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PROCESSES OF GLOBAL ORGANIZATION: LEARNING FROM THE ERADICATION OF SMALLPOX

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Abstract

This paper analyzes the global eradication of smallpox, the first and the only completely successful global effort in disease eradication. Using a hypothesis generating case study approach, it is proposed that organizing for smallpox eradication required the creation of a transformational vision, bridging of physical dispersion, working with different world-views, and generating material and human resources. The specific processes employed in managing these four key elements are described. Research propositions are presented and implications for managing other global issues are discussed.

On 8 May 1980, the Thirty-third World Health Assembly adopted a resolution declaring that smallpox had been eradicated globally. This was one of the rarest instances of a completely successful global organizing export to date. A dreadful disease known to have completely destroyed civilizations since 12th century BC (Booth, 1985) was eradicated in about ten years by an unprecedented global effort that involved tens of thousands of people transcending barriers of religion, nationalities, and ideologies. A small project team of the World Health Organization (WHO), called the Smallpox Eradication Unit (hereafter referred to as the SEU), coordinated and managed this incredibly complex task. The smallpox success story is an example of large scale global organizing in its most innovative form. This paper is an attempt to analyze the unfolding of this remarkable event and theorize about processes of global organizing for large scale planned change.

OVERVIEW

Theorists such as Bronfenbrenner (1979) and Donald (1991) have discussed the evolution in human capacity to progressively organize, starting from the dyadic, through the intra-group, inter-group, inter organizational, to the global levels. To them, human capacity to organize globally represents an evolutionary capability. Yet, research and theory development on large scale global organizing processes have been minimal (Exceptions are Mohrman, et al, 1989; Post & Waddock, 1989; Waddock & Post, 1990; and Elmes & Wynkoop, 1990, who have examined large scale system change, however, not at a global level).

The need for understanding global organizing processes becomes particularly germane since as a world we are moving towards a 'global civic culture' (Boulding, 1988; Cooperrider & Thachankary, 1991). One direct manifestation of the new global civic culture is the emergence of a new species of organizations termed as 'Global Social Change Organizations' (GSCOs) (Johnson & Cooperrider, 1991; Cooperrider & Thachankary, 1991). These GSCOs have emerged in response to a series of imminent survival issues facing this planet and its species. They include population explosion, environmental degradation, the greenhouse effect, poverty, unemployment, human rights violations, and war (See Brown, 1984 - 92 for a comprehensive description of global

problems). The GSCOs are transnational non governmental organizations and have a different impact than social movements (Boulding, 1991). In contrast to popular movements that come and go depending on whether conditions exist for the mobilization of public opinion, GSCOs typically demonstrate long range temporal commitments in mobilizing innovative social and organizational arrangements to create human cooperation across previously polarizing and constraining boundaries (Cooperrider & Pasmore, 1991).

Representative GSCOs include the Global Hunger Project which operates in 152 countries and has enrolled more than six million people in its campaign, the Nature Conservancy that has created history by swapping land for debt in Latin America, Greenpeace, and the International Physicians for Prevention of Nuclear War (IPPNW) which in 1985, less than five years after it was born, was awarded the Nobel Peace Prize. Today the IPPNW has 72 affiliates in 69 countries, representing over 500,000 physicians worldwide.

The GSCOs, in effect, are also the forerunners to one of the most profound changes taking place in the world of business organizations, that is, their growing globalization (Bartlett & Ghoshal, 1991; Weick & Van Orden, 1990; Franke, Hofstede, & Bond, 1991). A computer search for articles published in organizational sciences and business journals under the term 'globalization' yielded 1723 entries for the period from January 1989 to July 1992 (UMI/ABI/INFORM, 1992). A review of these writings indicates that globalization is emerging as a societal trend and its influence on organizations and society at large is likely to increase many fold over the coming years.

Despite the intense focus on globalization both from the angle of GSCOs and business organizations, very little is known about the actual processes of global organizing. The emerging literature on GSCOs has largely focused on organizational characteristics and structural features of these organizations (Cooperrider & Thachankary, 1991; Johnson & Cooperrider, 1991). Likewise, the many conceptualizations of globalization in relation to business organizations view it as an opportunity (Reilly & Campbell, 1990), or a capacity (Tichy, 1990; Weick, 1990; Ruwe, 1990). For example, Reilly and Campbell (1990) see globalization as an opportunity to conceive, design, buy, produce, distribute and sell products and services across individual geographical locations or

organizational units. Or, globalization is the "capacity to treat the world as one market while paradoxically dealing with it as many culturally diverse merchants" (Tichy, 1990, p. 8). In other words, most definitions focus on the end product, globalization, rather than the process, organizing. In our review of the literature we could find no descriptive accounts of the processes of global organizing.

As Weick (1979) notes "organizing ...involves a grammar, code or set of recipes...and it involves arranging processes to cope with the equivocal nature of streams of experience." (p. 47). Accordingly, this paper is an exploratory attempt to provide some insights into the processes of global organizing drawn from the first and so far the only one hundred percent successful global effort in disease eradication, the elimination of smallpox. Our hope is that a study of the smallpox case will be able to extend useful learning's for the many GSCOs involved in issues of global importance, as well as generate insights for other organizations both profit and non-profit involved in organizing efforts on a global level.

The core assumption of this paper is that eradication of smallpox represents the best example of a process of global organizing for accomplishing objectives that benefited the whole world population. Hundreds of huge government departments and institutions, and above all, the giant organizational setup of the World Health Organization--known for rigidity and red-tapism--responded to the unique structural and task requirements of the SEU effectively. They showed an unusual degree of adaptability, flexibility and a remarkable willingness to change in an unprecedented manner. Until today, there is no other instance when so many organizations world wide were involved to accomplish a clearly defined single task that was agreed upon by all parties concerned.

In the following sections we will present a brief review of the smallpox case, elucidate our methodology, and then focus on the global organizing processes as evident in the eradication of smallpox.

