

Page Denied

*US Dept of Agric
Contract*

CONFIDENTIAL

50X1

Table of Contents
Dominican Republic

NIS 80

	<u>Page</u>
A. General	1
B. Environmental factors affecting health	2
1. Topography and climate	2
2. Socio-economic pattern	2
3. Animal and plant life	2
a. Animal	2
4. Nutrition	3
b. Food supply and distribution	3
c. Food sanitation, storage, and technology	3
C. Diseases	4
2. Diseases of animals	4
a. Prevalent animal diseases	4
(1) Brucellosis	4
(2) Tuberculosis	4
(3) Tick-borne protozoan diseases	4
(4) Respiratory infections	5
(5) Equine encephalomyelitis	5
(6) Hog cholera	5
(7) Newcastle disease	6
(8) Other animal diseases	6
D. Medical organization and administration (veterinary)	6
1. Civilian	6
a. Organization	6
b. Legal controls	8
(1) Licensure	8
(2) Quarantine	8
(3) Inspection	8
c. Professional medical organization (veterinary)	8
d. Medical research (veterinary)	8
f. Emergency medical services (veterinary)	8
2. Military veterinary organization	8
E. Medical manpower (veterinary)	8

CONFIDENTIAL

50X1

CONFIDENTIAL

50X1

Page

F. Veterinary medical facilities	9
G. Veterinary medical supplies and materials	9
H. Reference data	10
I. Comments on principal sources	10
1. Evaluation	10
2. List of sources (in order of importance)	10

Master Bibliography

CONFIDENTIAL

50X1

CONFIDENTIAL

50X1

NIS 80 - Sect. 45

Dominican Republic

A. General

Veterinary public health services in the Dominican Republic have never achieved a significant level of development because neither human nor financial resources have been adequately available for such activities. The major veterinary emphasis has been placed on animal disease treatment rather than disease prevention, and the small number of available veterinarians or technicians have been and are currently fully occupied in attempts to cope with the animal diseases of greatest immediate economic significance. A limited investigation of bovine brucellosis and tuberculosis indicates high incidences, but no program of significant scope for control or elimination of these diseases is in operation. Veterinary supervision over meat inspection and food distribution or handling is cursory at best, and most of the actual work is undertaken by inadequately trained technicians who have little support in the way of facilities for laboratory diagnostic work.

As in most other Latin American areas, food handling and processing customs are often primitive, with casual attention, at best, to sanitary precautions.

The current expenditure for livestock development and veterinary services amounts to U.S. \$300,000, less than one-quarter of one percent of the national budget. It is quite obvious that only token attention can be directed to animal health and sanitation under such circumstances.

Current veterinary planning envisages public health activities related principally to brucellosis, tuberculosis and tick control, and veterinary inspection of meat at the major slaughterhouses, chiefly one engaged in export of meat to Puerto Rico.

1/ 4/ 5/ 6/ 7/ 8/ 11/

CONFIDENTIAL

50X1

CONFIDENTIAL

B. Environmental factors affecting health

1. Topography and climate -- The Dominican Republic occupies about two-thirds of the island of Hispaniola, with the entire area, including off-shore islands, comprising about 19,000 square miles. About 1,662,066 acres provide suitable improved or natural pasture for livestock, and such land is fairly well distributed throughout the country with the exception of the higher mountain regions in the West. Reasonably equitable rainfall throughout the year makes permanent grazing possible. The year-round tropical climate is conducive to the development and perpetuation of a great variety of insect pests afflicting livestock, some of which are involved in the transmission of zoonoses. 7/ 8/ 13/ 18/

2. Socio-economic pattern -- The lower and middle income groups in urban and rural areas have little concept of modern food sanitation. Storage and refrigerator facilities for handling food, particularly livestock products, are not generally available. Consequently, meat is consumed fresh, generally the day animals are slaughtered, and milk when used is generally boiled. Such empirical practices are largely responsible for preventing widespread food-borne disease outbreaks. 7/ 8/ 11/ 12/

3. Animal and plant life

a. Animal -- The insects involved in the transmission of diseases among animals have never been accurately identified by veterinary authorities. Mosquitoes are certainly involved in periodic epidemics of equine encephalomyelitis, and a great variety of ticks are responsible for the transmission of such serious animal diseases as anaplasmosis and piroplasmosis. Parasitic worms are common in animals, but species have never been accurately identified.

