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# IICA



**MINUTES OF IICA/CARAPHIN MEETING**  
**CARIBBEAN VETERINARY MEDICAL CONGRESS**  
**RAMADA HOTEL, OCHO RIOS, OLEANDER ROOM**  
**NOVEMBER 26, 1992 1:00 P.M. - 5:00 P.M.**





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**Edited by**  
**Drs. Sandra Vokaty & Wayne Lees**

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## **1. WELCOME AND OPENING REMARKS**

Dr. George Grant, Chairman extended a warm welcome to all especially the overseas participants and those who were visiting Jamaica for the first time.

## **2. OPENING ADDRESS**

Dr. Armando Reyes Pacheco, Representative of the IICA Office in Jamaica gave the Opening Address.

Dr. Reyes presented greetings and proceeded to introduce Dr. Wayne Lees from Agriculture Canada as the new CARAPHIN Project Coordinator. He anticipated collaboration from the Member Countries of IICA participating in the project, wished them success, and assured them support in their efforts.

The Opening Address dealt with two issues. The first concerned how the CARAPHIN project could support the needs of the countries regarding their animal and plant protection activities. During the coming year, CARAPHIN participants should reassess the direction and scope of the project.

The second issue dealt with the effects of the structural adjustment programmes on the public sector's ability to provide basic services, particularly plant protection and animal and/or veterinary services. To reduce fiscal deficits, throughout the 1980's most Latin American and Caribbean countries have been subjected to structural adjustment processes. Consequently, the politicians in the Ministries of Agriculture are rethinking, reshaping and redesigning the services they have traditionally provided. In the case of Jamaica, the veterinary services have been impacted by this situation.

This has also had a direct impact on how IICA projects relate to the Ministries of Agriculture and various public agencies.

## **3. OVERVIEW: CARAPHIN REPORT**

Dr. Wayne Lees, CARAPHIN Coordinator, said he was very pleased to be here and looked forward to taking on the added responsibility and meeting and working with all involved in the project. He said this was his first overseas assignment and that Dr. Raymond Dugas had given him an overview of the CARAPHIN project. He was intrigued with the manner in which the information was shared between the territories and looked forward to being able to contribute to the programme.

He stressed the point that the CARAPHIN Project was not his project but belonged to the CARAPHIN participants. It was there for their benefit and if at anytime the participants felt that the right thing was not being done then he would like to be notified.

He went on to say that there were some major topics that he would like highlighted in the meeting.

- a. Is the present system adequate?
- b. Are there better ways of disseminating the information between the territories?
- c. Concept of a Regional Laboratory.

He stated that as the resources of each territory were dwindling, we would have to be more creative with what was available.

He reviewed the present animal disease reporting system and asked for suggestions for improvement.

#### **4. COUNTRY REPORTS**

##### **ANTIGUA/BARBUDA**

Dr. Robinson in delivering his report stated that major attention should be paid to the Regional Amblyomma Programme which has not yet been implemented. He stated that the tropical Bont tick, heartwater and dermatophilosis are all present in Antigua. Other tick-transmitted diseases are also present, such as anaplasmosis and babesiosis. Bovine tuberculosis has been detected at slaughter.

In Antigua, interest was more directed to developing crops and livestock was relegated to second place. He suggested that for the sake of streamlining communications, letters should be sent directly to Veterinary Officers.

In closing, Dr. Robinson asked the question, "What was being done to upgrade the diagnostic laboratories?" He was under the impression that IICA had agreed to do this.

##### **BELIZE**

Dr. Ivor Burns gave a brief account on the disease status in Belize. Vesicular stomatis as well as rabies are present in Belize. Bat control was being practised currently. At present Belize was free from screwworm and a tick survey has been carried out. Testing for bovine tuberculosis would be undertaken shortly. Tests for



brucellosis and hog cholera in Belize have been negative.

## **DOMINICA**

Dr. John Toussaint stated that a general survey of diseases had been undertaken several years ago. This had established a negative status for tuberculosis, brucellosis and several other communicable diseases. This survey would be repeated in the near future. *Amblyomma variegatum* had been cleared from Dominica. The Central Livestock Station had discovered two male ticks recently but infestation was not established. The past outbreak of Gumboro disease was considered under control following vaccination of chicks. Face mange in sheep was still an occasional problem. The veterinary services expected to experience problems with privatization. This would be discussed further at a December meeting.