THE HISTORY OF SMALLPOX ERADICATION

Though a precise time of the origin of smallpox does not exist, the disease is presumed to have emerged as a viral mutation during the Neolithic revolution, when the introduction of agriculture and the herding of cattle resulted in the creation of the earliest civilization (Booth, 1985). It was known in China in about 1100 BC and in Arabia during the sixth century. The skin rash of the Mummy of Ramses V of Egypt, who died in the 12th century BC was probably due to smallpox. From the 16th to the 18th centuries, smallpox was the most devastating disease in the world. In the 17th century, Lord Macaulay described smallpox as "the most terrible of the ministers of death...smallpox was always present--filling the churchyards with corpses". A century later, in 1796, an English physician, Edward Jenner, demonstrated that a harmless virus obtained from cows could protect humans against the smallpox virus. However, the disease continued to annihilate hundreds of thousands of people every year and by 1959, 60% of the world's population lived in smallpox infested areas. That year, a global eradication proposal was accepted by WHO, but did not produce any marked improvement. In 1966, a 10 year goal for the achievement of eradication beginning the following year was conceived by the general assembly of the World Health Organization (WHO). An SEU, under the leadership of Dr. Donald Henderson, a well known public health expert, was set up by the WHO. At that time, there were some 10-15 million cases of smallpox reported in 31 countries. Yet, thanks to the devotion and commitment of tens of thousands of health care staff in the endemic countries, facilitated by the extraordinary managerial and organizational skills of the SEU, the world was free of the disease in just over 10 years. The last case of smallpox was detected in Somalia in October 1977.

The global organizing that was the foundation for the eradication of smallpox was an instance of global social innovation. The Websters Unabridged Dictionary (1983) defines an innovation as an act of effecting a change in the established order, or introducing something new. The technology to eradicate smallpox existed 177 years before its eventual productive use (Fenner, Henderson, Arita, Jezek & Ladnyi, 1988), but only a socially innovative process of global

organizing could transcend the cultural, political, and geographical barriers to bring about the elimination of smallpox.

METHODOLOGY

We followed the case study method (Yin, 1984; Berg, 1990) in our efforts to make sense of the smallpox eradication project. More specifically, our approach could be classified as a "hypothesis-generating" case study. Per Berg (1990), this type of case study "is an open-ended investigation of a social system based on the presumption that this system has something interesting about it that has thus far remained unexplored or insufficiently explored." (p. 67). Elmes and Wynkoop's (1990) analysis of the Polish Solidarity Trade Union movement and Prasad's (1991) analysis of organization building in a Yale Union, are representative case studies of this type. The objective is to generate theoretical propositions based on the facts of the case for further empirical investigation.

Our investigation of the smallpox eradication effort relied on a number of primary and secondary data sources. Our primary data source was Dr. Donald Henderson, the chief of the SEU, with whom we held interviews. We also interviewed pediatricians, epidemiologists, and public health experts attached to a well known international health care research center. Our secondary data sources included a thorough documentation of the entire smallpox eradication process, which runs close to 2,000 pages (Fenner et al., 1988) and various medical and public health journals. The data from these different sources were analyzed for common themes. Special attention was paid to figure out how the process unfolded since the SEU started its work in 1966.

DISCUSSION

Processes of Global Organizing

Based on our analysis, we propose that global organizing for smallpox eradication entailed creation of processes to manage four key elements:

1. Creation of a clear transformational vision

2. Physical dispersion
3. Different world-views and
4. Generation of material and human resources.

However, we do not see these processes emerging in a linear sequential manner. Rather, we view these as issues to be managed simultaneously.

Creation and sustenance of a clear transformational vision.

The importance of having a clear vision for task accomplishment has long been understood (Bennis & Nanus, 1985; Locke, 1990). Large scale transformations especially require a shared transformational vision--a shared mental image of a desired future state (Collins & Porras, 1991; Elmes & Wynkoop, 1990). In the case of global organizing, the significance of a clear desired future state was well demonstrated by the SEU. Holding together a global alliance of diverse interest groups and countries was a tremendous task made possible by the clarity of its vision--the eradication of smallpox. There were no in-between stages such as partial eradication. The world would be either free of smallpox or not. It was thus an all-or none question. The clarity of the transformational vision also helped people to sustain a deep commitment towards its fulfillment. Specifically, we believe that a clear transformational vision was made possible through a process of invoking a frame which directed attention to and evoked images of an anticipatory reality. A shift in frame away from the means and attention to the ends allowed members to get in touch with this future desired state in clear terms. Further, we infer that this clear vision allowed for an "enactment of possibilities" (Weick, 1979) which paved the way for many innovative methods and approaches for the eradication of smallpox. These two processes are discussed next.

Invoking a frame which directs attention to and evokes images of an anticipatory reality.

"One of the key contributors to the success of the small pox effort was when we shifted our focus from vaccination to eradication" (Henderson, 1990).

The intensified small pox eradication program was launched on January 1, 1967 with a proposed goal of 10 years to achieve complete eradication. This was not too long a period given that some 10-15 million cases of smallpox were then occurring annually in 31 endemic countries covering a total population of more than one billion. The last endemic case of small pox occurred just 10 years, 9 months, and 26 days after this program began. The most noteworthy aspect about this achievement was that prior to this intensified program "a century and a half of vaccination had yielded only modest results" (Fenner et al. , 1988, p. 1346. Emphasis added). One of the critical reasons for the success of the new program was reframing the purpose of the effort from vaccination to eradication. In earlier attempts, the goals were operationalized as vaccinating as many people as possible.

This shift may seem like a semantic issue, yet it's effect was powerful. While vaccination was definitely the primary means of attaining the end goal, it was equated with an act and not an outcome. The term eradication gave a new meaning to the act of vaccination and linked it with an identifiable goal or outcome and made the task significant (Hackman & Oldham, 1980). The reframing of the purpose of vaccination as ultimate eradication conjured up images of a planet free of smallpox, whereby both the key players and the grass root workers could visualize the 'anticipatory reality' (Cooperrider, 1990).

This phenomenon of reframing can be understood under the rubric of "framing effects" (Anderson & Pitchert, 1978; Bazerman, 1990). In essence, framing effects suggest that how a situation is presented or phrased influences peoples' interpretations, perceptions, expectations and actions. Thus, two different frames of a similar situation may evoke different responses from individuals. For example, in the context of negotiations, research has shown that, often whether the decision maker is evaluating the prospects of gains or losses is simply a matter of the way a question is presented or phrased (e.g. "Is the glass half-full", or "Is the glass half empty?").

Invoking a new "frame" of eradication made it possible to create and maintain a clear imagery and vision of a planet free of smallpox in the minds of thousands of health workers and key government and political figures. This, in turn, created a vision driven system that incorporated end

values (a world free of smallpox) with instrumental or modal means of vaccination (Austrom & Lad, 1989). The SEU managed to sustain a focus all over the world that the objective was total eradication and the act of vaccination was the step leading to a planet free of smallpox. This new image generated excitement of a different possible end state and encouraged thousands of health-care workers to go the 'extra mile'. Fenner et al's (1988) 2000 page documentation of the story of smallpox eradication ('Smallpox and its eradication') is full of instances where bureaucrats and health workers went out of their way to get their job done.

