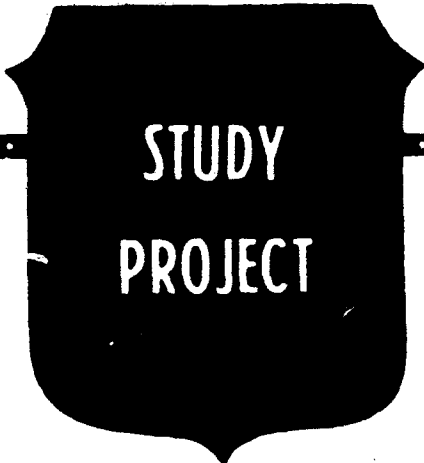


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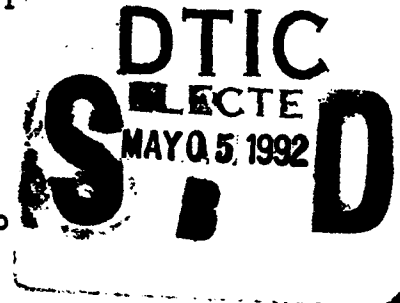


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ARMY VETERINARY SERVICE ROLE IN
LOW-INTENSITY CONFLICT

BY

Colonel Gary L. Stamp
United States Army



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ARMY VETERINARY SERVICE ROLE IN
LOW-INTENSITY CONFLICT

AN INDIVIDUAL STUDY PROJECT

by

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INTRODUCTION

"Terrorism in Latin America is basically rooted in economic and social inequality that can only be improved by providing a broader and more equitable access to economic resources and the benefits they imply (health, education, housing, stability, security and so on)."¹ This comment by a Chilean military officer was his observation on the theory of low-intensity conflict (LIC) as it relates to Latin America (LA). Certainly, LIC is not a spectrum of military activity that is confined to LA. It is a term, however, used to describe the type of hostile confrontation between groups anywhere in the world that is most likely to occur now and in the foreseeable future. General Woerner, U.S. Southern Command, CINC (Ret), preferred to apply the term "high probability" instead of LIC when discussing the potential for warfare in his theater of responsibility.²

What then is LIC? Terminology widely used, and often misunderstood, it is defined by the Joint Chiefs of Staff as:

Political-military confrontation between contending states or groups below conventional war and above peacetime competition among states. It frequently involves protracted struggles of competing principles and ideologies. Low-intensity conflict ranges from subversion to the use of armed force. It is waged by a combination of means employing political, economic, informational, and military instruments. Low-intensity conflicts are often localized, generally in the Third World, but contain certain regional and global security implications.³

This vague and broad definition suggests that conflicts, above peace and below total war, between opposing groups, may take many forms and have a variety of root causes.

Geography, history, politics, economics and social inequality have created conditions for instability and insurgency in many regions of the Third World. This certainly is the case in LA where poverty, malnutrition, inadequate (or nonexistent) health care, illiteracy and inept governments invariably contribute to very volatile and threatening situations. These situations are characterized by fetal, unstable democracies, struggling for survival and world identity. Government sustainability and legitimacy depend heavily on its ability to provide basic services to its people. A government's competence to provide health care and an adequate standard of living provide a foundation for nurturing democratic values.⁴

One of the United States' strategic objectives is a stable and secure world, where democratic institutions of political and economic freedom, and human rights can flourish.⁵ Any strategy to achieve this objective must address the human development issues of health, malnutrition and poverty.

This paper will discuss the role that medicine, specifically veterinary medicine (VM), plays in the military response to LIC using Latin America as the backdrop. The focus will be on veterinary capabilities, experiences and effectiveness in support of the human development aspects of LIC. Medical doctrine has been produced and principles for medical operations in LIC have been

articulated in FM 8-42.⁶ The veterinary support portion of that doctrine will be briefly reviewed as it has been aligned against the four broad operational categories of LIC--counterinsurgency/insurgency, combatting terrorism, peacekeeping operations, and peacetime contingencies. The primary purpose, of this paper, however, is to present a clearer picture of VM involvement (past, current and potential) in nation assistance (NA) programs in Latin America.

Various LA health care problems will be highlighted to relate the seriousness with which they impact on local, regional and hemispheric stability. Although efforts of the Army Veterinary Service (AVS) applied to these health care problems in the form of civic action and nation assistance missions have been significant, the overall value has been questioned.^{7,8} Findings and analysis of VM programs based on after-action reports, MACOM staff assistance trips and a recently conducted AVS "Process Action Team" meeting on LIC, will be presented. They suggest much can be done to improve the return on the AVS investment in Third World NA programs.⁹ This paper will develop and support the premise that veterinary medicine has been an underutilized and misutilized military medical component of nation assistance programs in Latin America.

BACKGROUND

The United States LIC policy recognizes that indirect, rather than direct, applications of U.S. military power are often the most appropriate and cost-effective ways to achieve national objectives. The principal U.S. military instrument in LIC is security assistance, which may take the form of training, equipment, combat support, and combat service support.¹⁰ Military medical assets (including veterinary) have been accepted as valuable combat service support components in responding to the myriad of threats in the LIC environment. Military medicine is a necessary and relatively noncontroversial means of employing military assets in LIC, whether it be providing health care to U.S. forces, projecting U.S. presence, or in assisting friendly governments.¹¹ Medical operations in support of LIC have been employed extensively in the past and continue to be today.

Of immediate concern is the effective application of U.S. medical resources to the looming Latin American health crisis (with its related conditions) that threatens stability of the Western hemisphere. It is in the United States' best interests to assist and support the countries of Central and South America in controlling the disease conditions devastating their populations. Unfortunately, mechanisms of medical support as applied to the human development aspects of LIC, such as civic action and Military Civic Action are drastically impeded by complex regulations and government restrictions.

GENERAL LIC CONCEPTS AND MEDICIVIC ACTIONL OPERATIONS

Medical operations in LIC (MEDOLIC) can be defined as encompassing all military medical actions (veterinary, dental, public health, etc.) taken in programs established to further U.S. national goals, objectives and missions in a LIC environment. These medical operations can play a significant role in enhancing host nation (HN) stability by:

- o Assisting with refinement or development of the military medical infrastructure
- o Providing and maintaining the basic necessities of life for the general population through host nation civilian medical programs
- o Providing assistance to repair, improve, or establish basic services once hostilities have ceased.¹²

Low-intensity conflict imperatives have been developed which apply to all operational categories of LIC. Planning and conducting medical/veterinary operations should be done with these imperatives in mind:

a. Political Dominance. In LIC operations political objectives drive decisions at the strategic level and it is important to recognize the importance of political objectives in planning the tactical mission.

b. Unity-of-Effort. Military leaders must integrate their efforts with other governmental agencies so that maximum advantage is gained through consistency and synergy. Particularly important

as MEDOLIC programs should be integrated into a comprehensive regional LIC strategy.

c. Adaptability. The skill and willingness to change or modify procedures, structures, or plans to make them applicable to the situation at hand. LIC will call for frequent modification of traditional medical processes.

d. Legitimacy. The willingness to accept the right of a government to govern, or a group or agency to make decisions. The perception that authority is genuine and uses proper agencies for reasonable purposes. Medical and veterinary programs should strive to strengthen the HN infrastructure ability to provide health services, thus increasing their legitimacy to govern.

e. Perseverance. Conflicts and operations in the LIC arena rarely have clear beginnings or ends marked by decisive actions culminating in success. Perseverance is the resolute and persistent, pursuit of national goals and objectives for as long as necessary to achieve them.¹³ Long term commitment is mandatory to achieve permanent improvement in the health of a population.