## **GUYANA**

Dr. Lennox Applewhaite stated that Guyana was declared negative for brucellosis following a survey conducted between 1978 - 1982. The bovine tuberculosis problem was being addressed in collaboration with IICA. In the most recent survey, the national prevalence of bovine tuberculosis was found to be 10%. Outbreaks of vampire bat-transmitted rabies had occurred in Guyana. He further stated that because cattle rabies vaccines were expensive, vampire bat control was being instituted through the use of bat trapping and anticoagulant paste application. Dr. Applewhaite stated that foot and mouth Disease had been eradicated from Guyana since 1978. Recently 500 cattle had been tested for FMD in Rupununi with 100% negative results, however limited veterinary personnel were available in that area.

## **GRENADA**

Dr. Bowen Louison gave the report for Grenada. Grenada was free of *Amblyomma* ticks but anaplasmosis and piroplasmiasis were still a problem. Rabies was mongoose-transmitted. There was a rabies vaccination programme for dogs and cats operated in collaboration with PAHO. A few cattle and sheep were affected by rabies each year. Ovine brucellosis had been reported in animals shipped to Trinidad and would be included in that country's report. The CARAPHIN computer was under the control of the Plant Pest Management department. This was a barrier to use by the veterinary division. He stated that a census was required for Grenada to embark on livestock disease prevalence surveys.

## **MONTSERRAT**

Dr. Garry Swantson stated that *Amblyomma variegatum* and dermatophilosis were present in Montserrat since early 1980. He further stated Dr. Barré from the EMVT in Guadeloupe had undertaken a serological sampling from 1% of the ruminant population in Montserrat. Cattle and goats were negative for heartwater. Sheep had shown less than 3% positive serology. Serology was positive for anaplasmosis and piroplasmosis. He appealed for improvement of the laboratory services and suggested that a regional service might be provided on a similar basis to CAREC under the PAHO. He further expressed his thanks to France for the serological survey.

He went on to say that an abattoir was present with separate slaughter for poultry.

Dr. José Rodriguez (PAHO) advised that diseases such as rabies and brucellosis were being handled through the national laboratories.

Dr. Gustave Borde from Trinidad and Tobago requested that consideration be given for viral laboratory diagnostic capability.

## **ST. VINCENT and THE GRENADINES**

Dr. Charles Corbette stated that surveys had been conducted which had established that the country was free from many communicable diseases including tuberculosis and brucellosis. There had been no outbreak of *Amblyomma variegatum* reported since the initial observation two years ago.

An abattoir had been constructed in the southwest and another would be built on the eastern side of the island. Grenada had approached St. Vincent for appropriate plans.

## **SURINAME**

(Paper delivered by Dr. Tjang-A-Fa)

Suriname is an equatorial country of South-America, its area is approximately 160,000 square km and population of about 450,000. More than 80% of the population live on the plain coastal area, mainly concentrated in and around the capital city of Paramaribo. Amerindians and Bush Negros live in tribal communities in the interior.

The economy of the country is greatly dependent upon the bauxite industry. The declining revenues from exporting industry, the socio-economic crisis and manpower braindrain have had a bad impact on the economy and quality of life.

The Veterinary Service is responsible for all aspects of animal health and the monitoring of animal husbandry. Veterinary public health is controlled by the Veterinary Service.

The manpower situation of this service is as follows:

- 9 veterinarians of which 3 are Belgian
- 1 animal husbandry specialist
- 1 agro-economist from Belgium
- 6 animal health assistants
- 2 lab. technicians
- 6 meat inspectors
- 2 field inspectors and other personnel

Due to a lack of foreign exchange, inputs are minimal for the livestock industry, and productions are declining.

Although we are neighbouring a FMD-infected country, this disease has never occurred here. There have been no outbreaks of hog cholera. Suriname is presently free of Newcastle disease. If outbreaks do occur, they are controlled through vaccination. Bat rabies has a low incidence at present. Brucellosis has been eradicated from a beef herd by quarantine, testing and slaughter of sero-positive animals. This farm is a semi-government operation in the far interior, which had imported cattle from Costa Rica and Panama several years ago. The source of infection was from this importation.