From an 'enactment of limitations' to an 'enactment of possibilities'.

The shift in frame and the resulting anticipatory reality opened up perceptions of possibility, or rather, created an 'enactment of possibilities'. Enactment can be viewed as bracketing some experiences from the stream of events and swarm of experiences which surround organizations, to pay attention and give further meaning (Weick, 1979). The essence of enactment is that organizations often impose that which subsequently imposes on them, and the environments organizations face are acts of invention rather than acts of discovery. The basis of such bracketing rests in the frames and schema's of organizational members which direct what events should be paid attention to. With the clear vision of a world free of smallpox being the frame, the bracketing in the case of the smallpox eradication was one of paying attention to events in the environment, which would make this possible. 'Selection', an integral component of enactment, is the process by which the enacted meaning is made sensible by producing occurrences which correspond to the enacted meaning. That is, at this stage, the possibilities are realized through actions creating a self-fulfilling prophecy in itself.

The image of the anticipatory reality helped in diverting attention from an enactment of limitations and facilitated refocusing on possibilities. According to Weick, (1979) attributions and perceptions of limitations result from a "failure to act rather than a failure while acting." (p. 149). Organizations and individuals seldom recognize that their understandings of limitations are based on presumptions than actions--an avoidance of testing, rather than a test of skills. By an avoidance of

testing organizations come to the conclusion that constraints exist in the environment and limits exist as to possible responses. In essence, enactment of limitations is a process wherein "inaction is justified by the implantation, in fantasy, of constraints and barriers that make action 'impossible'. These constraints, barriers, prohibitions then become prominent 'things' in the environment. They also become self-imposed restrictions on the options that managers consider and exercise when confronted with problems. Finally, these presumed constraints, when breached by someone who is more doubting, naive, or uninformed, often generate sizable advantages for the breacher. (Weick, 1979, p. 149-150)

Prior to the successful efforts by Dr. Henderson's team, the enactment was one of limitations. People believed it was impossible to eradicate smallpox, and selectively sought information which could confirm this enactment. For example, an Italian physician, Dr. Timoni and an American physician, Dr. Mather described their successful inoculation program against smallpox in Turkey and the United States to the fellows of the prestigious Royal Society (UK) who could have played an influential role in legitimizing vaccination programs. Instead, the society refused to act on it, mostly out of a belief that the disease would not respond to vaccines. Similarly, a paper sent by Jenner disclosing the important discovery of the smallpox vaccine was not even accepted for publication and sent back by the Royal Society. Dr. Waterhouse, an enthusiastic supporter of Jenner, published the news of the discovery of smallpox vaccine in Boston newspapers in 1799, and vaccinated his own children to persuade the Inoculation Hospital of Brooklyn to inoculate others. However, all such efforts failed to change the mind-set of administrators and decision makers.

Even in more recent times, there was little scientific support for the concept of eradication. Convinced by the adaptive relationship between man and micro-organisms, the general consensus of medical experts was that disease eradication in general was an unattainable goal (Smith, 1934; Dubos, 1965). A well regarded medical scientist at that time, Dr. Rene Dubos, went to the extent of suggesting in a book ('Man Adapting') released just before the launching of the smallpox eradication project that such programs "will eventually become a curiosity item on library shelves, just as have

all social utopias". Such pessimism was further compounded by the failure at that time in eradicating hookworm and yellow fever (Fenner et al., 1988) despite intense and large scale efforts.

In 1953, five years after the establishment of the World Health Organization (WHO), it's first Director General Dr. Brock Chisholm made an attempt to persuade the World Health Assembly to undertake a global smallpox eradication program. After two years of debate and study, the 8th World Health Assembly in May 1955 rejected the concept as "unrealistic". Three years later, a soviet delegate to the assembly, Dr. Viktor Zhdanov, presented a comprehensive program for the eradication of smallpox based on the learning from the successful program of eradication in his country. Still, several key players in the World Health Assembly did not have enough faith that smallpox eradication was a feasible idea.

All these support the role of enactment in global organizing. As we have seen, enactment is a process of believing - selecting - seeking - acting - finding - and retaining social actors' beliefs. In enactment of limitations, key players sought and retained information that confirmed their belief that eradication of smallpox was unattainable. On the other hand, with the shift in frame from vaccination to eradication (enactment of possibilities), the SEU members sought and found several innovative ways to produce results that would validate the enacted meaning system. The anticipatory reality was also disseminated in the context of local actions raising an awareness of the impact fullness of such initiatives in contributing to the global end. For example, a novice in Pakistan with no training in the medical field developed a revolutionary vaccination method, called the jet syringe, which could vaccinate up to 1000 people in an hour. Similarly, several other innovative vaccination procedures were also developed (Fenner et al., 1988). For example, a system of weekly markets existed in a region in Bihar, India. In 1971, there were 44 such markets, each drawing people from 72 to 287 villages out of a district of 1905 villages. By surveying just 13 of such markets, significant facts about nearly 2000 villages were collected and ascertained (Morinis, 1980). Likewise, Basu and Khodakevich (1978) in India found that just in two searches some 300- 500 market visitors could be questioned to obtain reliable information about cases in

villages 10-20 kilometers distant. Assessment studies conducted later to evaluate the effectiveness of this methodology yielded surprisingly encouraging results (Khodakevich & Rao, 1978).

During the surveillance stage also the SEU used innovative methods. In Indonesia, for example, they developed an approach in which they would visit a school and question children, showing them the WHO smallpox recognition cards and pictures of affected people. Typically, information pertaining to a 10 kilometer radius could be obtained this way. When required, the teams also went directly to the households for searching, the magnitude of which was mind boggling. In India, for example, 3 million households in 107,000 villages were routinely visited following each search. Overall, the Indian effort, code named 'target zero' involved the participation of 150,000 field staff who were estimated to have visited 100 million households to contact 550 million people (Fenner et al., 1988; Booth, 1985). Nowhere in history an organizing of this magnitude had ever taken place. In some countries a 'rumor register' was kept in hospitals and health centers where people were encouraged to write the name and address of anyone they suspected to be having smallpox. Comparable creativity and innovativeness were shown in transmitting a sense of hope and excitement to governments of all types such as dictatorships, monarchies, communism and democracy that smallpox could be eradicated with their active involvement.

