a program to cover those not covered through their job or by private insurance; and (3) reform of the health care delivery system through reduced hospital capacity and the encouragement of competition among those who provide health care and health insurance—doctors, hospitals, insurance companies and Health Maintenance Organization (HMOs). (HMOs provide a given set of benefits for a fixed per capita cost).

Under Carter's draft bill, employers are required to provide eligible employees with a federally approved health insurance package offering a minimum range of benefits and limiting out-of-pocket expense to \$2500 per year. The employee must be given a choice of insurance plans, including at least one federally qualified HMO, and the employer must contribute equally to all plans which he makes available.

In order to make the employees conscious of health care costs, the bill further mandates that employees choosing less

expensive packages be rewarded through supplemented paychecks and requires those employees choosing plans with premiums *greater* than the amount to which the employers contribute, to pay the additional costs out of their own pockets.

Supporters of Carter's bill also contend that providers of health insurance will be forced into direct competition with one another for employer purchasers and that this competition will result in increased efficiency and reduced health care expenditures.

HealthCare, a new federal program subsuming both Medicare and Medicaid, would provide coverage for the aged, disabled, cash assistance recipients, and families and individuals with incomes at or below 55% of the poverty level. Those with incomes greater than this, whose expenses for covered services bring them down to this level, would also receive HealthCare benefits. In addition, those unable to find affordable coverage would become eligible to purchase HealthCare benefits.

Whereas the employer guaranted coverage permits employees to pay up to 25% of their premium costs, HealthCare would limit cost sharing for the aged and disabled to \$1,250 yearly and require nothing of those at 55% of the poverty level.

HealthCare would be funded through a variety of sources and would pay providers of health care on a cost-related basis. Net health care expenditures would be capped by the administration's cost containment legislation.

### Kennedy Bill Has Support

Senator Kennedy's National Health Insurance bill, introduced a few weeks prior to the introduction of the Administration's bill this September, has the support of a broad coalition of institutions including labor unions, religious organizations and social agencies. The bill, which essentially gives the government control over the health care industry, offers "universal" coverage. That is, unlike Carter's plan, which makes coverage contingent upon full-time employment or HealthCare eligibility, Kennedy's plan uses government regulated private insurance to provide comprehensive insurance on a common basis for all Americans regardless of income, age, employment status, or past medical experience.

HealthCare expenditures are limited by strict budget controls at every level—national, state, community, and even individual HMOs and insurers. The federal government would preside over negotiations on insurance premiums and hospital and doctor fee schedules, regulate private insurers and HMOs, determine the minimum range of benefits necesary for a federally qualified program, institute mechanisms to encourage competition, and set an absolute national ceiling on health care expenditures. In a nutshell, what the Kennedy plan does is promise every American a set package of health care services while at the same time striving to limit total national health care expenditures through regulation.

Working within a budget is designed to provide HMOs and insurers with incentive to provide health care as inexpensively as possible. Proponents of the Kennedy bill assert that this will "create incentive for efficiency and careful monitoring of claims, fee schedules and budgets." An insurer or HMO which justifiably exceeds budget limitations because of some unforeseeable event such as an epidemic is covered by a national contingency fund. However, if financial hardship is due to some

fault of his own, the insurer or HMO must suffer the consequences.

In addition to taking different sides on the free-market government regulation debate, Kennedy and Carter differ in other fundamental ways. Under Carter's bill, providers are still reimbursed for services and, unlike Kennedy's bill, there is no absolute limit placed on costs.

Kennedy's program does not make use of copayments (employee requirements to pay part of premiums or cost of services) or deductibles (the amount which must be paid out-of-pocket before insurance company takes over payment for services). Its proponents believe that copayments and deductibles have the undesirable effects of discouraging the use of preventative services.

Carter's plan, on the other hand, supports the notion that it is imperative to develop a cost conscious health care consumer. To develop cost consciousness, people must be required to pay at least a minimal portion of their health care bills.

Finally, to ensure that all Americans receive equal treatment, Kennedy's plan would provide each American with a card showing that he or she is entitled to receive care but not specifying the source of the funds. It is feared by Kennedy supporters that Carter's HealthCare system will foster the growth of another two-tiered system: one for the rich and one for the poor.

Although the bill would cost us approximately \$30 billion in GY1983, supporters of the Kennedy legislation claim that it would really *save* money in the long run. By assuming that health care costs would continue to increase exponentially absent the passage of some legislation, and by assuming that Kennedy's plan would indeed control health care expenditures as it claims, Dr. Isadore Falk of Yale School of Medicine states that by 1988 we would save \$38 billion by passing Kennedy's legislation and at least \$73 billion by 1990.

Unfortunately, not eveyone believes that the Kennedy plan will be able to live up to its promises. Many legislators do not think it wise to invest a large amount of money in a program which they are not convinced will save money in the long run. Furthermore, many do not believe that the government should, or could, regulate the third largest industry in this country.