Economic losses in livestock are frequent due to malnutrition, endo- and ecto-parasite infestation, and lack of farm management skills.

Technical and financial aid was received from the EEC to implement an artificial insemination project to upgrade the dairy industry.

In starting up a sound animal health programme, IICA was requested to set up an epidemiological survey study to determine the health status of our livestock population.

Recently two FAO screwworm specialists visited the country to evaluate the screwworm situation. After receiving their recommendation a programme will be formulated.

A discussion followed on the availability of an oral rabies vaccine for use in wildlife. Dr. Rodriguez (PAHO) advised that the bait for the mongoose had been tested but that the virus was not yet ready. Through genetic engineering, the genome would be placed in a carrier. Finding the appropriate bait for the mongoose, while avoiding non-target species might be a problem.

### **ST. KITTS and NEVIS**

Dr. Burnell Nisbett stated that *Amblyomma variegatum* accompanied with dermatophilosis had devastated the ruminant population in St. Kitts and Nevis. As a result of the situation, the Government's policy had also restricted importation. A major disease survey had been done in 1978. Bovine tuberculosis and brucellosis were negative. Several necropsies had been undertaken by Ross University on the island.

Bluetongue and CAE (caprine arthritis - encephalitis) surveys had been completed. St. Kitts/Nevis had participated in the disease investigation for heartwater, conducted by the University of Florida under Dr. Burrige. A serological survey was carried out with assistance from EMVT. Results were negative for heartwater in cattle. Two false positives had been found, which were believed to be associated with ehrlichiosis.

Anthrax was last reported in 1947 and Newcastle disease in 1972.

Donkeys were considered feral in Nevis. The French had reported serological evidence of equine arteritis in them and had ceased importation.

White-tailed deer were located in the peninsular portion of St. Kitts and were often heavily infested with ticks of *Boophilus* species. No *Amblyomma* ticks had been found on them. The African Green Vervet monkey was brought to St. Kitts 300 years ago by the French. Two research facilities exist, which use monkeys, Behavioural Sciences and St. Kitts Biomedical. Foetal brain transplants had been conducted and foamy cell virus sero-conversion was reported.

Dr. Rodriguez (PAHO) reported a profitable export trade of monkeys from Barbados. The USA paid \$600 per monkey for use in production and testing of polio vaccine from kidneys. Tourists were also paying US\$5.00 to see the monkey reserves.

### **TRINIDAD and TOBAGO**

Dr. Gustave Borde reported that, under a special license for CARONI Estates, sheep were imported from Carriacou and tested in Trinidad. Split samples were sent for

tests with the following results.

No. of samples	Brucella ovis CF positive	Brucella ovis ELISA positive	Brucella melitensis CF positive
<b>Feb/March 1992 CAR. 252 T&amp;T 35</b>	<b>9.5% 0</b>	<b>0.4% 0</b>	<b>4.4% 2 (5.7%)</b>
<b>May/June CAR. 217 T&amp;T 259</b>	<b>7 (3.2%) 26 (10.0%)</b>	<b>0  1 (0.4%)</b>	<b>1 (0.5%) 9 (3.5%)</b>

In addition, Trinidad had experienced outbreaks of disease in cattle with clinical diarrhoea, mucopurulent ocular discharges and pyrexia. Bovine viral diarrhoea was suspected. Dr. Borde also suggested that equine influenza and contagious vulvular dermatitis should be added to the CARAPHIN reporting format.

A rapid response mechanism reporting system was required in CARICOM to avoid the "crabs in a barrel" syndrome.

The Ministry of Agriculture would review functional responsibility of veterinary services for diagnostic, investigative and regulatory roles. Dr. Borde called for an accreditation process with laws and regulations for diagnostic centres.

He further stated that Trinidad was negative for tuberculosis for five years but he was not satisfied with the level of testing completed.

Hog cholera had been eliminated. There was an excellent control programme for rabies with resultant low incidence. There was no cattle brucellosis present in Trinidad and Tobago.

## JAMAICA

(Report by Dr. Cedric Lazarus)

The Government veterinary services had undergone drastic restructuring as a result of which all aspects of the clinical practice were privatized.