Managing physical dispersion

Dispersed organizing is a special kind of organizing where organizational actors are dispersed across a wide geographical location. Most of human organizing is 'local' or 'concentrated' (Louis & Sieber, 1979) in the sense that the process takes place in the physical proximity of humans in a given location. The eradication of smallpox is an excellent example for understanding dispersed organizing. For the SEU, the very nature of its mission fulfillment required that the organization members stay dispersed. Its members were spread all across the globe, yet they were connected to one another around a single mission, and their activities were coordinated from a central place, in this case the SEU office located in Geneva.

Dispersion in organizations is seldom researched. The single reference to dispersed organizations (Louis & Sieber, 1979) considers this as a "prototype of an unusual category of social structure" (p XI). Managing physical dispersion requires sophisticated mechanisms of control and decentralization, hierarchy as well as egalitarianism. We think at least four key processes may be identified that were effectively utilized in the management of dispersion during the global organizing for smallpox eradication. They are 1) trust, affirmation and development of local competence, 2) monitoring and immediate recognition of progress made by local actors, 3) maintaining a creative balance between standardization and customization of methods, and 4) creating a flexible central coordinating structure which is skillful in creating alliances and networks with local and/or global actors.

Trust, affirmation and development of local competence

A growing number of writers (e.g., Cooperrider & Srivastva, 1987; Weick, 1982; Conger, 1991) have been highlighting the value of affirmation and appreciation in managing the complexities of organizational life. The SEU felt that the people with whom they were working all across the world were capable, competent, and trustworthy individuals. The voluminous book mentioned earlier, 'Smallpox and its Eradication' (Fenner et al., 1988) is full of instances where this belief got translated into a strategy of mobilizing 'grass-roots for action' (Henderson, 1990). For example, local leaders and workers were trained to detect and report smallpox, and in some cases even to vaccinate. The SEU also arranged to provide training for the health care staff in various countries for vaccination and related activities. By the time the program was over, several thousands people had become skilled in primary health care and epidemiology.

The trust and affirmation also extended to the institutional frameworks of individual countries. The SEU did not invest their energy to critique the system or procedures (such as rigid bureaucracy) of individual nations, rather, it worked within the constraints of different political systems trying to make use of their strengths. 'Smallpox and its eradication' is full of examples where the SEU adopted creatively to the cultural, political and organizational peculiarities of a

great many nations. In most cases it meant creating symbiotic relationship with highly bureaucratized in-country networks. For example, public health officials in many places discovered that the WHO effort had rejuvenated overall health care delivery in their countries. Thousands of motivated health care staff learned about advances in primary health care from the helpful SEU staff. The development of such local competences was evident even in the case of manufacturing smallpox vaccine. In 1969, for example, Dr. Henderson and Dr. Arita convened a meeting at the end of which a step by step manual describing the method of manufacturing freeze-dried vaccine was developed, making use of the comments and contributions of participants from several parts of the world. At the time, the Soviet Union was the major supplier of the estimated 250 million doses of vaccine a year. Just four years later, 80 percent of the vaccine required was being produced in the developing countries affected by smallpox (Booth, 1985).

The affirmation of local competences also resulted in tremendous cost control and efficiency. Vaccines packed in multiple containers cost far less than the same individually packed, but because the vaccine deteriorated rapidly after the vial was opened they needed to be used up immediately. The local workers solved this problem by arranging to have a large number of children vaccinated at a time in one location by coordinating with school officials and village Heads.

Monitoring and immediate recognition of progress made by local actors

The SEU placed utmost emphasis in creating an efficient monitoring system to report cases and to maintain strict quality control. For example, clear standards were established for surveillance and containment that 75% of outbreaks should be discovered within 2 weeks of the onset of the first case, that containment of an outbreak should begin within 48 hours of its discovery and that no new cases should occur more than 17 days after the containment had begun. A 'Weekly Epidemiological Record' made freely available to the field staff provided a continuous update on the situation and was used as a major source of reporting by media.

Reward systems were instituted for the local population for reporting cases. For example, in India, a cash reward was announced whose value was successively increased at various phases during the eradication plan. Further, key stages in the global eradication program such as the certification of eradication in each nation, the occurrence of the last incident in a given region, etc., were well recognized, rewarded and publicized through ceremonial functions attended by key officials and political figures.

The mass-media was used creatively as part of the recognition process. For example, a series of articles were published in the New York Times by a well known physician touring India and Bangladesh which described the intensive efforts going on in these countries, resulting in a heightened interest in the eradication theme and further publications. Subsequently, accounts of the progress made in the intensified eradication campaign appeared prominently in newspapers and magazines throughout the world. Documentary films were made by the public broadcasting services in most countries and were shown before feature films in local theaters. Meanwhile, several countries also issued special stamps and commemorative medals.

This system of monitoring and immediate recognition of progress contributed to a phenomenon of "spreading activation" (Reder, 1983). A concept in cognition studies, "spreading activation", assumes a long-term memory structure involving concept nodes connected by relational links. When a specific concept is activated in memory by some form of stimulation, the activation spreads to related concepts via the relational links. This is an appropriate metaphor to capture the effects of the recognition and appreciation of the local population in smallpox infested areas. It acted as a stimulant for people in those areas to start showing tremendous initiative and extending the eradication notion to other diseases such as poliomyelitis and tuberculosis. The local people also started reporting cases of all kinds of illness with the result that the health care staff ended up treating people for various diseases at the same time.

The tremendous local activism prompted key government and public figures to bring in badly needed material and human resources. For example, in the industrial city of Jamshedpur in India, the business sector, the government and voluntary organizations got involved in a massive

smallpox containment program. All bridges and roads were barricaded and no one was permitted to pass through unless vaccinated. Trains were diverted to special platforms where every passenger was checked and those not already vaccinated were vaccinated (Bharucha, 1975).

Maintaining a creative balance between standardization and customization of methods

Before the SEU took over, monitoring the quality of smallpox vaccine in various countries was non-existent due to the absence of independent national testing centers. The SEU soon established a uniform and simple testing procedure which could be easily followed. At the same time, customizing to local conditions was equally important as standardization. For example, when health workers could not set up camps on their own (which was the WHO recommended standard procedure), they went to existing camps, such as the refugee camps setup in Ethiopia. Even when one hundred percent vaccination was achieved in an area, nomads would reintroduce the disease occasionally. Learning that the nomads would congregate at certain sites to graze their animals or to assist in seasonal harvest, the local eradication team utilized those rare opportunities to vaccinate them. Similarly, farmers were vaccinated during slack periods in the agricultural calendar when they were most available. Many others were contacted in special programs organized during religious festivals and as already noted, at railway stations, ferry crossings, and bus stations.