It is emphasized that unity-of-effort and perseverance are imperatives extremely important in the pursuit of medical objectives in the face of the overwhelming challenges of Third World conditions. Lack of coordination and cooperation among governmental agencies, the military services, and components within services are major frustrations and are frequently encountered obstructions to progress.

VETERINARY SUPPORT IN LIC AND PEACETIME ENGAGEMENT

The concept of LIC has been recently expanded to encompass the term "peacetime engagement" to more fully characterize U.S. strategies in the current world environment. Defense Secretary Cheney stated:

To help deter low-intensity conflicts and promote stability in the Third World, we must have innovative strategies that support representative government, integrate security assistance, and promote economic development. Our approach for doing this is peacetime engagement--a coordinated combination of political, economic, and military actions aimed primarily at counteracting local violence, and promoting nation building.¹⁴

President Bush originally articulated the term and concept of peacetime engagement in his notable Aspen speech of 2 August 1990.¹⁵ Later, Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict (ASD/SOLIC), Mr. Locher, added his endorsement and guidance for integrating the peacetime engagement concept with LIC.¹⁶ Peacetime engagement has as its two underlying objectives: promote democratic regimes and market economies, and reduce threats to U.S. interests. A hallmark in implementation of peacetime engagement is U.S. Government interagency cooperation, collaboration and integration. The Department of State is expected to be the lead agency in peacetime engagement as the ambassador is the representative of all U.S. agencies operating in country (outside the U.S.). As such, he/she is the focal point of U.S. interests.¹⁷

Militarily, peacetime engagement will be characterized by "Forward Presence" featuring a more mobile, flexible force structure. More combat support and combat service support forces will be utilized as the emphasis will be on nation assistance and internal development. This means increased use of public health, engineering, and civil affairs personnel in the LIC environment. Clearly, economic development is a cornerstone of peacetime engagement, realizing that a healthy free market economy is essential for a stable, well-developed democratic government.¹⁸

A fundamental component of a productive economy is health. As stated elsewhere, "...the economic health of a nation depends first on the health of its people."¹⁹ Assuming this to be true, nation assistance programs directed at health improvement take on added significance for the Latin American region, beleaguered and suppressed for decades by the double devastation of poverty and disease.

With broad training in public health, epidemiology, and animal health, veterinarians can have a greater impact on the quality of life of the Third World populace than one might initially suspect. The relationships of animal health, economics, and human health are complex, albeit tightly woven. Cohabitation of animals (including livestock) with families, common water sources and sharing of zoonotic diseases, contribute to strikingly high disease and mortality rates in lesser developed countries (LDC). Poor health results in low productivity (animal and human), and unrealized

economic potential. These health and economic conditions fuel the fires of LIC.

Doctrinally the Army Veterinary Service supports the operational categories of LIC and peacetime engagement in the following ways, per FM 8-42:²⁰

Support for Counterinsurgency : AVS support to counterinsurgency includes support to U.S. forces, assistance to HN military forces, and enhancement of the stability of the HN government.

a. Support to U.S. troops is through traditional veterinary service such as medical care for government owned animals, primarily military working dogs (MWDs), but also pack animals and horses. The AVS ensures wholesomeness and safety of military food supplies which frequently entails establishing a safe local procurement source.

b. Support to HN forces can be assessment and training of HN veterinary or medical personnel, and development of veterinary programs such as a food procurement system. Unfortunately, few LDC military systems have a counterpart to the AVS.

c. Enhancement of HN government stability is the AVS most challenging but potentially most meaningful role. In this capacity the AVS participates in nation assistance programs that benefit the populace. Coordination through the Ambassador's country team is essential and cooperation with other government agencies such as the Department of Agriculture (USDA), U.S. Agency for International Development and various HN agencies may be required. Host nation active participation and cooperation are of paramount importance, and all NA projects are initiated at HN request.

Well developed veterinary programs have the ability to impact across a wide range of factors such as public health and sanitation, medical care, nutrition and economics. To maximize counterinsurgency support, specific problem areas fostering insurgency must be identified and coordinated solutions applied. Improving health, nutrition and economic status certainly contribute to defusing an insurgent's program and bolsters the credibility of the HN government. Specific

veterinary counterinsurgency and peacetime engagement programs may include:

- Animal and human disease surveys
- Mass animal immunization programs
- Village level animal and human parasite control
- Animal husbandry & disease control training
- Assessment and recommendations on the agriculture systems
- Livestock marketing procedures
- Sanitation training (water potability and waste disposal)
- Food wholesomeness programs including food hygiene and handler education
- Zoonoses disease control programs

Combatting Terrorism: Veterinary service should provide support in countering the NBC terrorist threat, particularly the biological and chemical contamination of food and water. Personnel, animals and food supplies (including sources and processing centers) are highly susceptible to biological agents. Use of MWDs to combat terrorist activities will require appropriate animal care support.

Peacetime Contingency Operations: The AVS participation is in supporting Noncombatant Evacuation Operations (NEO), humanitarian assistance, and security surges.

a. Veterinary support is required in NEO to assist evacuation of privately owned pets to ensure their safety and to preclude introducing a foreign animal disease of major consequence into the U.S. Several thousand animals were evacuated from the Philippines in the spring of 1991 as part of NEO subsequent to the volcano eruption disaster. Prevention of food and waterborne diseases in these operations is joint responsibility of the veterinary and preventive medicine services.

b. Humanitarian assistance is provided by ensuring recent food supplies are wholesome and safe; by advising on proper public health and sanitation procedures to be followed; and by assisting in the control of zoonotic diseases throughout the disaster area.

Peacekeeping Operations: Traditional AVS missions are conducted to support peacekeeping forces. Veterinary care of the assigned MWDs and food hygiene assistance is provided.

Army Veterinary Service support to LIC and peacetime engagement, in short, is in the form of traditional (animal care and food inspection) or nontraditional (nation assistance, counterinsurgency) missions. It is on the nontraditional that the remainder of this paper will focus.

These nontraditional missions of providing some form of HN support can be employed through many different, but similar federal programs. Programs such as military civic action, humanitarian assistance, Humanitarian/Civic Assistance (H/CA), civic action, foreign assistance, nation assistance (NA) and many others (see Appendix, Glossary) have very specific guidelines and restrictions attached for proper and legal implementation. For the sake of discussion, the general term of NA will be used hereafter, realizing that specific programs may fall in another area for funding and execution. The CINC, Country Team and State Department are responsible for proper administration and funding of the various programs in country, depending on resources available, agency sponsorship and interagency coordination required.

SITUATION: HEALTH THREAT IN LATIN AMERICA

Stability in this hemisphere is dependent in large part on the socioeconomic status of Latin America and this in turn is dependent on governments' capability to provide basic services to the citizens. Politically unstable and economically suppressed governments as a rule are not able to effectively meet the medical and public health needs of their people.²¹ Such is the case in LA, with few exceptions. Generally poor public health exists, due to environmental stresses of climate and geography, lack of economic resources, and increased population and urbanization that have overwhelmed the woefully inadequate health care infrastructures. This failure of the public health systems has resulted in continued high morbidity and mortality rates from tropical diseases, food and waterborne diseases, and malnutrition.²² The pattern of disease, parasitism, malnutrition, and poor sanitation sap the health and productivity of the work force contributing even more to serious social and economic unrest.