A serum bank had been established at the Veterinary Diagnostic Laboratory which aimed at developing disease profiles of the various animal populations.

The bovine tuberculosis and brucellosis eradication programme was nearing its final stages with no cases of tuberculosis being reported since 1989. With respect to brucellosis, a single focus involving approximately six quarantined herds in the Parish of St. Ann continued to be problematic. Re-testing of these herds is in progress.

Regarding the respiratory diseases, field reports and subsequent laboratory confirmation of IBR/P13/BVD were undertaken with assistance from USDA. Vaccination programmes were recommended.

The presence of CAE in imported goat herds was reported in 1988 and 1991. The herds involved have all been depopulated.

A herd of 43 Alpine and Nubian goats were imported from the U.K. through a MINAG/EEC/CARDI project aimed at improving local stock. These goats are now stationed at the government Goat Research Centre at Bodles Research Station in St. Catherine.

A compulsory on-going vaccination programme for equines was instituted after an outbreak of equine influenza at the local race track compound.

Regarding poultry diseases, results of tests from field reports indicated positive results for mycoplasmosis and *E. coli* septicaemia. Laboratory results for infectious bursal disease was inconclusive but investigations are continuing.

Routine vaccination programmes for Newcastle, bronchitis and Mareks diseases continue to be conducted.

Dr. Lazarus mentioned that following the recent screwworm eradication programme in Libya, there are indications that remaining funds could be used for a similar programme which is proposed for Jamaica and some of the other Caribbean countries. He also mentioned that work on the eradication of ticks remains an outstanding area of concern.

A national meat residue testing laboratory has been opened at the Veterinary Diagnostic Laboratory at Hope.

Finally, Dr. Lazarus mentioned that there might have to be changes in the quarantine regulations governing the possible entry of animals from rabies-affected areas. Jamaica is free from rabies and dogs and cats are only allowed in from the U.K. The importation of rabies vaccine is prohibited by law.

**5. TOWARDS A REGIONAL VETERINARY DIAGNOSTIC LABORATORY NETWORK: EMVT REPORT** (Institut d'Élevage et de Médecine Vétérinaire des Pays Tropicaux, Pointe-A-Pitre, Guadeloupe)  
Presented by Dr. Nicolas Barré

**EMVT : Animal Health & Veterinary Medicine in the Tropics**

**CIRAD: International Centre of Agronomical Research for Development**

**RESEARCH ACTIVITIES OF THE CIRAD-EMVT LABORATORY IN GUADELOUPE ON ANIMAL DISEASES IN THE CARIBBEAN**

**N. BARRE, E. CAMUS, D. MARTINEZ, J.C. MAILLARD(1)**

The laboratory of the department of Animal Husbandry and Veterinary Medicine (EMVT-CIRAD) was created in Guadeloupe in 1982. Two veterinarians specializing in acarology and arthropod-borne diseases belonged to the first team. The initial objectives were to cooperate with the Universities of Utrecht and Florida to determine the distribution of heartwater (discovered in 1980 in Guadeloupe) and the tropical bont tick in the Caribbean.

Now four research scientists (for a total of 10 persons) work there. EMVT has extended its field of activities to tick biology, ecology and control, and to the epidemiology and control of diseases transmitted or associated with ticks.

The laboratory is included in the INRA (Agronomical Research Institute) research Centre but in 1993, CIRAD will build a new laboratory (200 m<sup>2</sup>) for the exclusive use of EMVT.

**A. CURRENT RESEARCH**

**i. Research on tick biology/ecology and control**

We cooperated with the University of Florida in 1982-1985 to determine the distribution of *Amblyomma variegatum* and heart-water in the Caribbean. Libby Birnie visited, with your helpful assistance, most of the islands of the Caribbean. This preliminary survey allowed us to confirm the presence of the tick and heartwater in several new islands, Montserrat and Dominica for the tick, Antigua and Marie-Galante for heartwater. The University of Florida ceased its activities in the area but continues to work on heartwater in Africa.

During this period (about 1984), we started an active cooperation with U.S. Department of Agriculture and especially with tick acarologist, Glen Garris. At this

time, he had finished his work in Puerto-Rico where the tick had just been eradicated. In Guadeloupe, we agreed to study particular aspects of the biology and ecology of the tick so that we could formulate control measures.