Creating a flexible central coordinating structure which is skillful in creating alliances and networks with local and global actors

Several researchers who have studied 'bridging organizations' (Brown, 1991) and inter-organizational networks (e.g., Gray, 1985; Whetten 1987; Cummings, 1984; Austrom & Lad, 1989; Trist, 1983) have commended that such alliances are characterized by a relative absence of central authorities interlinked with strong interdependence of key players. When the SEU was set up, they had 10 long years of mandate to accomplish the mission, the length of which was sufficient for the emergence of a traditional hierarchical organization under the imposing bureaucratic culture of

WHO. Instead, the SEU strove to maintain flexibility and adaptability by remaining an inter-organizational network.

The SEU also demonstrated qualities of an emerging strategic network called 'multi-organization enterprise (MOE). MOE is a form of network which is increasingly being used to respond to large scale societal concerns (Horwitch & Prahalad, 1982). Generally, the MOE is a collaboration of organizations in government, industry and other sectors intended to meet visible, large scale needs that are usually beyond the technical, financial, political and management capabilities of any single organization. An MOE often contains participating groups that exhibit different cultures, assumptions, priorities and goals. They are typically very large and require significant financial resources and employ thousands of people from different organizations. Yet, only a small part of each of the participating organizations is involved in the MOE. All these descriptions fit very well with the SEU, where member nations and their health care systems, having different cultures and priorities, pooled in their resources and worked effectively to fulfill an objective that no single nation would have been able to accomplish on its own.

Overall, the SEU was able to make the best use of networks that employed thousands of health workers from several countries, because the alliance structure allowed them sufficient flexibility. Smallpox was eliminated in successive stages and in each stage the team had the flexibility to expeditiously reallocate resources where the epidemic still prevailed. For example, In 1972, the civil war and creation of the new nation Bangladesh resulted in serious refugee problem--creating fertile sites for epidemic explosion. The SEU acted swiftly and reallocated resources to Bangladesh to deal with the crisis. Soon, Botswana was swept by an epidemic, followed by Iran and Iraq. Still, by 1973, only 5 countries remained with the epidemic. By quickly re-deploying (often using helicopters) thousands of staff and resources where they were most needed, the transmission of the disease was stopped in all but one country by 1975.

The cornerstone of this alliance with local government and related agencies was the high credibility the SEU enjoyed with them. The SEU was seen as engaged in a noble task of eradication

of a troublesome disease and therefore all cooperation was extended to them by the local network of organizations and governments.

Managing different world-views

One of the most complex aspects of global organizing is managing the different world-views held by people in different parts of the world. Campbell (1969), based on his classic study of mythology in different parts of the world, argued that people operate out of the various mythologies that are unconsciously a part of their mental make-up. Boulding (1956) maintained that what guides human behavior is subjective knowledge structures called 'images'. Expanding on this notion of images and mythologies, we posit that a world-view is the aggregation of the attitudes, values, beliefs, ideology and social norms that act as a filter in the social perception of the world. The world-views are what determine the social construction of reality. For example, two opposing world-views are individualism and collectivity. The individualism world-view assumes that human beings create their own destiny, whereas the collectivist world-view sees the individual as a product of his or her historicity and social conditions.

Our review of globalization literature tends to suggest that when it comes to dealing with a globalizing world, economy or business, one group of social agents are, in general, trying to change the world view of those they are coming into contact with. This is based on 'modernistic' (Clegg, 1990) assumptions that change is effected only when there is a change in one's world-views. A post modernist strategy would be not to change the world views of others, but to make use of them, or work with them (Thachankary & Pasmore, 1992). The smallpox eradication story is probably the best known instance where the latter was done. The SEU team had to work with a multitude of cultures and belief systems in different parts of the world. In many cases, the world-views appeared to directly conflict with the intent of vaccination. Yet, the SEU's strategy was to work with those world-views than attempt to change them. We believe that the SEU's creative utilization of appropriate local cultural beliefs and practices was one of the key processes used for managing different world-views.

The SEU's appreciation of other cultures is found in the way they dealt with several myths and Gods associated with smallpox. In China, T'ou-Shen Niang was the goddess of smallpox since the 11th century. In Japan, a red picture of Tametomo, a 12th century hero who was reputed to have thwarted a smallpox demon, was often hung in the rooms of smallpox victims to aid in the recovery. In Africa, a smallpox deity called Sopona was worshipped from the beginning of 18th century. In India, 'Shitala Mata' has been an Indian folk Goddess of smallpox since the 18th century (Nicholas, 1981). She was represented as riding on a donkey with a basketful of grain on her head. In one hand she had a pitcher of water and in the other a broom. The belief has been that when she shakes her head, the grain that spills turns into a smallpox pustule. The victim survived if she cleaned the spilt grain with water, but did not if she used only the dry broom (WHO Chronicle, 1979). To benefit from this religious and cultural belief, the SEU led teams created hundreds of large posters where the water in the Goddess hand was replaced by a large syringe containing the vaccine, and placed them very prominently in rural areas.

The SEU made every effort to incorporate such cultural and religious belief systems in its mass campaign to encourage vaccination and reporting of cases. This was particularly important since in many countries the indigenous system of medicine advocated practices that interfered with the SEU program. Yet, SEU's strategy was not to convince people that their local knowledge was unscientific or unsound, but to present vaccination as an addition to what they were already doing.

This may be seen as very good example of a post modernist approach to globalization. In a modernist perspective, the SEU would have imposed its own 'grand narrative' (Lyotard, 1984) of disease eradication all across the world. This would have involved utilizing a single standard procedure and methodology irrespective of the peculiar geographical and cultural conditions. Instead, we see that the focus was on 'local narratives' (Lyotard, 1984) whereby the SEU effectively utilized whatever cultural practices pertaining to people's beliefs about smallpox.

Generating material and human resources

Global organizing requires mobilizing and utilizing resources, both human and materials, in large proportions. The sheer physical dispersion demands that people and goods be available wherever and whenever they are needed. This can be made possible only with the allocation of money and materials. Most of the countries where smallpox was an epidemic were poor and underdeveloped. The WHO and SEU had thus the unenviable task of generating most of the badly needed resources from richer nations. Three processes which enabled generation of material and human resources are particularly worth mentioning. The first entailed a continual process of raising awareness of our global interdependence to all actors. The second was the SEU working with an awareness that the eradication effort was embedded in the larger context of the overall wellness of humankind and making sure that this consciousness was manifested in its actions. And the third was employing innovative methods including some political strategies to generate commitment and consensus from key interest groups. We discuss the three processes briefly below.