CONFIDENTIAL

-2-

CONFIDENTIAL

Unidentified noxious weeds have been reported as cause for losses in livestock. 4/ 5/ 11/

4. Nutrition

b. Food supply and distribution -- Consumption of livestock products in the Dominican Republic remains low in comparison to that of most other Latin American countries. With little possibility for immediate production increases and a continuing trend towards siphoning off available supplies for export, there is little hope of maintaining even the present low rate of consumption. Current plans to aid and stimulate livestock production will require some time for implementation, and even longer to show significant results. The constantly rising human population increases create further demands on available supplies. The possibility for nearly doubling the country's production of livestock products by effective disease control and improved animal nutrition exists, but considerably greater technical assistance and possibly financial support are essential for implementation. 1/3/5/6/7/8/11/22/24/

c. Food sanitation, storage, and technology -- Several licensed slaughter establishments exist in the Republic, but only one, Matadero Industrial, in Santo Domingo, has modern facilities and refrigerated coolers. Others, which generally consist of a concrete floor covered by a roof with water available, slaughter a few head of animals for local distribution. Sanitation in all installations is minimal at best.

The dairy industry is undeveloped and milk consumption, estimated at 116 pounds

Insert at end of page 3: which produces 15,000 liters of milk per day.

CONFIDENTIAL

C. Diseases

2. Diseases of animals -- Critically low animal productivity is largely a result of widespread and uncontrolled disease and parasitism. The annual calf crop is less than half that normally expected under modern livestock producing systems, and the annual slaughter rate is no more than a quarter of that expected in the more advanced livestock producing areas. Although a part of these low yields are attributable to nutritional deficiencies, by far the greatest loss results from failure to control disease.

a. Prevalent animal diseases

(1) Brucellosis -- Brucellosis is widespread and probably the most immediately important disease in the Dominican Republic. The incidence has risen to over 50 percent in some herds, reducing the calf crop and seriously retarding production. Although the rate of infection has probably not yet reached the overall rate mentioned above, it is bound to spread and continue to retard production. An immediate massive vaccination program is essential to control further spread of brucellosis.

(2) Tuberculosis -- Although only a small proportion of livestock has been tested, tuberculosis in bovines is common. No information is available concerning the relative significance of tuberculosis infection in cattle in relation to strains of organism involved. Since milk is either pasteurized or boiled, under ordinary circumstances the threat of human infection is somewhat reduced.

(3) Tick-borne protozoan diseases -- Anaplasmosis and piroplasmosis are disseminated throughout the livestock population, and ticks, which are ever present,

CONFIDENTIAL

CONFIDENTIAL

serve to perpetuate the disease. Anaplasmosis may also be transmitted by other biting insects. Brahman type animals are resistant to the effects of these diseases and, to a certain extent, to tick infestation. However, since an important phase of the country's livestock development plans calls for rather intensive importation of European type animals, which are highly susceptible to these diseases, care must be exercised in protecting such stock or in selecting only young animals, in order that they might undergo premunition before being added to range or pastured herds.

(4) Respiratory infections -- A variety of respiratory conditions cause severe losses in all classes of livestock. In cattle particularly, pasteurellosis is a serious disease. It may often be complicated by virus pneumonia. A great deal of treatment of questionable value is devoted to this condition, and little attention is given to improved management as a key factor in reducing losses from this syndrome.

(5) Equine encephalomyelitis -- This disease appears periodically in many parts of the country, with occasional heavy losses among equines. Although the human form of the disease has been reported in 1963, veterinary authorities have noted no cases among horses and have conducted no serological tests to determine whether equines or birds are harboring the virus.