We made an inventory of the hosts, studied the survival of free-living stages, the duration of blood meal feeding period and all aspects of the biology of the tick. Also we tested different pyrethroids and organophosphorous acaricides and proved the efficacy and duration of treatment of pyrethroids like flumethrin, deltamethrin and pyrethrin applied as pour-ons.

Simultaneously, we investigated the tick's predators and parasites and we evaluated the possibility of control by means of the aggregation attachment pheromones. We showed that of the tick's predators, ants are the most efficient, but birds, especially chickens, also have a significant impact on tick populations.

We also evaluated the possibility of dissemination of the ticks by means of migratory birds. With the University of Georgia, we conducted a mark and release study on the cattle egret in Guadeloupe and Antigua. We found painted birds disseminated throughout the Caribbean, as far south as Grenada and as far north as Florida.

All this knowledge on the biology, ecology and control of the tropical bont tick was part of the contribution of our institute, in cooperation with USDA, to the FAO/IICA/USAID proposal for the eradication of the tick in the Caribbean. We participated in the elaboration of the first document produced after the meetings in Washington in 1984, and Barbados in 1987.

Our institute, with Dr. Fifi, Chief of the Veterinary Services of Guadeloupe and Dr. Bertaudiere, Chief of the Veterinary Service of Martinique, wrote the projects for the French Caribbean islands. The project proposal for the whole area is also presently finished, and it will be submitted by FAO to donors next month. All of us expect that this ambitious eradication campaign will start in 1993 and that the threat will definitely end for countries that are not yet infested.

Ticks are only part of our activities. We also work on diseases transmitted and associated with ticks, mainly heartwater and dermatophilosis.

**ii. Research on Heartwater and Dermatophilus**

The objectives of our research are to:

- Increase the knowledge of the distribution of the diseases.



- Increase the knowledge on the immunology of ruminants and their ability to respond to *Cowdria* and *Dermatophilus* antigens.
- Contribute to the understanding of the epidemiology of these diseases.
- Set up diagnostic methods which are more reliable and easy to use.
- Control these diseases by means of vaccines and by the use of genetically resistant breeds of animals.

At present, we have proven the existence of heartwater by isolating *Cowdria* in Guadeloupe, Marie-Galante and Antigua. Recent serological surveys showed the existence of *Cowdria* antibodies in the sera of cattle and goats from islands where the disease is not clinically suspected. This is the case for Monsterrat, Martinique and Dominica, and even in islands, like Grenada, where the disease cannot be established because of the absence of the tick vector.

It is clear that at least for Grenada, there are problems of specificity with the 3 different tests used in Guadeloupe, or at Utrecht (ELISA, IFA, Western blot). Our research on diagnostic procedures will aim to increase the specificity of the serological tests, and to identify the antigen (maybe an *Ehrlichia*) that cross-reacts with *Cowdria*.

Another important result of our work concerns dermatophilosis. We have shown that the tick is not a true vector of *Dermatophilus* and that the clinical expression of the disease could be due to a decrease in the immunological response of animals induced by saliva of *Amblyomma* ticks. These findings will be discussed further at the ASTVM meeting in February 1993.

Regarding control of tick-borne diseases, we obtained good protection against heartwater using *Cowdria* attenuated by passages on endothelial cells and also with inactivated *Cowdria*. This is the first step toward the production of a vaccine.

Another very promising way of control involves selecting for genetically resistant breeds or lines of animals. We are working on genetic markers of resistance to dermatophilosis amongst Brahma cattle in Martinique in order to select more resistant animals in this very susceptible breed.

Along the same line, we are conducting experiments to identify the genetic determinants of resistance in goats to heartwater, to identify resistant lines, and to select on this characteristic.

Resistant breeding stock will be distributed to farmers in the next few months and their beneficial effect will be determined.

**iii. Regional Survey on diseases by ticks and on infectious diseases in the Caribbean**

Our Institute organised a serological survey on some diseases of ruminants in the Caribbean with the active assistance of the veterinary services of the Islands of the Lesser Antilles.

The survey involved nine countries of the Lesser Antilles from St. Kitts - Nevis in the north to Grenada in the south. Samples were collected from 1% of the ruminants of each island by French veterinary students. A total of 4000 sera were collected. The survey took place this year from February to September.