Raising awareness of our global interdependence

Earlier, several countries undertook their own vaccination programs independently, with the anticipation of making their countries free of smallpox. Some of them temporarily succeeded in it. However, the disease was re-introduced into these countries from outside by travelers. The SEU helped such countries grasp the fact that only complete global eradication rather than national or continental eradication would help them in the long run. In a way, the smallpox case demonstrated vividly the notion of global interdependence to all countries and made collaboration between 'strange bedfellows' possible. This understanding greatly helped in generating the badly needed resources.

Working with an awareness that eradication efforts are embedded in the overall wellness of humankind

The realization of the SEU that the eradication effort was just one facet of an on-going attempt to enhance the overall wellness of human kind was crucial for various world bodies and countries to commit the material and human resources needed to carry out the eradication program effectively. There are numerous examples of how the SEU teams extended themselves beyond merely the domain of smallpox. They saw the eradication of smallpox as just one facet of a larger purpose, "the upliftment of humankind" (Henderson, 1990, personal communication). For example, the SEU team provided to the country networks not only the smallpox vaccine but also other vaccines, such as BCG and DPT, and assisted with the transport of personnel and supplies for other programs. In addition, thousands of health-care workers were trained in administering vaccines and related procedures. Further, these efforts were not just limited to eradication of diseases only, but to other aspects of local development. For example, during the intensive surveillance program in Bangladesh in 1973, the eradication team also evaluated the availability and utilization of tube wells in rural areas, contraceptive pills, and public awareness of family planning methods and rural health centers (Jorder, Tarantola, & Tulloch, 1980). In the process, the SEU team gained the trust, support, commitment and cooperation from people.

There is enough evidence to suggest that both the SEU and the local governments had began to see the smallpox eradication program as a test case in large scale organizing for disease eradication and human welfare. It was recognized for a long time that social problems exist not because of the absence of a technological know-how, but because of cultural, political and economic barriers. As we have seen, the smallpox vaccine was in existence over 170 years before its eventual utilization. The smallpox eradication story has since become a model for many global disease eradication programs of WHO and local governments (this will be elaborated in a later section). The competence and skills acquired by thousands of health care workers in different parts of the world has been put to effective use in implementing this resolve.

Innovative strategies for generating commitment and consensus from key interest groups

The SEU employed strategies such as creation of local and international forums and arenas of large audiences for influential parties to publicly proclaim their commitment. The SEU team showed amazing political and cultural sensitivity and acumen in dealing with an unprecedented multitude of power structures, hierarchies, ideologies and political systems in different corners of the world (Fenner et al., 1988). They were careful not to impose their ideological views on host governments. Instead, political commitment was obtained by convincing individual governments of the potential impact of eradication. This was supplemented by an ambitious educational campaign on the importance of vaccination which generated a great amount of awareness and momentum in the public mind, with the result that politicians had no choice but to support the campaign.

Effective use of the media also helped direct attention and gain commitment from appropriate sources. An accidental outbreak of two smallpox incidents from laboratory stored smallpox virus in Birmingham, UK generated world wide press coverage, which in turn helped focus attention on complete eradication. At the international level, the SEU's good rapport with the Soviet delegates resulted in the diplomats assuming the role of informal sponsors of the eradication program. During the peak of that Cold War era, the soviet delegates kept up the pressure on the World Health Assembly to keep the program going in full swing.

The SEU also created an effective process of obtaining a public proclamation of commitment from key players. In the World Health Assembly, all countries declared their commitment to make the eradication program a success, which included committing both material and human resources for the SEU and pledging to work collaboratively with it. Having made such public proclamations, which were well publicized by the international media, most country governments were morally and politically committed to fulfill their promises.

SUMMARY

We present the key learning's from our hypothesis-generating case study of the smallpox eradication in the form of the following theoretical propositions. Our intent is both to summarize our learning's on processes of global organizing as well as encourage future empirical investigation.

Proposition 1a. Creating and sustaining a transformational vision for successful global organizing involves invoking a frame which directs attention to and conjures images of an anticipatory reality.

Proposition 1b. An image of the anticipatory reality creates an 'enactment of possibilities' and paves the way for generating innovative methods towards goal realization.

Proposition 2. Managing dispersion for successful global organizing entails:

a) trust, affirmation and development of local competence,

b) monitoring and immediate recognition of progress made by local actors,

c) maintaining a creative balance between standardization and customization of methods and

d) creating and maintaining a flexible central coordinating structure which is skillful in creating alliances and networks with local and global actors.

Proposition 3. Managing different world-views for successful global organizing requires understanding and creatively utilizing appropriate cultural beliefs and practices.

Proposition 4. Generating material and human resources for successful global organizing requires:

a) communicating and raising awareness of our global interdependence to all actors,

b) maintaining this awareness that it is embedded in the larger context of the overall wellness of humankind, and

c) using innovative methods for generating commitment and consensus from key interest groups.

IMPLICATIONS FOR GLOBAL ORGANIZING

Organizing efforts to the magnitude involved in the eradication of smallpox were previously unknown and its success brought about a change in the established global order, creating new international understanding and cooperation. In addition, a new awareness that primary health care has more to do with prevention rather than treatment emerged, which highlighted a proactive rather than a reactive side of health care delivery. New hope now exists for the eradication of many other diseases such as poliomyelitis, measles, rubella, mumps, hepatitis B, Hemophilus influenza-B and meningococcus for which vaccines already exist
(Peter et al, 1991), and possibly AIDS once a vaccine is available (Henderson, 1990). Above all, it showed for the first time in human history that almost the entire population of the world could be reached for bringing about social changes.

The propositions stated in this paper clearly convey the implications of smallpox eradication to other global organizing efforts. In fact, some of the learning's from smallpox eradication have already been utilized in other disease eradication efforts. For example, in 1986, the 39th World Health Assembly approved a plan for the global eradication of dracunculiasis. Even before that, in 1977, the 30th World Health Assembly created an expanded program on immunization in order to provide six vaccine antigens to children throughout the world by 1990. Dr. Henderson (1990) called this "little known revolution in child survival" which has begun and now extends throughout the Third World. The 'revolution' has helped provide children throughout the world with vaccines against poliomyelitis, measles, tetanus, whooping cough, diphtheria and tuberculosis. As a result of similar efforts, poliomyelitis in the Western Hemisphere has virtually vanished (Henderson, 1990). A program has already begun to eradicate the poliomyelitis throughout the world by the year 2000 as per a resolution of the World Health Assembly in 1988 (Wright et al, 1991).