GENERAL PUBLIC HEALTH PROBLEMS

Health problems in LDC are due primarily to lack of sanitation, inadequate immunizations and health education, primitive agriculture and food distribution systems, and to the acceptance of and indifference to these conditions.²³

Environmental Health

Environmental conditions and health are closely related. This is manifested in much of LA where shortcomings in fulfilling basic sanitary needs result in diarrheal and parasitic diseases being leading causes of death, especially among children.²⁴ Contaminated water and inadequate disposal of sewage are among the three leading causes of disease and death in the world. In LA alone, over 200,000 deaths per year are attributed to gastroenteritis and diarrheal diseases.²⁵

Sewage and water services in the cities is better than in the rural areas but still is inadequate. In 1988 it was estimated that only 49 percent of the urban population had sewage service and 88 percent had water service. In the rural area water supply coverage was around 55 percent and sewage service was estimated at 32 percent. Having water service in LA, however, is not necessarily a benefit as the improper treatment of sewage and excreta result in the highest fresh water pollution rate of any region in the world. Less than 10 percent of the LA municipalities adequately treat their waste water before discharging into the rivers and streams.²⁶

Population and Urbanization

The population of 429 million inhabitants in Latin America represents the largest percentage of the hemisphere's population and it is increasing. By the year 2000, it is expected that 63 percent of the Western hemisphere populace will live in LA. In 1989, 80 percent of the 429 million Latin Americans were

concentrated in the six countries of Brazil, Mexico, Argentina, Columbia, Peru, and Venezuela.²⁷

There is a trend toward urbanization as in the rest of the world, however, several countries remain predominately rural such as Honduras (65 percent rural).²⁸ The dilemma is whether to remain in the rural area where basic services of health, education and transportation are minimal at best; or relocate to the cities where water, food and air contamination pose perhaps greater threats, in spite of increased access to health care and municipal services.

Health Care Infrastructure

The economic crisis of the eighties in Central and South America seriously impeded progress in health care systems.²⁹ Available resources for health care declined at a time when population and urbanization stresses were challenging the system even more. The deterioration in health care as indicated by increased infant mortality and morbidity during this period, can plausibly be attributed in part to the economic damage to health service systems.³⁰

There is an inclination, especially with democratization, to decentralize health care delivery to the local communities. This shows some potential of improving access to health care and health education.³¹ A major problem exists however in the paucity of trained medical personnel to staff community (rural and urban) health centers. Commonly, medical school graduates have little intent to practice extensively, especially in the rural areas.³²

Another compounding public health factor is the little attention given to veterinary medicine, and the apparent failure to recognize the relationship between animal and human diseases. There also is minimal veterinary input and few trained veterinary resources devoted to improving livestock production. These factors foster an increase in zoonotic diseases, food and waterborne diseases (through improper waste management) and a decrease in animal source protein for human consumption. There are few well developed veterinary schools in Latin America. Central America has a total of three, none in El Salvador, Belize, Honduras or Panama. Mexico and Brazil have over twenty each, but not in the likeness of North American or European schools.³³

SPECIFIC HEALTH PROBLEMS

Numerous vector borne, communicable, and zoonotic diseases are rampant in the LA countries. Exposure to these diseases coupled with chronic malnutrition contribute to life expectancies in some countries of barely 50 years--25 years less than in the United States. At each end of the scale are Bolivia and Costa Rica with life expectancies of 53 and 75 years, respectively.³⁴

Vector Borne and Communicable Diseases

Malaria and other vector borne diseases such as Denge have increased sharply and steadily over the last few years, primarily due to continued increase in vector (mosquito) density and unsuccessful preventive measures. Over 1.1 million malaria cases

were reported in 1988 with increased mortality as well.³⁵ The prevalence of these diseases reflect a failure of the countries to provide basic environmental (standing water, refuse management, etc.) control measures. The populace is paying the price in increased morbidity and a tremendous decrease in worker productivity. Chagas disease, yellow fever and leishmaniasis along with other vector borne diseases, continue to cause concern.

Other communicable diseases such as schistosomiasis, viral hepatitis and tuberculosis continue to spread. Although the parasitic disease schistosomiasis has decreased in some regions, it is still considered endemic in most areas.³⁶ Pooling of water from increased use of hydroelectric power, and agricultural irrigation projects (especially with untreated waste water), readily promotes the spread of this water borne disease.

Tuberculosis and viral hepatitis are persistent problems in LA. Tuberculosis control is lagging behind North America by about 40 years. Viral hepatitis is of grave public health concern because certain forms (hepatitis B) are associated with severe chronic disease and 25-40 percent mortality.³⁷ In spite of hepatitis B being vaccine preventable, it remains endemic in many regions of Central and South America.

Zoonotic and Vesicular Diseases

The incidence of these diseases common to animal and man continues to be high in the LDC. Diseases such as rabies, brucellosis, bovine tuberculosis and trichinosis, which have been

nearly eradicated in North America and other industrialized nations, continue to affect LA at alarming rates.

The animal population of this region is very large. With 8.2 percent of the world population, they have 20 percent of the world's cattle, 9.5 percent of world's goats, 9.7 percent of the world's pigs, and 32 percent of the world's horses. The ratio of animal to human population is higher in LA than elsewhere in the world. In spite of this huge quantity of livestock, proportionately, the productivity is 30-40 percent less per species than in the United States or Canada due to various diseases and poor husbandry procedures.³⁸ The immense livestock population on one hand offers tremendous potential to improve nutrition and economic status; on the other hand serves as a vast reservoir of disease agents if not managed properly.

Rabies continues to be the most important zoonosis of the region, although some countries including Costa Rica, French Guyana, Panama, Surinam, Uruguay and the Caribbean are presently rabies free. In Mexico, Bolivia, and El Salvador mortality from rabies actually increased from 1985-1988. Dogs, cats, vampire bats, and various other wildlife species constitute the major sources of transmission.³⁹ Vampire bats carrying rabies are particularly a problem to cattle in certain areas.

Brucellosis and bovine tuberculosis in man and livestock (cows and goats) are diseases widespread throughout the area. Brucellosis causes a debilitating disease with high morbidity in man, usually contracted through consumption of raw goat milk

products. The bovine form causes an estimated \$270 million loss in productivity each year in LA alone.⁴⁰

Other diseases of major significance affecting the livestock industry are the vesicular diseases, including foot and mouth disease, and vesicular stomatitis. These diseases, affecting many species of livestock, cause several hundred million dollars in lost productivity each year.⁴¹ Additionally, due to the highly contagious and devastating nature of the diseases, their presence in a country will drastically restrict the marketing and export potential of animal origin products. The USDA assigns veterinarians in several countries primarily for the purpose of maintaining surveillance of these diseases, which would be catastrophic if introduced into the U.S. livestock industry.

Foodborne Illnesses and Malnutrition

Contaminated food and water are mainly responsible for the millions of cases of gastroenteritis, diarrheal disease and high rates of infant mortality in LDC. Bacterial enteritis from *Salmonella* is overall the most common foodborne illness.⁴² However, a team of U.S. military physicians in Peru documented that enterotoxigenic strains of *Escherichia coli* are leading causes of childhood diarrheas.⁴³ *Campylobacter* and *Shigella* bacteria are also significant causative agents of this devastating childhood problem.

Food contamination usually occurs due to poor handling and processing practices, or improper storage and transportation procedures. In LA most bacterial contamination (*Salmonella* and

Campylobacter) of food is of animal origin; that is animal feces, fluids, improper cooking, etc. Lack of refrigeration and poor sanitation promote bacterial growth and food spoilage. It has been estimated that, in addition to illness and death caused by contaminated food, over \$40 billion annually is lost in LA to food spoilage.⁴⁴

Food spoilage along with poor livestock productivity, inadequate storage facilities, and undeveloped distribution systems contribute to a general food shortage in the region. In 18 of 29 countries in the Americas food production per capita declined from the seventies to the eighties. Consumption of meat and milk per capita also are comparatively very low in LA with 37 Kg of meat and 86 Kg of milk consumed per capita, compared to 115 Kg meat and 281 Kg milk per capita in North America. During the mid eighties livestock food production in the region declined by eight percent while population rose by nearly 2.5 percent.⁴⁵ A very disturbing trend.

