

Modern technology gobbles up jobs

3060A

RAPID technological development is leading to unprecedented job re-trenchments worldwide, and the resulting unemployment crisis will be structural in nature and get increasingly worse in the foreseeable future.

This is the grim scenario portrayed by the renowned American social analyst Jeremy Rifkin, whose forthcoming book "The End of Work" will show how computerization, automation and bio-technology have already begun to eliminate millions of jobs.

Within a few decades, predicts Rifkin, hundreds of millions of people working in manufacturing, services and agriculture could be displaced, potentially causing massive social upheavals in both industrial and developing countries.

"We are fast moving into a world where there will be factories without workers and agricultural production without arms or farmers," Rifkin said. "Much of the global workforce could well be eliminated, replaced by information technology, robots, machines and biotechnology."

Rifkin is president of the Washington-based Foundation on Economic Trends and author of several best-selling books on environment and society, including *Entropy* and *Biosphere Politics*.

His current work is an attempt to answer the question why there is serious, persistent and growing unemployment in the industrial countries, although productivity and output have been rising. Rifkin found that this delinking of jobs from economic growth could be explained by the fast expansion of the information technology in both the industrial and service sectors.

And in the near future, the livelihoods of millions of farmers, particularly in developing nations, will be threatened by tissue culture and genetic engineering that can produce foods and fibres in the laboratory.

In industrial countries, human work is being systematically phased out as computers and information technology replace human hands and minds, forcing millions of blue- and white-collar workers into unemployment lines.

Rifkin quotes studies that predict that in the United States 90 million jobs out of the total 124 million workforce are vulnerable to replacement by machines. A recent Wall Street Journal article projects that 1.5 to 2.5 million American jobs could be lost each year for the foreseeable future. Out of 90 million private sector jobs, 25 million could be eliminated. The manufacturing sector is

fast eliminating human labour from the production process. Computer technology is also causing job loss in the service sector: in the past 10 years, 3 million white-collar jobs were eliminated in the US.

In agriculture, farm mechanization has already drastically reduced the farm labour force. Computerized robots are also now being used in farms. And soon, new plant-breeding techniques, particularly tissue culture and genetic engineering, will be able to produce substitutes for outdoor farm products in the laboratory. Hundreds of millions of farmers' livelihoods around the world are under threat.

Rifkin said the loss of jobs and persistent unemployment in the industrial countries is due mainly to changes in technology. "It is misleading to blame job loss on the shift of corporations from the industrial countries to the developing countries, as this is only a secondary factor, and minor compared to the elimination of jobs by technology," he says.

The present technological developments amount to a Third Industrial Revolution, according to Rifkin. The first industrial revolution (in the 19th century) was characterized by coal and the steam engine, the second (in the 1920s) by oil and the electro-dynamo.

Rifkin sees a fundamental weakness and contradiction in the new industrial revolution: "The technology is advancing so fast and productivity is rising, but as jobs are being lost, there are not enough people to buy the products. The capacity to produce will expand tremendously, but there is also a growing lack of purchasing power and effective demand. So there is overproduction and recession."

Within this analytical paradigm, Rifkin explains the Uruguay Round process (conducted under Gatt auspices) as a "market extension of the Third Industrial Revolution." Owing to the expanded production capacity of the big corporations, he says, they urgently require new markets to absorb their output and thus prevent or reduce the pressures of overproduction. The growth in Gatt's power and reach through the round would, the companies hoped, open up new markets and in new sectors to help overcome this threat of overproduction.

In Rifkin's view, liberalized markets cannot be a respite because worldwide the loss of jobs will create a lack of effective demand.

"The only way out of this growing jobs crisis is to eliminate work and not the workers," says Rifkin. He proposes a reduction of the working

week from the present 40 hours (in the US) to 30 hours, so that more workers will be employed. At the same time, the rate of pay should go up, although perhaps the average volume of pay may not increase.

He suggests a three-prong approach for society to deal with the problem. "We should have more people working, with each person working less hours."

Secondly, the benefits to the labour force should improve, with higher rates of pay and other benefits.

These two measures would enable a fair share of the benefits of productivity gain to accrue to the labour force.

Thirdly, with the increase in free time, people should be encouraged to participate in the social sector or the voluntary sector, being involved for instance in welfare, education, and community work. As an incentive, volunteers could be given tax deductions. The unemployed could be given a "shadow wage" or allowance.

The scheme could be operated by community-based citizen groups and facilitated by the government, which could finance it through higher taxes and voluntary contributions.

(Third World Network Features)