Despite the success of the smallpox eradication program, its transferability to similar problems belies certain aspects we have not considered in this paper so far. We could consider at least two factors:

Level of issue complexity.

Though smallpox was a global problem, it could be conceptually grasped as a single causality. In other words, once a person was vaccinated, she/he would attain life-long immunity against the disease. The same cannot be said about many other global problems. For example, eradication of hunger is a more systemic, multiple causality problem. Simply stated, hungry stomachs will have to be fed everyday, and not just once. That would imply helping to generate self-sustaining agricultural and economic systems which in turn requires developing infrastructure, which ultimately need infusion of capital, which may have to be borrowed or generated internally. Eradication of hunger, therefore, necessitates work at different levels of causality. The eradication of smallpox indeed was a complex process, yet its realization appeared more realistic than eradication of hunger.

Technological feasibility

Technological feasibility was yet another aspect that made the eradication of smallpox possible. The vaccine could be stored in room temperature which was a crucial requirement in most of the affected countries where temperature would soar above 110 degrees. Further, the disease was easily recognizable even by children. As mentioned earlier, children were instrumental in reporting smallpox incidents. Also, just one vaccination was enough for life-long immunity. Above all, there were no intermediary hosts in the transmission of the disease.

Technological feasibility for eradication has not been promising for a good number of other infectious and contagious diseases. Malaria is virtually impossible to eradicate since that would involve annihilating mosquitoes from this planet. In other cases, like AIDS, the recent discovery of AIDS-like symptoms in people who did not test HIV positive have thrown the research efforts for the development of a vaccine into some confusion. Further, mounting evidences are accumulating to suggest that the AIDS virus is producing its mutant varieties that are resistant to drugs like the AZT.

Similarly, though technological advances have made the prognosis of many bacterial infections like tuberculosis very promising, the recent findings that many of these bacteria have developed drug resistant forms are disturbing.

In spite of these limitations, the domain of potential applications may be extended to other global issues. The challenges we face have been recorded in many places (e.g., Brown, 1984 - 1992; Meadows, 1972; 1992) and include such problems as unbridled population growth, depletion of natural resources, tropical deforestation, loss of biological diversity, global warming and depletion of the ozone layer, chronic hunger and malnutrition and the potential for nuclear accidents. A recent special issue in Time magazine (Beyond the year 2000: What to expect in the new millennium, Fall, 1992) authoritatively highlighted the dangers facing humankind in times ahead. Of special concern is the prediction that at the present rate of growth, the human species may double its number to 11 billion by the year 2050. "If the worst occurs", wrote one of the authors, "countless millions will become environmental refugees, swamping the nations that tried to conquer their soil, water and forests...The world in which they survived would consist largely of deserts, patches of tropical forests, eroded mountains, dead coral reefs and barren oceans--all buffeted by extremes of weather" (Lindern 1992; p. 64). Such a possibility has also been articulated by Meadows, et al (1972) who wrote 20 years ago a landmark best seller called the 'Limits to Growth'. They warned (in 1972) that if the trend in population growth and resource depletion continued unchanged, the limits to growth on this planet would be reached sometime within the next 100 years.

What learning's from the eradication of smallpox can be applied in dealing with such a gloomy picture regarding the future of humankind and this planet?

Writing in 'Beyond the Limits' (1992), conceived as a sequel to the 'Limits to Growth' (1972), Meadows et al have argued that a sustainable society is still technically and economically possible. What is required, according to them, is a global organizing effort. 20 years ago, U Thant, the then Secretary-General of the United Nations echoed a similar theme when he warned that "members of the United Nations have perhaps ten years left in which to subordinate their ancient quarrels and launch a global partnership." (Quoted in Meadow et al, 1992. p. 12. Italics added)

Let us take the specific issue mentioned above, population explosion, and see how efforts for a global organizing and partnership to tackle the issue could potentially benefit from the lessons learned in the eradication of smallpox.

World population has been growing exponentially since the beginning of the Industrial Revolution. At a population growth rate estimated to be 1.7%, more people were added to the world in 1991 than in any year before, yet surveys (in 1987) confirm that half the 463 million married women in developing countries outside of China want no more children. Millions more would like to delay their next pregnancy (Population Crisis Committee, 1987). Yet, effective contraceptive techniques and facilities are not available to a significant portion of the people who actually need them (Jacobson, 1992). Thus, a clear, unmet need for family planning exists. What is lacking may be a global organizing effort similar to the kind one witnessed in the eradication of smallpox. Let us look at some of the propositions suggested earlier and see their relevance for family planning in containing population explosion.

Globally organizing for family planning must begin with an enactment of possibility based on images of an anticipatory reality. Sadly, this has been consistently missing. Few countries have put family planning and reproductive health care at the top of their agendas. Yet, in countries where partial success was achieved in containing the population explosion, this enactment was evident. For example, in the early 70s, India embarked on a massive family planning program with a slogan urging couples to have only two children. The program met with some initial success, though the momentum was soon lost for various reasons. To date, we have seen more rhetoric and less action on the part of the international community in dealing with the population explosion crisis (Jacobson, 1988; 1992). No articulation of an anticipatory reality of a world with a zero population growth has ever been made by the United Nations or by a world leader. On the contrary, just as in the case of smallpox before the SEU took control, there have been more doomsayers than prophets of hope.

Creating and maintaining a central coordinating structure (something similar to the SEU) skillful in creating alliances and networks with local and global actors is urgently needed. A wide variety of family planning methods are available in different parts of the world. Advances in

medical technology have created a sophisticated array of birth control devices, but their availability is mediated by a complex set of factors including political considerations (as in the United States) and cultural resistance. Even when they are available, the effective use of them is dependent on the expertise and competence of local health care personnel who administer them. Sub-Saharan Africa faces the highest fertility rates in the world. And between 1987 and 2007, five countries--Brazil, China, India, Indonesia, and Mexico--will account for 37 percent of total world population growth (Population Research Bureau, 1987). For any population containment program to work in these places, the local health care professionals will have to be trained in managing the family planning methods. Since family planning is a very private matter, the local para-professionals who have a working knowledge of what methods will work in a given region will have an advantage in convincing couples of the need to practice an appropriate method. Village-based paramedics and midwives can teach women the benefits of birth spacing, breast feeding, prenatal care and contraceptive use (Jacobson, 1988). All these can be done by customizing various standardized procedures to the specific needs of a region. Time and again, it has been shown that most of the methods promoted by the WHO and different UN bodies would have to be individually tailored to fit the material and cultural needs of the people in different societies.