Malnutrition, especially in the children of Central America is tragic; contributes to other disease problems, and physical and mental underdevelopment. Most malnutrition of the region is chronic rather than acute, and is due to heredity, environment, and chronic disease factors (parasitism, gastroenteritis, hepatitis, etc.) decreasing the biological utilization of food.

It is clear from this brief discussion of the health problems confronting Latin America and all who reside or travel there, that the diseases of the region are primarily due to basic public health

and sanitation deficiencies. It also is apparent that nation development programs need to be aimed at altering the behavior of the indigenous population, raising the level of understanding and appreciation for basic sanitation and disease prevention. Infrastructure improvements are likewise needed. Efforts to decrease transmission of disease from animals to man by reducing food and water contamination, and by decreasing cohabitation, would be of tremendous benefit.

FINDINGS AND OBSERVATIONS

Veterinary civic action and NA programs in support of Third World public health and agriculture systems are not new. The disease challenges previously discussed also are not new, as reported by Col (Ret) W. Clark USA, VC:⁴⁶

In the isolated villages the animal husbandry practices had not changed for generations. The heat and moisture of the tropics served to incubate and multiply animal disease organisms that eventually became endemic. Modern veterinary medicine had the vaccines, medications and knowledge to control these diseases. It was not science that limited what could be done for the village livestock: it was the confusion . . . the lack of trained personnel and the low priority that civil government placed on animal disease control, the competing interests within the . . . civil bureaucracies, and the lack of interest that . . . leadership had for people in the villages. The Veterinary Corps could provide professional time and USAID could provide money, but they were never able to get the . . . system organized and motivated. Individual families were grateful for the help they received, but very little was accomplished of lasting value.

This comment describes civic action efforts by the Army Veterinary Corps in Vietnam in 1966 - over thirty-five years ago. The NA exercises at that time were called VETCAPS - Veterinary Civic Action Programs. One must wonder if anything has been learned from those civic action experiences in Vietnam, and the more recent ones in Latin America.

There has been heightened interest in Central and South America, since the early eighties, with a concomitant increase in military NA programs and exercises of all types. These missions have utilized various combinations of active component, reserve

component and Army National Guard forces. Planning, coordination and actual execution of the civic action and NA missions have been variably successful. The measurement of effectiveness, however, seems to be totally subjective, and in the eye of the operator.

Review of after-action reports, staff visit observations, and interviews with numerous exercise personnel reveal several persistent flaws, failures, outright blunders and wasted efforts, as well as some unrefutable NA accomplishments. A constant also stated in virtually every exercise evaluation, is the necessity and great potential utility of the NA programs. Invariably, regardless of the tangible and long-term benefit to the HN, there has been an exchange of good will, and a reciprocal positive psychological effect between the United States and HN. Study and discussion of past NA missions should provide a basis for more meaningful application of AVS resources.

TYPES OF EXERCISES

Nation assistance missions in which the AVS participates fall into one of three general categories: Deployment for Training (DFT) and Overseas Deployment for Training (ODT); in-theater assigned unit exercises; and JCS-directed missions. All missions and programs originate (theoretically at least) from the Country Team, and then pass to the respective country MILGROUP who in turn forwards the mission or support request on to the theater headquarters (USSOUTHCOM in the case of Central and South America).

USSOUTHCOM or other unified command will then process the request and determine the mission tasking, type funding required, etc.

In-Theater Missions

The various USSOUTHCOM MILGROUPS in conjunction with their embassies will request support for specific projects, such as a combined medical/dental/veterinary mission to a certain village for a prescribed period of time. These missions commonly are called Medical Readiness and Training Exercises (MEDRETES).⁴⁷ Independent veterinary projects may also be requested, in which case the missions are termed Veterinary Readiness and Training Exercises (VETRETES). Theoretically, the host country Ministry of Health, Ministry of Agriculture, Ministry of Natural Resources, or other HN agency will have provided input as to the type of project needed.

Upon reviewing the request, USSOUTHCOM will validate the mission, list for scheduling in the plans and projects, and perhaps include it in the command's Integrated Priority List. Appropriate funding will then be allocated. The medical or veterinary mission is then passed on to U.S. Army South (USARSO) for execution, which determines whether or not it can be conducted with USARSO assets. One veterinary Table of Organization and Equipment (TOE) unit, the 216th Veterinary Detachment, is assigned to USARSO to support such requests. Occasionally, veterinary personnel from the U.S.A. MEDDAC Panama may augment this unit or perhaps be specifically tasked to conduct a nation assistance program in the Panama region.

Should a mission or long-term program be designated for Honduras, the Joint Task Force-Bravo (JTF-B) Medical Element, Veterinary Service may be tasked to support it. JTF-Bravo is a FORSCOM fixed installation located at Soto Cano Air Base, Honduras. It originated with the Big Pine II exercise in August 1983, and VETRETES and MEDRETES have been supported from there since that time.⁴⁸ JTF-B was conceived to support Army and Air Force units deploying to Honduras for training and has developed into quite a substantial installation.

Medical Element personnel are assigned to JTF-B for three to six months and have the primary responsibility to support U.S. troops training or working in the region. A second mission responsibility for the Medical Element is to provide medical training and assistance to the Hondurans through various civic action projects. Hence, nation assistance (or H/CA) projects originating with the Honduran Country Team may commonly be tasked to JTF-B for execution. In this regard, veterinary teams from JTF-B have conducted several hundred VETRETES throughout Honduras since 1983. Additionally, a few long-term programs have been attempted and some implemented. One such program is the cooperative project between the JTF-B Vet Service, the Honduran Ministry of Natural Resources and the regional USDA office, initiated in the late eighties to control the hog cholera epidemic ravaging the swine population of Honduras.

In most cases, due to the high number of projects and mission requests, USARSO and JTF-B cannot provide the support needed so the

requests are passed on to FORSCOM. Thus many FORSCOM units have and will continue to perform NA exercises in the SOUTHCOM theater.

DFT/ODT Nation Assistance Missions

Medical/veterinary civic action requests received by FORSCOM are processed approximately one year out for DFT (active duty unit), or ODT (Reserve or National Guard unit) support. Active duty veterinary TOE units are then tasked for various DFT missions with or without their parent medical detachment, depending on the mission. Occasionally only a small veterinary team (a VCO plus 3 or 4 technicians) is required to support another unit, such as engineers or military police, when the primary mission is not medical or veterinary.

Reserve and ANG units volunteer for the missions which are not designated for DFT support. These missions and projects may be primary medical/veterinary or frequently neither. In the latter case, medical/veterinary resources are usually needed to support other combat support or combat service support units deploying for training. Unfortunately, all too often missions accepted by a unit for ODT require broader support than what is intrinsic to the unit (no vet section). For example, a reserve component unit may deploy for a three-month road building project with its medical team available to perform unit medical care and HN civic action. With failure to address the veterinary requirement for the mission early on, and a lack of unit assigned veterinary resources, the overall project planning and execution will be compromised. Veterinary

support to the unit and HN program likely will not be effectively performed since veterinary medicine was not considered in the planning and budgeting phases of the mission.