At present, part of the tests have been conducted (heartwater, anaplasmosis, babesiosis and brucellosis [*B. melitensis*, *B. bovis*]). Other diseases will be checked in the following months on this serum bank (bluetongue, contagious agalactia, contagious pleuropneumoniae, leukosis, infectious bovine rhinotracheitis).

**iv. Implication in a Regional Network of Laboratory for the Surveillance of diseases in the Caribbean countries.**

We prepared a synthesis of the sanitary situation in the Caribbean based on CARAPHIN reports and on information originating from the veterinary services of Martinique, Guadeloupe and Guyana. This synthesis was presented at a meeting on biodiversity in the Caribbean held in Trinidad in June 1992. We discussed the danger of introducing exotic diseases in the area, the necessity to conduct a sanitary inventory and to establish a regional veterinary policy, including not only CARICOM countries, but also non-CARICOM countries, like the French islands.

The objectives of forming a regional laboratory network would be:

- (1) To identify the diagnostic capabilities of each laboratory
- (2) To determine what equipment, supplies and personal training are required
- (3) To initiate a complete zoosanitary survey
- (4) To try to eradicate those diseases which can be eliminated
- (5) To prevent new disease introductions
- (6) To coordinate the policies of different countries within the area in order to facilitate animal trade.

Our institute as well as the Veterinary Services of the French Antilles and of Guyana would appreciate participating in such an effort at a regional scale by following proposals previously formulated by IICA. We can begin by immediately initiating an inventory of the diagnostic capability of each laboratory within the region.

**v. Training**

In addition to these research or developmental activities in Guadeloupe, we received 20 trainees for two 1-week courses on ticks and tick-borne diseases.

A course was held in December 1990, was attended by nine veterinarians from Haiti, Guyana, Martinique, Guadeloupe and New Caledonia. Another course was held in June 1991, organised jointly by FAO, USAID and our institute. Eleven technicians of the various Veterinary Services in the Caribbean attended. A training manual, which reproduces the text of the conferences, is being prepared by FAO.

**B. PERSPECTIVES FOR THE FUTURE**

There are four major activities that we wish to pursue:

- i. Participate in the campaign of eradication of the tick. As soon as the funds will be available, we will cooperate with the Veterinary Services of Guadeloupe and Martinique and the FAO representative to organise this campaign. Our institute will continue our role of providing technical and scientific advisors to the project. We also plan to set up methods to assess the impact of the campaign on tick population in Guadeloupe, Martinique and other islands involved.
- ii. Participate, in collaboration with IICA, in the identification of laboratories and centres of excellence for the diagnosis of animal diseases. The objective of this action is to establish a regional network of laboratories which specialises in the diagnosis of one or more diseases. The final objective would be to increase our knowledge of the zoonository situation, to establish a regional sanitary policy, to prevent the introduction of exotic diseases and to facilitate trade between islands of similar sanitary level.
- iii. Complete the serological survey on ruminants and participate in similar surveys in other animal species.
- iv. Start research, experiments and surveys on gastro-intestinal parasites in small ruminants. Helminths are certainly the most important cause of losses of ruminants in the area. We plan to initiate in Guadeloupe, in cooperation with INRA, a programme of research on internal parasites. We want to include other countries of

the Caribbean in that program.

The objectives of the surveys and experiments would be to:

- determine the economic impact of helminths in the Caribbean
- determine the epidemiologic situations in which helminths have both the most and the least important impact.
- propose preventive measures, based on the use of chemicals or on agronomic practices, to decrease the impact of helminths.

We contacted Veterinary Services of the Lesser Antilles to propose cooperation on this program and received favourable replies from St. Lucia, Antigua, St. Vincent and Dominica.

In conclusion, our institute, despite its location in Guadeloupe, has the mandate to work on problems of regional importance. For this purpose, we wish to enhance the contacts with partners of the Caribbean to implement research or development actions. Among these actions, the establishment of a Regional Network of Veterinary laboratories across traditional linguistic, economic, political or institutional barriers would be an important step on the way to a regional approach to the veterinary situation.