The value of immediate recognition of the progress made by local actors in family planning has already been evident. China, for example, offers substantial pay increases, better housing, longer maternity leaves, and priority access to education to one-child families. In a pilot program in Thailand, loans of $2,000 were made available to applicants practicing family planning. In addition, members of the loan fund received shares and dividends on the basis of the contraceptive method used; more effective methods earned higher dividends. As the level of family planning in a village increased, so did the total value of the loan granted (Weeden et al, 1986). At the end of two years, loans adding up to $72,000 were used up. During that period, contraceptive use in the experimental villages rose from 46 to 75 percent as compared to the control villages, where it moved from 51 to 57 percent.

Appropriately utilizing cultural beliefs and practices will be extremely necessary in managing the different world-views of people regarding family, conception and contraception. There is universal agreement that the biggest obstacle facing successful family planning programs is in getting people to try an effective method against the backdrop of several cultural taboos, values, practices and myths. Until a decade ago, most African governments opposed family planning programs on the grounds that curtailing population growth may limit the region's ability to realize its economic potential (Jacobson, 1988). In many other parts of the high fertility regions, children are seen as economic resources who later will become bread winners for the family. In many African countries, prices paid for brides in expectation of high fertility increase the wealth of a woman's family. In a research done in Kenya, Frank and McNicoll (1987) noted that since men (they studied) carried little responsibility for basic subsistence of the family unit, the cost of raising a large number of children were not known to them. There are also innumerable religious and cultural beliefs against adopting family planning in all the populous regions. In many cultures, for example, the diaphragm is considered undesirable, because women are uncomfortable with inserting it. It may also be impractical where water for washing is in short supply. A global organizing effort in favor of adopting contraceptives should be able to use the local values and customs in favor of using the most appropriate method.

Raising awareness of our global interdependence and appreciating that it is embedded in the larger context of the overall human wellness will obviously be essential in generating the necessary material and human resources for getting people together from different parts of the world. Population explosion is not a regional or national problem. Ramifications of overpopulation readily spill over to neighboring countries and ultimately to the whole planet. A chain reaction affecting the whole world is set in motion due to overcrowding. Depletion of natural resources, deforestation, crowed cities, unemployment, etc., are intimately related to population explosion. According to Jacobson (1988), family planning is among the most basic of preventive health care strategies, though it is seldom seen as such. "Encouraging fewer and safer births among women in developing countries will reduce unacceptably high rates of maternal mortality from complications of childbirth

and abortion. A fertility rate reduction of 25 - 35%, resulting from more widely available family planning, would also lower maternal mortality by one fourth (Winikoff & Sullican, 1987). Moreover, by distributing condoms and increasing the public's understanding of reproductive health issues, family planning programs can help control the spread of AIDS, "a major threat to Third World health and economic survival" (Jacobson, 1988; p. 156-157).

In addition to having the potential to contain the population explosion, learning's discussed in this paper are also applicable to other large scale organizing efforts, both at organizational and global levels. For instance, the value of developing local competence in organizing is now part of both organizational change and international development literature. In large scale organization change efforts, consultants, researchers and change agents are all in agreement that the so called 'expert' model of change, where external agents determine and manage the change process, is no more suitable (Ledford, Mohrman, Mohrman, & Lawler, 1989). Most such 'top-heavy' paradigms of change efforts accomplish only short term results. Just as in the smallpox story, a relatively permanent organization change takes place when there is an ownership of the process among those who are affected by it (Brown & Tandon, 1983). In global change efforts too, the same trend is evident (Cooperrider & Pasmore, 1991; Galli, 1992; Bloom, 1992). Greenpeace, for example, trains local volunteers in activities that were previously undertook by personnel from central Greenpeace offices. The Nature Conservancy, a highly successful globally oriented conservation organization that manages to acquire ecologically important land, is actively trying to train its local volunteers and activists in South America. Major international development agencies such as the United States Agency for International Development, the Canadian Agency for International Development etc., have announced significant policy changes whereby the onus of development is shifted to the local participants in different parts of the world. Finally, Galli, Rudebeck, Moseley, Weaver, and Bloom (1992) have developed a new conceptualization of development where the idea of progress itself is negotiated by the local actors. Coming out of the post modernist debate (Gergen, 1991) such approaches argue that we need to move away from the modernist grand

narrative of progress (Lyotard, 1984) and define it exclusively as making use of the cultural and economic realities of the local populace.

The success stories of several Global Social Change Organizations illustrate the value of maintaining a balance between standardization and customization of methods. To give an example, the Institute of Cultural Affairs, a well regarded human development organization with a global mission, started out from the United States with a universal model of development, but as they came in contact with diverse cultures in different parts of the world, their standard model of development was greatly modified or customized in order to incorporate the specific socio-economic realities of each location (Srivastva, Cooperrider, Thachankary, and Tian, 1989).

Yet another learning from the smallpox case study, the importance of utilizing appropriate cultural beliefs and practices is most evident in the globalization of businesses (Franke, Hofstede & Bond, 1991). As firms become multinational, they are exposed to tremendous differences in the philosophy and practice of doing business. Experiences of American managers exposed to Japanese, Korean and Taiwanese cultures, or those of Japanese automobile company executives managing plants in North America (for example, Tung, 1991), bear testimony to the value of what the WHO learned in the process of eradicating smallpox.

The globalization of business also reveals how interdependent the world community and markets are, no matter whether it pertains to financial markets, manufactured goods or trade conflicts. It is no more easy to determine whether an automobile is domestic or import due to the complex geographical dispersion in manufacturing, assembly and servicing of products (Reich, 1991).

The awareness that global organizing is embedded in the larger context of the overall wellness of humankind (and the planet) is crucial in holding together global coalitions and alliances. A sizable number of organizations with a global mission such as the International Physicians for the Prevention of Nuclear War (IPPNW), Amnesty International, Save the Children, the Nature Conservancy and Greenpeace have been successful in organizing effective and sustained actions based on this belief. They overlook differences among themselves in order to transcend national

boundaries and articulate the significance of collective action for the common good of all people (Cooperrider & Thachankary, 1991; Johnson & Cooperrider, 1991).

The eradication of smallpox is a stellar example of the old adage, "where there is a will there is a way". The result was not just eradication of one of the most dreaded diseases from the face of this planet, but also the creation of a story in global interconnectedness and planned change that could be cherished for the times to come.

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