JCS or OSD Directed Missions

Many LIC missions originate directly from the Office of the Secretary of Defense and/or the Joint Chiefs of Staff. These missions have clearly defined, specific objectives, and often are classified due to their strategically sensitive nature or location. Commonly, Special Operations Forces (SOF) execute these projects and medical and veterinary support are key elements of the SOF package. A veterinary cell is incorporated into each Special Forces (SF) Group, providing a wide range of veterinary, medical and preventive medicine capabilities. Unfortunately, there normally is little interaction between these veterinary cells and the rest of the AVS.

OBSERVATIONS AND FINDINGS

As with any military mission, success of NA projects depends on well defined objectives; planning and coordination; resourcing; sound logistics and transportation; and smooth execution. Also important are meaningful after-action reviews with subsequent modifications; and flexibility to factors and requirements unique to the specific mission.

Strategy and Objectives

There has been no defined set of veterinary objectives or long-term plans for the Central or South American area of operation. The AVS, although keenly interested and highly involved in nation assistance endeavors, has not developed a comprehensive plan to apply veterinary service capabilities to NA programs. This is not unique to the AVS, however, as no such planning or strategy documents exist for the Army Medical Department as a whole, although considerable discussion and debate have occurred on the issue for some time.^{49, 50} Medical operations in LIC have been codified in FM 8-42, and USARSO Regulation 40-2, but these do not address strategy and objectives.^{51, 52} The AVS has recently recognized the need for such planning, long-term objectives and strategy.⁵³ A Process Action Team was established in June 1991 to address the Veterinary Corps role in LIC/NA. The challenge to the LIC Process Action Team was to study the past and current AVS involvement, and to recommend a course of action to coalesce veterinary efforts in support of a strategy to accomplish veterinary medicine LIC/NA objectives. Veterinary input from SOUTHCOM, FORSCOM, Health Services Command, Academy of Health Sciences, Office of the Surgeon General, and Army-Air Force Center for Low-Intensity Conflict was used to formulate the following AVS general statement of LIC/NA goals:⁵⁴

- a. To improve the assistance U.S. Army Veterinary Service provides to the State Department's missions and objectives in developing countries.

b. To improve host nation agricultural and public health capabilities; the improvement should be based on HN needs and priorities, developed in concert with host country resources, and should be sustainable by the host nation.

c. To provide realistic LIC/contingency training for U.S. Army active/NG/reserve component units and personnel, and to support all military operations wherever necessary in the LIC arena.

Planning and Coordination

This aspect of the mission can not be overemphasized. Planning, preparation and predeployment coordination largely determine the outcome of the NA exercise. Logistics, personnel and transportation requirements are built upon the general concept and scope of operations, which should be consistent with the stated LIC/NA objectives in the respective country plans. At this point, veterinary country plans have been developed only for Panama and Honduras, however the SOUTHCOM veterinarian has the responsibility to ensure plans are developed for all countries in his area of responsibility. The veterinary country plan should address the animal health, public health and agricultural needs of the country as coordinated with the HN.

The following is a summary of observations on the planning phase of many veterinary NA exercises:⁵⁵

- ° No long-term plan or set of veterinary objectives exists upon which to base plans for specific exercises to ensure continuity of effort of deploying units.
- ° Planning of each MEDRETE is performed by the medical

staff of the organization and frequently there is not a VCO available to provide veterinary input.

° Commonly a veterinarian is not included on the predeployment site survey team. This precludes obtaining necessary information on the following:

- Numbers and types of animals
- Diseases prevalent in the various species
- Unique sanitation and public health problems present
- Animal holding facilities available; if none, instructions given on how to prepare them
- Health education needs and literacy level of the community ranchers
- Agricultural marketing system
- Access to local veterinary service and discussion with local veterinarians
- Availability of drugs and supplies from local sources

° ODT exercise planners frequently are not aware of veterinary mission requirements, therefore budgeting, supply and logistic problems develop later which hamper execution.

° Minimal coordination and continuity occurs between DFT, ODT and in-theater veterinary staffs. This has resulted in duplication of effort in some locations, no coverage in others, and inconsistency of care being provided between VETRETE teams. It has been frequently reported that:

- Reserve and ANG units normally demonstrate very high

levels of interest and skills in conducting civic action programs, but frequently deploy with insufficient or inappropriate supplies, and without proper coordination with the SOUTHCOM or FORSCOM veterinary representative.

- Poor or nonexistent coordination has been evident between in-theater veterinary staffs and reserve component civil affairs veterinary elements. This was especially true in Operation Desert Storm and Operation Just Cause.⁵⁶

° There is great need for veterinary epidemiology and disease surveillance studies to be performed in Third World Countries. Broader planning to request these studies would significantly influence where and how to focus NA efforts. The Pan American Health Organization accumulates such data primarily from indigenous health reporting systems, however little if any similar information has been obtained through VETRETES since their initiation.

° Conflicts and interference have been encountered between Army Medical Department programs and other governmental organizations (e.g., U.S. Army Medical Research and Development Command, Peace Corps) and non-governmental organizations such as church groups, and international assistance agencies. In some cases there is a direct conflict in objectives; in other cases counterproductivity

and duplication of effort. This situation is embarrassing to the United States and confusing to the HN.

- ° Planning and coordinating NA with HN representatives has been challenging, but has improved recently, especially in Honduras and Panama. Frequently HN officials are unaware of what is needed or what is possible; other times support is directed inappropriately and with bias.

Resourcing

Personnel and funding resource problems have been major obstacles to overcome with all foreign assistance programs for Latin America, including civic action. The SOUTHCOM area of responsibility, although being responsible for approximately 20 percent of the world's land mass assigned to unified commands, in the past has used less than one percent of the DOD manpower and less than .5 percent of the Army's operation and maintenance funds.⁵⁷ Assistance has improved slightly in recent years for Central and South America, with U.S. increased activity in the "War on Drugs." Security assistance funding for SOUTHCOM, however, excluding counterdrug funds, has steadily decreased since 1984 and the 1990 level was only 50 percent of that for 1989. In 1990, all of Latin America received only five percent (\$240M) of the Foreign Military Financing Program budget, while Israel and Egypt combined received 64 percent (\$3.1B),⁵⁸ clearly a very discouraging trend for Latin America.

Specific veterinary NA resource problems have been encountered frequently, manifested by too few veterinary personnel to support all the planned projects, and an inherently low priority of funding for veterinary supplies and equipment. When MEDRETE/VETRETES have been adequately resourced, and with the appropriate portion of the exercise funds, many AVS projects have been well executed with very positive results.⁹⁹

The AVS has experienced a paucity of personnel since 1983 when DOD made the Army Veterinary Corps Executive Agent for veterinary service activities. With this came responsibility to support all the military services worldwide in any and all veterinary programs.

The increased VETRETE and civic action programs since 1983 have had to be supported by AVS "out of hide" primarily by loaning TDA assets to cover DFT and occasionally ODT missions. Less than 20 veterinarians are assigned to TOE units, including the Special Forces Groups. In turn, reserve component veterinarians have filled many VETRETE missions when an active component officer was not available. This disjointed AVS involvement has led to considerable lack of uniformity in veterinary programs, although the efforts have been genuine and the training experience worthwhile.

Funding of NA programs suffers not only from a persistent shortage of funds but also complex restrictions applied to the use of federal funds. Funding for civic action projects is sorted out in the MILGROUP-Embassy-CINC arena. Source of funding depends on

the type of project, HN coordination required, HN target group, and U.S. forces available for support.