## **6. IICA HEMISPHERIC PROJECT:**

**"Modernization of Quarantine Information Systems To Increase Agricultural Trade in Latin America and the Caribbean".**

Presented by Sandra Vokaty, Animal Health Specialist, IICA Office in Guyana on behalf of Juan Leon, Project Leader, IICA Head Office, Costa Rica.

IICA's Agricultural Health Program responds to a critical need: the presence and impact of diseases and pests that reduce productivity and limit expansion of agricultural trade in Latin America and the Caribbean.

Actions taken to meet the demands of the sector, which faces the adversities referred to above, are aimed at facilitating the export of agricultural commodities, increasing productivity by reducing the impact of sanitary problems, and preventing the introduction and spread of exotic diseases and pests.

In carrying out these actions, Program V receives the active support of the national and international and political agencies.

## **The New Agricultural Horizon**

International policies on free trade as well as the movement toward integration so prevalent today represent a challenge for Latin America and the Caribbean.

In view of the crisis affecting the countries of the region, and, paradoxically, the vast potential of its agricultural sector, it is obvious that any future solution will depend on converting this potential into reality.

This was one of the main topics addressed during the Ninth Inter-American Conference of Ministers of Agriculture (Ottawa, Canada, 1987) and in preparing the Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean (PLANLAC).

Two years later, an evaluation of the Agricultural Health Program provided important information in this regard. The evaluation mission of the Program set out three basic objectives:

- a. to facilitate agricultural trade,
- b. to increase production of domestic consumption, and
- c. to prevent the introduction for exotic pests and diseases.

In this context, the project "Modernization of Quarantine Information Systems to Increase Agricultural Trade in Latin America and the Caribbean" constitutes a specific proposal and a means for upgrading the capabilities of relevant institutions. This project will also serve to make regional authorities more aware of the link between agricultural health and development. Agricultural health services have seen their budgets cut, and, in some cases, even eliminated because such links have not been understood.

### **The problem**

Agricultural health services and sectoral organizations do not have access to:

- a. consistent information model, legal procedures and quarantine controls; and
- b. information on the quarantine requirements of importing countries.

### **The solution**

IICA offers the following information systems related to agricultural pests, diseases and the corresponding legislation:

- Computerised data base (CARAPHIN)
- Computerised system of Ministry of Livestock, Agriculture and Fisheries of Uruguay
- Access to Pesticide Information Network of the Environmental Protection Agency (EPA) of the United States
- IICA's Program I and IV information systems
  
- Foreign Trade Information Service (OAS-SICE) and the Market News Service UNCTAD/GATT
- Legal plant and animal health regulations provided by Program V
- Legal plant health regulations of Guatemala

### **The plan for modernizing information**

#### **Specific objective**

To strengthen information systems and the process of harmonizing agricultural health systems in Latin America and the Caribbean

- To upgrade the capabilities of animal health and plant protection services
- To improve the quality of agricultural products for international trade in Latin America and the Caribbean
- To improve the agricultural health information system
- To develop new plant and animal health procedures

#### **Final products**

1. Compatible hemispheric agricultural health information system
  
2. Array of equivalent and compatible models of laws and regulations to facilitate trade

This information system will integrate information sub-systems related to:

- quarantine registration
- laws and legal procedures

The different models of laws and regulations will facilitate trade

A data base will be installed at IICA containing updated information on pertinent legislation in Latin America and the Caribbean; future development will be

harmonized and made available to users immediately

3. Plant and animal health procedures will be designed, based on quarantine principles, for important agricultural products

Quarantine procedures will be based on documents on:

- product inspection at points of embarkation
- emergency systems
- measures for the prevention, diagnosis and control of animal and plant diseases and pests
- tolerance of toxic residues, and minimum acceptable range
- criteria for rejection of products
- plant and animal health certification
- described and documented diagnostic techniques
- training

### **Procedure**

The general strategy of the project is to support the region wide actions of Program V. The project will generate the basic information, methods and instruments the countries require to implement regional projects.