### **Critics Have Proposals**

Some of the bill's critics have offered proposals of their own. Although the majority of these bills are likely to quietly fade out of existence, they are important nonetheless because with only a few exceptions they are outgrowths of the increasingly popular and influential ideas of Dr. Alain Enthoven of Stanford University.

Dr. Enthoven assumes that the health care industry can be made to respond to traditional market forces. He outlines programs designed to introduce competition into the health care sector by providing tax incentives which encourage employers to shop around for employee insurance plans. It is thought that encouraging this type of behavior in employers will force providers to compete with the resultant effect being an overall reduction in health care expenditures.

Critics of the Enthoven model claim that it is based on a false premise, and therefore, fundamentally flawed. According to Max Fine, Director of the Committee for National Health Insurance and co-drafter of the Kennedy bill, the health care industry will never respond to traditional market forces. It is not a traditional market; it is provider controlled. At one level, insurers and HMOs can exercise some control over the consumer because the average consumer is generally uneducated when it comes to what a health insurance program should cover. More importantly, the health care consumer—and here it might be better to use the word "patient"—cannot himself determine whether the tests, drugs, and procedures which his doctor orders are necessary. Thus, because to a large extent providers control demand, the health care system is not a free market system.

When asked what he thought it would take for the Kennedy plan to become a reality, Fine pointed out that history shows that major social legislation has only come into being when four conditions are simultaneously met: (1) a strong President leading the movement; (2) congressional leaders committed to the program; (3) major lobby groups and organizations making it their top priority; and (4) organized, strong grass-roots demand.

Thus, it seems it could be quite some time before national health insurance becomes something more than a political issue and we are left with time to reflect upon the two different approaches taken toward national health insurance.

### The Enthoven Model

The bills based upon Enthoven's model, including the administration's bill, support a free market approach to revamping the health care delivery system. Kennedy and his supporters believe that only through massive government regulations will we solve our health care woes.

It is not that Kennedy is ideologically opposed to a free market system; on the contrary, the Health Care for All Americans Act incorporates free market notions by encouraging competition wherever possible. Proponents of a regulatory approach simply recognize that bills embodying a free market approach leave many of our existing problems intact; they continue to leave many Americans without necessary health insurance.

### FAS PUBLIC INTEREST REPORT (202) 546-3300

307 Mass. Ave., N.E., Washington, D.C. 20002

**Return Postage Guaranteed** 

November 1979, Vol. 32, No. 9

☐ I wish to ren	ew membership fo	r the calendar y	ear 1980.	
☐ I wish to join	FAS and receive	the newsletter a	s a full member.	
Enclosed is scientist, law member.)	my check for 198 wyer, doctor or er	0 calendar year ngineer, but wis	dues. ( lam sh to become a	not a natural or social non-voting associate
☐ \$25 Member	\$50 Supporting	S100 Patron	☐ \$500 Life	\$12.50 Under \$10,000
<ul><li>Subscription</li></ul>	nonly: I do not wish	to become a me	ember but would	like a subscription to:
	☐ FAS Public In	terest Report —	\$25 for calenda	ır year
Enclosed is my tax deductible contribution of				to the FAS Fund.
	LE Please Pri	nt		
ADDRESS				
CITY AND STA	TE			Zip
PRIMARY PRO	FESSIONAL DIS	CIPLINE		

The Carter plan is a good example. While full-time employees and their dependents, current Medicare recipients and those making less than 55% of the federal poverty standard are guaranteed health insurance, others are left to fend for themselves. Many who cannot find affordable private health insurance are only *eligible* to purchase HealthCare; they are not automatically *guaranteed* HealthCare coverage.

Furthermore, although those who drafted the administration's plan have concluded that those with an income greater than 55% of the poverty level—let us say 60%—can afford to buy health insurance, this is very optimistic. And even if the near-poor could afford to buy health insurance, they might not choose to do so, leaving us once again with Americans unable to purchase needed medical care.

This is not to suggest that Kennedy's plan is the answer. It is subject to all the pitfalls that beset any large bureaucratic structure with a significant regulatory role. In addition, it promises *unlimited* health care services but allocates only *limited* funds to pay for these services. The obvious question is what happens when demand for guaranteed services generates costs which exceed the absolute government limit on health care expenditures? Are services rationed? Or is the budgetary limit sacrificed, defeating one of the primary goals of the legislation?

### How Bad This Crisis?

In closing, it should be noted that not everyone feels that our health care problems are significant enough to militate drastic change in the health care system. They argue that the best medicine in the world is practiced in America and that only a negligible number of Americans are unable to obtain access to excellent medical care.

Unfortunately, while it would be nice to believe that our best interests would be served by preserving the status quo, this is a difficult conclusion to reach. 50,000 Americans will be bankrupted by heavy medical expenses this year and another 7 million families will incur expenses greater than 15% of their incomes. Thus, while it might be true that things could be worse, things could certainly be much better.

Second Class Postage Paid at Washington, D.C.