Specific Humanitarian/Civic Assistance activities are defined to include: (1) medical, dental, and veterinary care provided in rural areas of a country; (2) construction of rudimentary surface transportation systems; (3) well drilling and construction of basic sanitation facilities; and (4) rudimentary construction of and repair of public facilities.⁶⁰ Funding attached to this category of projects was rigidly controlled in the past, but more recently Congress has taken a more liberal view of the military use of H/CA funds in developing nations facing LIC challenges.⁶¹ A more detailed discussion of civic action funding can be found elsewhere.⁶²

Upon being allocated, funds are aligned against the various aspects of NA mission. Herein surfaces a problem for veterinary programs. Occasionally, the public health and economic value of animal health projects are not clearly understood by the planning and budget section, and insufficient funds are allotted for the veterinary mission. Frequently also there is not a veterinary representative included in the mission planning and budgeting process so the needs of the veterinary portion of the program are not appropriately considered until too late.

Some very well designed and funded veterinary programs have been conducted. These primarily have been independent VETRETES in Honduras and Costa Rica. For example, the hog cholera control program in Honduras has received solid financial support and is a

cooperative program between the AVS, Honduran Ministry of Natural Resources and the USDA regional veterinarian. This has been a very positive experience and good progress is being made.

An underutilized source of funding for veterinary programs has been the International Military Education and Training (IMET) plan, and the Security Assistance Program in general. The AVS has not taken advantage of the IMET opportunities to obtain training for key HN veterinary scientists, nor facilitate purchase of medical and laboratory equipment that could significantly upgrade HN capabilities to support animal and human health programs.

Logistics

Logistics problems primarily result from poor planning and/or resourcing. This has been the case with many AVS supported NA projects. Although proper veterinary resourcing is clearly a major problem, the most difficult logistics problem to manage is the nonavailability of most veterinary drugs and supplies in the military medical supply system. This being the case, most veterinary vaccines, drugs, and equipment are nonstandard items, therefore they must be procured through stifling local purchase procedures. This again becomes a significant issue when a veterinarian is not directly involved in the planning phase of the mission.

Numerous after-action reports document that VETRETE teams have arrived at the project site with insufficient or incorrect supplies to perform their civic action mission. In some cases supplies were

purchased on the local economy, in other instances the veterinary supply package arrived the last few days of the exercise, too late to be of any real value. Prepositioning of some veterinary supplies in Panama and at JTF-B in Honduras has recently alleviated these problems to some extent in the SOUTHCOM region, but the basic problem still exists of ensuring the required supplies are available at the proper time and place.⁶³

Execution of the Project

In those missions where planning, coordination, resourcing and logistics have been properly attended to, the NA projects have been effectively executed. However, problems still exist. Some of the commonly reported impediments to performance of the mission include:⁶⁴

- ° Required supplies not being available
- ° Inadequate transportation to access the mission area
- ° Inadequate assessment of the mission requirements (e.g., animals present, health facilities available, restraint facilities, diseases, etc.).
- ° No language training provided to in-theater assigned VCOs
- ° Failure to assign translators to the VETRETE teams
- ° Lack of HN cooperation and/or failure to psychologically prepare the target group for the exercise.
- ° Low literacy level of populace; lack of understanding of basic sanitation, and animal-human health relationship by the indigenous population.

- ° Inability of HN infrastructure to sustain the programs introduced by U.S. medical/veterinary civic action teams.
- ° Compromise of the VETRETE mission by scheduling simultaneous medical and/or dental civic action projects.
- ° Inability to make follow-up visits to enhance the care provided by the initial vaccinations, dewormings, education, counseling, etc.

Other frustrations encountered with performance of veterinary civic action projects are the raising of expectations of the HN recipients; and the lack of long-term benefits or demonstrable change by the "shotgun approach" of the NA programs. These factors discourage the local inhabitants and discredit the U.S./ HN efforts to improve their quality of life.

The AVS is vitally interested in and readily perceives the value to be obtained through effective veterinary nation assistance programs. Until recently, however, the AVS priorities and resources were focused on the traditional combat service support mission to counter the global threat of communist insurgency. Review and analysis of these past AVS civic action experiences and their lessons learned should generate ideas for more effective implementation of future programs.

ANALYSIS

"The most remarkable development in Latin America during the economically 'lost decade' of the 1980s is the region-wide process of redemocratization. Over 98 percent of the people of the region are now ruled by civilian rather than military governments. Military civic action can be important in buttressing these new democracies against pressures or economic depression."⁶⁵ This statement by General Woerner accurately suggests that the level of civil-military conflict has decreased in LA, but there still is great political instability in the region as many governments continue to strive for moral legitimacy to govern. It has been advocated that one of the most powerful measures of moral legitimacy is the ability of the government to deliver the basic services--security, health and economic opportunity.⁶⁶

The relationship then is clear between political stability, socioeconomic needs, and health/human development. In recognition of this, the United States' policy toward LA over the past decade has evolved from a singular emphasis on human rights to the four "Ds": democracy, development, defense and dialogue.⁶⁷ Civic action has been suggested as perhaps the most effective and versatile instrument to implement this policy in LA.⁶⁸ It has been further stated that, "Military medicine is the least controversial, most cost-effective means of employing military forces in support of low-intensity conflict situations. . . especially in the capacity

of nation building rather than the traditional combat service support role."⁶⁹

Analysis of the past and current veterinary nation assistance endeavors, as presented above, indicates the need for continued and enhanced AVS involvement. Analysis also strongly suggests that major changes are needed if the socioeconomic potential for veterinary NA is to be realized.

Most veterinary NA programs since the Vietnam era can be described as "cute," and rewarding psyops and public affairs programs. In reviewing progress made since that time, it is apparent that these programs have not yet been exploited to maximize their benefit to the health and economic status of the HN. With few exceptions, veterinary programs are not recognized for their own merit and utility.⁷⁰

Veterinary medicine impacts on human health and economics--two of the basic human development factors that must be addressed if quality of life is to be improved, and political stability maintained in the developing democracies of LA. The Pan American Health Organization cites poverty, malnutrition, and contaminated food and water as leading causes of morbidity and mortality in LDC.⁷¹ Veterinary medicine as it relates to animal health, animal productivity, zoonotic diseases and animal waste contamination of food and water directly impact on human health.

A commonly presented concept depicting long-term relative values of health procedures against their level of effort and resources required is shown in Figure 1.⁷² Note the moderate value

assigned to "veterinary deworming and vaccination." This relative value seems to have been based on the derived benefit of such procedures on the *animal population alone* not the indirect effect that healthy, productive livestock have on *public health*, available nutrition, disease vectors and potable water. The chart also implies that "dewormings and vaccinations" are the essence of veterinary contributions to NA. Realistically, veterinary medicine is a significant component of all of those healthcare elements listed above it except human dental procedures and immunizations. This chart and what it represents does not do justice to the real contributions of veterinary medicine in the LIC environment.