(6) Hog cholera -- Hog cholera is enzootic in the country. Vaccination is practiced to some extent, but only a small proportion of the swine population is adequately immunized. Controls to prevent its spread are not enforced, and possible dissemination through distribution and use of uncooked garbage is completely overlooked.

CONFIDENTIAL

Insert page 6:

(7a) Rabies is quite common and efforts to control the disease are largely confined to major urban areas. During the first half of 1962, 8,948 stray dogs were eliminated and 11,639 animals vaccinated.

mastitis, blackleg, pullorum disease, chicken pox, coccidiosis and a host of parasitic conditions. 4/ 5/ 6/ 7/ 11/ 21/

D. Medical organization and administration (veterinary)

1. Civilian

a. Organization -- Veterinary services in the Dominican Republic are in a transitional phase. The proposed organizational structure for the Directorate of Livestock, under the Secretary of State for Agriculture, calls for a Director General of Livestock Office, with responsibility for control and orientation of all livestock activities. These activities will be directed by the office of the Sub-director of Livestock, which will supervise five sections; (1) Laboratory of Animal Biology, (2) Animal Health, (3) Livestock Development, (4) Training and Information, and (5) Poultry Production. A similar system is now in operation, but the lines of responsibility are not clearly delineated. There are far too few veterinarians or trained technicians to carry out the necessary programs, and the inauguration of a new schematic system will not materially change the current animal disease situation.

The Laboratory of Animal Biology is scheduled to carry out diagnostic investigations for field services and arrange the importation of necessary veterinary supplies.

It may also prepare a limited amount of biologics locally and cooperate in the laboratory work required in certain zoonotic diseases of interest to the national

CONFIDENTIAL

-6-

CONFIDENTIAL

public health services.

The Animal Health Section is to be concerned with the control of infectious livestock diseases and parasites, the application of animal health regulations and field programs, the prevention of disease introduction, supervision over livestock or livestock products, and export-import activities.

The Livestock Development Section is intended to stimulate production of milk, meat and other livestock products, take care of statistical reporting, carry out investigations related to breeding, nutrition and health, operate the artificial insemination programs, and organize livestock exhibitions.

The training and Information Section is designed to carry out an extension type activity.

The Poultry Production Section is to be concerned with expanding poultry, meat and egg production, and collaborating with regional veterinary technicians in reducing infectious diseases and parasitic infestations.

Of 26 provinces, only a few have established local veterinary services. Although enough veterinary medical technicians have been locally trained to provide some degree of veterinary services throughout the country, only a few areas have resident technicians. Theoretically, these veterinary medical technicians are intended to provide emergency services, conduct the routine disease preventive procedures and supervise the sanitary processing of meat at local abattoirs.

Veterinarians at headquarters in Santo Domingo are responsible for port and airport requirements for import and export certification of livestock and livestock products.

1/ 4/ 5/ 6/ 8/ 11/ 19/ 22/ 24/

CONFIDENTIAL

CONFIDENTIAL

b. Legal controls

(1) Licensure -- The Director General of livestock is responsible for determining qualifications for veterinary service. No formal licensing system exists. 3/ 4/ 11/

(2) Quarantine -- Various laws exist for quarantine and inspection of livestock. The latest Law No. 4030, January 1963, prohibits the importation of poultry (except baby chicks) in an effort to prevent infectious poultry diseases. 4/ 5/ 8/ 11/ 20/ 22/ 24/

(3) Inspection -- A 1956 regulation established sanitary control of meat and meat by-products as a function of the Secretary of State for Public Health. Regulations for inspection are adequate, but enforcement is lax. 4/ 5/ 8/ 11/ 20/ 22/ 24/

c. Professional medical organization (veterinary) -- No veterinary professional society exists in the Dominican Republic.