The four principal aspects of the strategy are:

**Information**      Establishment of a data base on regulations regarding tolerance and detection of residues of pesticides and veterinary products, in importing countries

Strengthening of ties with CIRAD, EPA, FAO, FDA, WHO, APHIS (USDA) and OIE

Use of the OAS-SICE Foreign Trade Information Service data base

**Accomplished by:  
Legislation**

Dissemination of plant health data base created in Guatemala

Preparation of basic module(s) to be made available to regional projects

Installation of hemisphere-wide data base at Headquarters

<b>Systems</b>	<p>Translation into Spanish and English of Quarantine procedures prepared by OIE</p> <p>Regulations and procedures pertaining to diagnostic techniques</p> <p>Training</p>
<b>Tasks</b>	<p>Compilation, evaluation and analysis of existing information systems</p> <p>General design of integrated information system</p> <p>Programming and testing</p>
<b>INFORMATION</b>	<p>Support in installation of information system</p> <p>Updating of system</p> <p>Training</p>
<b>LEGISLATION</b>	<p>Compilation, evaluation, preparation and adoption of models of laws and regulations, in order to make them compatible</p> <p>Preparation, testing and installation of data bases on laws regulations</p> <p>Exchange of the model among countries and training</p>
<b>DESIGN OF QUARANTINE PROCEDURES</b>	<p>Compilation and preparation of quarantine procedures in Latin America and the Caribbean, such as inspection, prevention measures, tolerance of toxic residues and minimum acceptable ranges, risk analysis methods approved by GATT, plant and animal health certification requirements, among others</p> <p>Preparation of quarantine procedures</p> <p>Publication of manuals in Spanish and English</p>



## **Beneficiaries**

Project beneficiaries are the countries of Latin America and the Caribbean, which, once they have access to timely and up-to-date information on agricultural health regulations on international markets, will suffer fewer rejections of their exports, and thus increase the foreign exchange earnings they can use for overall development.

Another benefit to be derived from the project is the prestige the exporting countries will gain in the eyes of their clients, because of the higher quality products. The confidence and reliability this produces will have a favourable impact on trade agreement negotiations.

Finally, farmers will be able to plan their activities in such a way as to reduce the margin of risk.

## **7. DISCUSSION**

Discussion concerning the development of a regional laboratory network followed the presentations. Dr. Reyes Pacheco remarked that, given the present economic climate, most countries may not be willing to spread out their financial resources by supporting regional diagnostic centres. Dr. Franz J. Alexander agreed that the money would be required for such a concept, but that development of key personnel might not be possible within each island's situation. Further comments from the floor emphasized the problems experienced by veterinarians who wished to have diagnostic testing done. some of these problems were:

- not knowing where to send the samples
- finding laboratories which would accept samples
- high cost of testing
- transportation delays

To address some of these issues, the group agreed that a sub-committee would be formed consisting of Drs. Vokaty, Applewhaite, Borde, Corbette, Swanston, Barré and Lees. This group would be charged with circulating a questionnaire to all the labs in the Caribbean and to compile a summary of each laboratory's diagnostic capabilities.

## **8. CLOSING**

Dr. George Grant thanked all those in attendance and officially closed the meeting.

## APPENDIX I

### List of Participants

NAME	COUNTRY
Dr. George H. Grant	Jamaica
Dr. Dalton R. McWhinney	Jamaica/USA
Dr. T. Tjang A-Fa	Suriname
Dr. Clifford Daniels	Guyana
Dr. Charles Corbette	St. Vincent & The Grenadines
Dr. Nicholas Barré	IEMVT-CIRAD - Guadeloupe
Dr. Bowen Louison	Grenada
Dr. Mahfouz Aziz	Trinidad & Tobago (Observer)
Dr. Lloyd Webb	Trinidad & Tobago (Observer)
Dr. Joseph Ryan	British Virgin Islands (Observer)
Dr. Carl March	Jamaica (Observer)
Dr. Lennox Applewhaite	Guyana
Dr. Ivor Burns	Belize
Dr. Joseph L. Robinson	Antigua/Barbuda
Dr. Franz J. Alexander	Jamaica
Dr. Burness S. Nisbett	St. Kitts & Nevis
Dr. Garry B. Swanston	Montserrat
Dr. John Toussaint	Dominica
Dr. Patricia Barrow-Smart	Trinidad & Tobago
Dr. Gustave Borde	Trinidad & Tobago
Dr. Sandra Vokaty	IICA Guyana
Dr. Wayne Lees	IICA Trinidad & Tobago