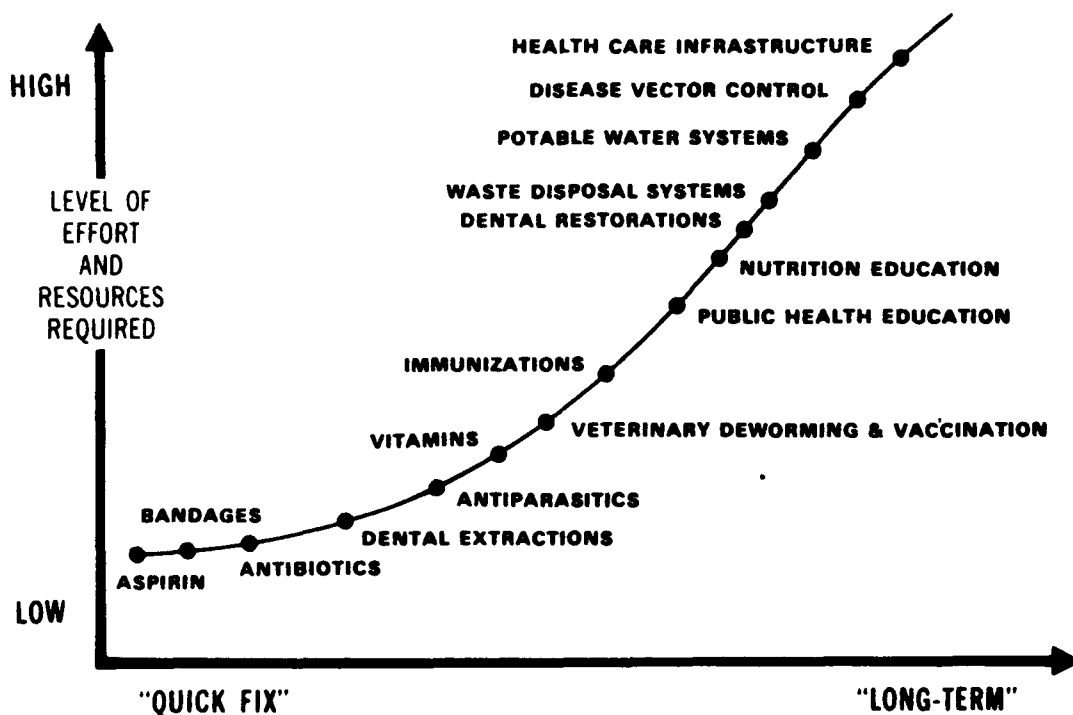


Figure 1.

In analyzing AVS efforts in LA, it must be concluded that for all the resources applied to VETRETE programs little has been achieved of lasting HN benefit except good will. A proposed reason for this is that hundreds of uncoordinated missions have been conducted primarily aimed at providing direct health care in the form of immunizations and parasite control. There has been little opportunity to conduct programs with continuity or to modify animal health systems. Where that has happened, there has been measurable success, as exemplified by the hog cholera control program in Honduras.

VETRETES and MEDRETES in themselves have limitations that cannot turn a country around. Indigenous attitudes and values greatly determine the socioeconomic status and level of poverty of the HN citizens.⁷³ For health to supplant disease among the rural poor the following problems must be tackled aggressively:

- 1) Social and economic justice
- 2) Land tenure
- 3) Agricultural production and marketing
- 4) Population control
- 5) Malnutrition
- 6) Health training
- 7) Curative medicine

Note that curative medicine is the last priority.⁷⁴ A public health program aimed exclusively at curing the sick will have little effect on the health of the rural poor. A program that includes preventive medicine, nutrition and hygiene will do better; a

program expanded to family planning and to increasing crop yields on the family farm will accomplish much more.⁷⁵

It appears then that a weakness in the MEDRETE/VETRETE strategy has been to focus on projects and quantifiable goals rather than on institutional change. General Joulwan (CINC, SOUTHCOM) also feels the most effective way to contribute to development in a country is to focus on *institution development* in that country, both private and public.⁷⁶ The key to "institution building" is the transfer of processes, not performance of projects or merely building things; although these may be part of the early institution building process.⁷⁷ These concepts are indeed applicable to veterinary NA programs where it is the processes of livestock management, animal husbandry, disease prevention and control, and health education that are more important than attempting to immunize every head of cattle and swine in the region.

Another persistent flaw in veterinary support to LIC is the failure to adhere to the LIC imperative "unity of effort." This basic concept is the foundation for a successful effort in LIC.⁷⁸ Many different governmental and nongovernmental agencies (as previously stated) have been participating in veterinary civic action programs with little regard for coordinating or unifying resources.⁷⁹ The NA programs at times appear to be conducted more for the benefit of the civic action team than the HN target group. Although many of the missions are officially "training exercises," NA objectives should not be sacrificed in the context of training.

Failure to embody the unity-of-effort imperative has resulted in large part from the lack of any defined LIC veterinary policy and strategy upon which to formulate mission and exercise plans. Inability to effectively integrate reserve component and National Guard activities into active component programs also has seriously hampered unity-of-effort.

This interagency cooperation, and unity-of-effort is vital also between corps and branches, such as between Veterinary and Engineers Corps; Preventive Medicine, Engineers and Veterinary Corps; Civil Affairs, Medical Corps, and Veterinarians, etc. Progress can be made with proper planning and interagency cooperation focusing resources on critical nodes of the poverty-disease-social depression threat.

Veterinary assistance programs can have an impact on Third World health and economic problems when applied practically. A brief example is presented. In Costa Rica there has been great potential to develop cattle production to the extent that a substantial export market could be realized, as well as provide increased amount of beef for domestic consumption.⁸⁰ One of the limiting factors has been the intrinsic laboratory capability to certify that cattle herds are free of certain contagious diseases.⁸¹ Fortunately, a native Costa Rican veterinarian with a Ph.D. in virology (from an American university) has had a joint appointment with the Veterinary School and the Ministry of Agriculture Animal Health Laboratory, collocated in San Jose. With the assistance of the regional USDA veterinarian, the Army Veterinary Corps, and USA

Health Services Command, training was provided to his Costa Rican laboratory personnel on medical equipment maintenance and laboratory techniques. The end result has been to enhance the capability for animal disease testing and surveillance, thereby greatly facilitating an increase in beef production and export. A similar example is cited for a beef processing plant in Panama, where sanitation inspections and counseling by AVS personnel has resulted in the plant obtaining sizable contracts for export and domestic sales.

The ripple effects of these very low cost assistance projects can be increased cattle production, increased income to ranchers; increased cattle for slaughter with increased beef processing plant labor; and increased beef for export and domestic consumption. This type of coordination (between HN, AVS, USDA, etc..) should be applied to projects in other countries of the region as well.

Recommendations will be presented in the next section addressing how to overcome the NA problem areas of veterinary doctrine and concept of operations; integration of cost-effective veterinary programs into the broader, long-term country plans; and lack of unity-of-effort in implementing veterinary NA programs.

RECOMMENDATIONS

With increased democratization of Latin America and an end to the Cold War, the tendency could be for the United States to look inward to domestic issues and scale back foreign assistance programs. The reality is, that Latin American countries as regional neighbors, should receive increased U.S. attention and tangible support. The domestic issues of health, poverty, drugs (with narcoterrorism) and socioeconomic inequality combined have supplanted communism as the insurgency threat to national stability in virtually every country of LA.

A well-developed and adequately resourced counterinsurgency program is needed to bolster the fledgling LA democracies and foster economic growth. Alternative forms of agriculture are needed to replace coca as the national crop of Bolivia and Peru.⁸² Civic action and NA programs can be effective vehicles for meeting these needs and are much more easily applied in an environment not threatened by military or insurgent violence. Nation assistance programs have a greater chance to succeed now than ever before, and with less military emphasis required on Europe, perhaps resources can be redirected to fund these efforts in LA. The following recommendations are presented to improve the implementation of veterinary civic action, and to project it appropriately into the mainstream of U.S. nation assistance activity.