d. Medical research (veterinary) -- Little or no veterinary research is conducted. 4/ 5/ 8/ 11/ 19/

f. Emergency medical services (veterinary) -- No organized emergency veterinary medical services exist. The current veterinary force could not react effectively in the case of a serious epidemic or animal disease threat. 4/ 5/ 8/ 11/

2. Military veterinary organization -- No military veterinary service exists in the Dominican Republic. 4/ 5/

E. Medical manpower (veterinary)

The Director of Livestock Development has currently 26 veterinarians, mostly locally trained, on his staff. This represents about 60 percent of the veterinarians in the Dominican Republic, and the only segment of the profession with any degree of

CONFIDENTIAL

CONFIDENTIAL

effective competence. Theoretically, these veterinarians are assigned principally

Insert page 9, line 1, after "competence." -- The Ministry of Public Health employs three veterinarians and the specific activities of the remaining eight veterinarians are undetermined.

Insert page 9, end of first paragraph: No specialized public health training has been provided for veterinarians.

staff. The number has dwindled to one full-time and a few part-time instructors, and there have been frequent interruptions in the training courses. Training has never achieved minimal acceptable standards. 1/ 4/ 5/ 8/ 11/ 19/ 23/

F. Veterinary medical facilities

Only one veterinary laboratory, located near Santo Domingo, exists in the Dominican Republic. Current equipment and facilities limit the extent of diagnostic and investigational work, but plans are underway to obtain some modern equipment and improve facilities. One of the most critical current problems in the veterinary service is lack of mobility, few individuals having vehicles for field services. 4/ 5/ 8/ 11/

G. Veterinary medical supplies and materials

Since production facilities and indigenous sources of raw material are lacking, the Government of the Dominican Republic imports virtually all of the veterinary medicaments and biologicals used in the country. The amount of material used falls far short of supplying minimal requirements for effective animal health control, but enough insecticides have been obtained in recent years for regular treatment of about 25 percent of the cattle population. 1/ 4/ 5/ 8/ 11/

CONFIDENTIAL

CONFIDENTIAL

50X1

H. Reference data -- Not included in this report.

I. Comments on principal sources

1. Evaluation -- Reference material for the veterinary section of this report is extremely meager, simply because virtually no detailed reports have been produced in the Dominican Republic or elsewhere on veterinary or animal health problems. Disease incidence has been investigated only for a few conditions and not in significant depth. Veterinary activities in regard to public health have been neglected. No surveys are available regarding the identification of parasites or insects. Estimates of existing conditions, suggested in a few reports, are substantiated through conversation with technical assistance personnel and local veterinarians currently on duty in the country.

2. List of sources (in order of importance)

- 1) Direccion General de Comision Ganadera (Second reunion of the Livestock Commission). Santo Domingo. 1963. (Unclassified)
- 2) Direccion General de Comision Ganadera (Third reunion of the Livestock Commission). Santo Domingo. 1963. (Unclassified)
- 3) Direccion General de Direccion General de Ganaderia (Projected organization of the Directorate General for Livestock). Santo Domingo. 1962. (Unclassified)
- 4) Maddox, C. W. 1962. "Comments on the livestock and meat situation in the Dominican Republic." International Development Services Inc. Santo Domingo. (Unclassified)
- 5) Nieves, M. A., R. Ramon, and P. Gasper. 1962. "Past, present and future cooperative programs in the Dominican Republic." International Development Service Inc. Santo Domingo. (Unclassified)
- 6) U.S. Agency for International Development Technical Assistance Officers and Dominican Republic Veterinary Officials. Personal communications. Santo Domingo. 1963. (Unclassified)

CONFIDENTIAL

50X1

MASTER BIBLIOGRAPHY

Dominican Republic

1. Agency for International Development. 1962. Agreement for the allocation of funds for a project for the development and improvement of cattle and poultry in the Dominican Republic. Washington, D. C. 9 p.
2. Anon. 1962. Progress of the Agrarian Reform program in the Dominican Republic. International Development Service Inc. Santo Domingo. 30 p.
3. Direccion General de Estadistica y Censos. 1962. Sacrificia de Granado 24(1960). Santo Domingo. 50 p.
4. Direccion General de Comision Ganadera. 1963. Second reunion of the Livestock Commission. [In Spanish] Santo Domingo.
5. Direccion General de Comision Ganadera. 1963. Third reunion of the Livestock Commission. [In Spanish] Santo Domingo.
6. Direccion General de Direccion General de Ganaderia. 1962. Projected organization of the Directorate General for Livestock. [In Spanish] Santo Domingo. 5 p.
7. Direccion General de Ganaderia. 1962. Data regarding livestock in the Dominican Republic. [In Spanish] Santo Domingo. 13 p.
8. Maddox, C. W. 1962. Comments on the livestock and meat situation in the Dominican Republic. International Development Services Inc. Santo Domingo. 50 p.
9. Nieves, M.A., R. Ramon, and P. Gasper. 1962. Past, present and future cooperative programs in the Dominican Republic. International Development Services Inc. Santo Domingo. 24 p.
10. Pagdet, C. B. 1962. Poultry study in the Dominican Republic. International Development Services Inc. Santo Domingo. 12 p.
11. Real, E. 1962. Livestock industries study in the Dominican Republic. [In Spanish] Banco Agricola de la Republica Dominicana. 30 p.
12. Rogers, G.E. 1962. Human resources of the Dominican Republic. International Development Services Inc. Santo Domingo. 17 p.
13. Rogers, G.E. 1962. Natural resources of the Dominican Republic. International Development Services Inc. Santo Domingo. 42 p.
14. Rogers, G.E. 1962. Land tenure in the Dominican Republic. International Development Services Inc. Santo Domingo. 30 p.
15. United Nations, Food and Agriculture Organization. 1962. Dominican Republic: Results of the agricultural census taken in August 1960. 5th inset in Monthly Bulletin of Agric. Economics and Statistics. Rome.
16. United States Department of Agriculture, Foreign Agricultural Service. 1963. Dominican Republic plans another meat plant. Foreign Agriculture 1(9). Washington, D. C.
17. United States Foreign Broadcast Information Service. 1962. Meat prices, exporting criticized. Washington, D. C. April 13.
18. Wiltbank, M. J., Jr. 1962. Agricultural crop production and development. International Development Services Inc. Santo Domingo. 81 p.

50X1

19. U.S. Department of Agriculture, Foreign Agricultural Service. 1955. Dominican Republic: New school of veterinary medicine formally inaugurated. AGR 48. Ciudad Trujillo. November 10. (Unclassified)
20. U.S. Department of Agriculture, Foreign Agricultural Service. 1956. Dominican Republic: Quality control and sanitation regulations established for meat. AGR 12. Ciudad Trujillo. July 25. (Unclassified)
21. U.S. Department of Agriculture, Foreign Agricultural Service. 1960. Dominican Republic: Outbreak of livestock disease. AGR 29. Ciudad Trujillo. May 4. (Official Use Only)
22. U.S. Department of State. 1961. Existing export controls on cattle and meat repealed. Desp. 360. Ciudad Trujillo. June 20. (Official Use Only)
23. U.S. Department of State. 1962. Creation of the Faculty of Agronomy at the University of Santo Domingo. A-232. Santo Domingo. November 15. (Unclassified)
24. U.S. Department of State. 1963. Non-tariff restriction on imports of live poultry, Dominican Republic: Imports of live poultry (except baby chicks) prohibited. A-372. Santo Domingo. February 14. (Unclassified.)
25. U.S. Agency for International Development. 1963. Bi-weekly summary report. TOAID A-412. Santo Domingo. February 7. (Unclassified)
26. U.S. Agency for International Development Technical Assistance Officers and Dominican Republic Veterinary Officials. 1963. Personal communications. Santo Domingo. March. (Unclassified)
27. Plan Nacional de Salud Publica 1963-1972. Secretaria de Estado de Salud y Prevision Social. Santo Domingo. 1962. (Unclassified)

50X1