DOCTRINE AND CONCEPT

1. The Veterinary Corps should develop a long-term plan for LIC-peacetime engagement which addresses the AVS in both a *supporting* and *supported* role.
2. Veterinary Corps senior leadership must clearly articulate to the Office of the Secretary of Defense, State Department, Office of the Army Surgeon General and to the unified CINCs the AVS' interest in, and capabilities for nation assistance. A commitment of resources must also be made.
3. Concept of veterinary programs and their applicability must be appropriately described in upper echelon publications such as Joint Pub 3-07 (Doctrine for Joint Operations in Low-Intensity Conflict), Joint Pub 3-57 (Doctrine for Joint Civil Affairs Operations) and FM 100-20 (Military Operations in Low-Intensity Conflict).
4. The veterinary LIC concept must stress transfer of processes to HN and HN sustainability of programs. Proven small-scale agriculture programs (such as the Benson Institute Small-Scale Agriculture program) should be incorporated into the AVS LIC strategy.⁸³
5. A veterinary LIC strategy should be developed identifying near, mid, and longterm goals.

INTEGRATION OF VETERINARY PROGRAMS

1. Veterinary nation development programs must be integrated into the respective CINC's and ambassador's country plans; and a veterinary portion should be included in the CINC's Peacetime Engagement OPLAN.⁸⁴
2. Veterinary country plans should be developed for each country in LA, in concert with State Department priorities and objectives.
3. Major veterinary initiatives must be included in The Army Plan and the Program Objective Memorandum to ensure resourcing and visibility. Such initiatives also should be included in the CINC's Integrated Priority List, for resourcing and implementation.
4. The AVS needs to facilitate training of key HN personnel through such programs as IMET, Subject Matter Expert Exchanges, and the Personnel Exchange Program.

UNITY OF EFFORT

1. Effective measures must be taken to ensure all ODT, DFT and in-theater veterinary missions are coordinated and consistent with the objectives and priorities of the veterinary country plans.
2. The proposed expansion of civil affairs units to support LIC peacetime operations should be immediately adopted.⁸⁵ The activation of Civil Affairs Foreign-Internal-Defense/Unconventional Warfare battalions

calls for VCOs to be in the Civic Action and Public Health/Dental Teams.⁸⁶ Employment of this structure would provide tremendous improvement in unity-of-effort for civic action.

3. More emphasis must be placed on joint missions coordinating veterinary, engineering, and preventive medicine projects to focus on specific public health, and agricultural problems/systems.
4. Funding for veterinary/animal health projects should be given higher priority, realizing the human health, nutrition, and sanitation implications. Most funding restrictions should not be an issue since no other federal agencies, including USAID , are significantly involved in animal health programs.⁸⁷

PERSONNEL AND TRAINING

1. Train more Regional Veterinary Medical Experts for NA duty. This program, initiated in August 1990, is intended to provide advanced training for veterinarians in language, culture, agriculture and public health of a specific region. These VCOs will then be assigned to the regions for which they have been specially trained. Latin America has been designated first priority, Pacific Basin second, and Africa third.
2. Pursue language training for VCOs assigned to SF groups, JTF-B, SOUTHCOM and PACOM.

3. Assign a VCO to the USARSO staff to facilitate coordination of veterinary NA programs with SOUTHCOM, FORSCOM and Office of the Army Surgeon General.
4. Tour length for the JTF-B veterinarian should be designated as 12 months to gain maximum benefit from interaction with HN agencies.
5. Develop a career track for VCOs in the LIC/NA/SF arena.

CONCLUSION

The struggle in LIC extends beyond military confrontation. It is characterized more by confrontation between man and his socioeconomic and political environment, of which health and nutrition are integral parts. Properly applied veterinary medicine programs can make a difference in this struggle. They impact on health, economics, and nutrition more than any other one discipline. Presently no governmental agency except the Army Veterinary Service is involved in this nation development aspect of LIC. Resources must be used wisely and unity-of-effort must be improved upon if AVS efforts in NA are to be rewarded with improved quality of life for LDC citizens.

U.S. national security depends on stability in the Western Hemisphere, and this stability in turn depends in large part on the respective governments being able to control disease, malnutrition, and poverty in their exploding population. Veterinary medicine is not advocated here to be the answer to the world's health and economic problems. It is however, an often overlooked, frequently underutilized and very cost effective resource. The Army Veterinary Service has the capability and is dedicated to contributing more in LIC. Its role should be clarified and its potential realized.

A P P E N D I X

GLOSSARY

- Civil Affairs (CA):** Those phases of the activities of a commander which embrace the relationship between the military forces and civil authorities and people in a friendly country or area or occupied country or area when military forces are present.
- Civil Military Operations (CMO):** Military efforts to support resistance auxiliary organization development, undermine government claims, gain support for an insurgent government, and attain national objectives without fighting. Civil-military operations are basic to any insurgency program. Successful civil-military operations increase civilian support to resistance organizations and improve US intelligence and logistical support to the resistance organization.
- Country Team:** The executive committee of an embassy, headed by the chief of mission, and consisting of the principal representatives of the government departments and agencies present (for example, the departments of State, Defense, Treasury, Commerce, and the USIA, USAID, DEA, and CIA.)
- Foreign Assistance:** Assistance ranging from the sale of military equipment to donations of food and medical supplies to aid survivors of natural and man-made disasters. US assistance takes three forms--development assistance, humanitarian assistance, and security assistance.
- Foreign Internal Defense (FID):** Participation by civilian and military agencies of a government in any of the action programs taken by another government to free and protect its society from subversion, lawlessness, and insurgency.
- Humanitarian and Civic Assistance (H/CA):** Such assistance shall include: medical, dental, and veterinary care provided in rural areas of a country, construction of rudimentary surface transportation systems, well drilling or refurbishing, and construction of basic construction and repair or public facilities.

Humanitarian Assistance: Assistance provided by appropriate authority, in the aftermath of natural or manmade disasters to help reduce conditions that present a serious threat to life and property. Assistance provided by US forces is limited in scope and duration and is designed to supplement efforts of civilian authorities that have primary responsibility for providing such assistance.

Internal Defense and Development (IDAD): The full range of measures taken by a nation to promote its growth and protect itself from subversion, lawlessness, and insurgency.

MEDRETE: Medical Readiness Training Exercise.

Military Civic Action (MCA): The use of preponderantly indigenous military forces on projects useful to the local population at all levels in such fields as education, training, public works, agriculture, transportation, communications, health, sanitation, and others contributing to economic and social development, which would also serve to improve the standing of the military forces with the population. (US forces may at times advise or engage in military civic actions in overseas areas.)

Nation Assistance (NA): Civil and/or military assistance rendered to a nation by foreign forces within that nation's territory during peacetime, crises or emergencies, or war based on agreements mutually concluded between nations. Nation assistance programs include, but are not limited to, security assistance, FID, other DOD title 10 programs, and activities performed on a reimbursable basis by federal agencies or international organizations.

Nation Building: Term previously used for Nation Assistance.

Peacetime Engagement (PE): Designates US national security policy for promoting and protecting US interests with diverse policy instruments in all security environments short of global and major regional conflict. Emphasizes selective regional political-military problem solving, and includes missions ranging from

diplomatic initiatives and humanitarian assistance to shows of force and contingency operations. The purpose is to take advantage of opportunities for promoting American principles, and to prevent the gradual erosion of American security.

Security Assistance: Groups of programs authorized by the Foreign Assistance act of 1961, as amended, and the Arms Export Control Act of 1976, as amended, or other related statutes by which the United States provides defense articles, military training, and other defense-related services, by grant, loan, credit, or cash sales in furtherance of national policies and objectives.

VETCAP: Veterinary Civic Action Program.

VETRETE: Veterinary Readiness and Training Exercise.

Zoonoses: Communicable diseases transmitted from vertebrate animals to man.

ENDNOTES

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