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COUNCIL OF MINISTERS
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THE FIRST REGIONAL TECHNICAL CO-OPERATION COMMITTEE OF THE OAU AND ALL SUB-REGIONAL GROUPINGS IN WEST AND CENTRAL AFRICA

(Lagos 21st - 23rd July 1970)

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THE FIRST REGIONAL TECHNICAL CO-OPERATION COMMITTEE OF THE OAU AND ALL SUB-REGIONAL GROUPINGS IN WEST AND CENTRAL AFIRCA

Lagos 21st - 23rd July, 1970

A. This first Regional Technical Meeting was officially opened by Mr. A.O. Odelola, Executive Secretary, OAU/STRC. In his opening address, he stated that the most important item of the agenda is the discussion of the proposal to launch a Joint Campaign against C.B.P.P. The question of integration of Livestock Development with Disease Control was also emphasised. This is also important in order to stimulate the interest of Donor Agencies. The full text of Mr. Odelola's speech is given in Appendix I.

The agenda shown in Appendix 2 was studied and approved. Working hours were stated to be 9.30 a.m. to 1.00 p.m. and then 3.00 - 6.00 p.m. (this time could be extended).

A total of 14 delegates attended this meeting (see Appendix 3).

B. Since this was the first Regional Technical Co-operation Committee meeting it was agreed that for the present meeting, the Executive Secretary of the OAU/STRC should be the Chairman. In future, the location of the meeting shall rotate among the Headquarters of the other sub-regional groupings and the Administrative Secretary of the sub-regional grouping that plays host to a meeting automatically becomes the Chairman of the meeting.

Interested International Organizations shall be invited to attend future meetings. The Anglophone West African countries who do not belong to any of the sub-regional groupings shall also be invited to the Committee meeting.

It was also agreed that the country which plays host to a Committee meeting should also take active part in the meeting. (See recommendation I in Appendix 4).

C. DISEASE CONTROL: JOINT CAMPAIGN AGAINST C.B.P.P.

Before working out details on a future joint campaign against C.B.P.P.

it is necessary to study what progress has so far been made on this disease since the last meeting in Kinshasa in December 1969. A review of the activities of each sub-regional grouping on C.B.P.P. was then given by the respective Administrative Secretaries.

(i) O.C.A.M.

Mr. Max Diaw, Directeur de la Recherche, Scientific Technique explained the activities of this sub-regional grouping.

In December, 1969, a conference on CBPP control was held to discuss methods of stamping out the disease. It was generally agreed that for vaccination, T1 and KH_3J was to be used. These two different types of vaccines were closely studied.

The Conclusions of the meeting were that: -

(a) Sanitary Measures are to be enforced.

(b) Action to be taken to start a mass vaccination campaign

and (c) There should be better control over cattle movement.

Only a few OCAM member countries have so far sent in full reports on CBPP and its control. After the rest of the reports are received, it is hoped that a comprehensive document shall be prepared for the future execution of a joint action. Some countries like Cameroon have expressed the wish that the future joint campaign should be based on the same lines as the OAU/STRC J.P. 15. This means that the same equipment, staff etc. that executed the J.P.15 should be used for this new joint project against CBPP.

The vaccine of choice shall be KH_3J. This has been widely used in this region with satisfactory results.

The aim of this joint campaign shall be stamping out CBPP. During the campaign, there shall be slaughter with compensation of infected animals.

The OCAM countries have Sanitary Regulations of one form or the other. These do not now include compulsory vaccination against CBPP. Action shall be taken to amend them. It is important that all efforts be made at local and National level to start fighting this disease while Regional financial assistance are looked for.

(ii) CHAD BASIN COMMISSION:

The report of this sub-region was presented by Dr. Toupou Mfeuapou, the Veterinaire Expert of this Commission.

The Chad Basin Commission (C.B.C.) was formed in 1965. The FAO has suggested a plan for Livestock Development for this area. In two meetings held in Chad and Yaoundo respectively, the problem of CBPP was discussed.

The incident of the disease in this region is contained in reports from the different countries.

Among the recommendations taken at the Yaounde meeting was one to harmonize sanitary measures on CBPP in the whole region. Another recommendation called for the start of a Regional mass vaccination program, using the "Bisec" (Rinderpest/CBPP combined vaccine). It should be on the same basis as the J.P.15 programme.

The question of the use of "stamping out" measures, depends on the decision of the different countries.

It is expected that funds could be obtained for this project in due course.

(iii) O.E.R.S.:

The activities of this sub-regional grouping was reported on by Mr. Balde Oumar. Secretaire General a la Planification et au Development Economique.

Steps to have a joint project against CBPP started in March 1968 when the Heads of States gave their approval for this campaign to be launched.

The sub-Regional grouping of OERS can be divided into two zones - the sahelian zone and the Southern or Coastal zone. The former has more CBPP while the latter has little or no CBPP incidence. It is estimated that for the 4 countries of OERS the cost of the Campaign shall be about 1,876,199,810 Frs. CFA. After a CBPP plan for the OERS was drawn up, the December Kinshasa meeting was held, where it was agreed that for effective control of this disease a co-ordinated and joint effort of all the sub-regional groupings under the OAU, was important. This was further agreed on by the Heads of State.

The OERS had worked out a joint campaign plan, which was submitted to Donor Agencies.

Their reactions were as follows:-

U.S.A.I.D. was interested but advised that this project for CBPP control should be incorporated in other Livestock Development projects such as Livestock Production, Marketing, Health, research, etc.

E.E.C. criticised the economic importance of this joint project. It was thought that present available data was insufficient. A good vaccine has not yet been developed because the effectiveness of the vaccine was questionable. It was also doubtful if this project shall bring profitable results. The EEC then concluded that it was too premature to launch this campaign. They, however, promised to help in the investigation on the incidence of this disease and obtain more economic data.

Later on, the OERS held another meeting to review the state of affairs and to draw up a joint campaign. In this meeting, USAID, FAO, UNDP, IBED, EEF, etc. were present. The problem of CBPP was considered, and a new project on CBPP was drawn up and incorporated in the problems of Livestock Marketing and Production. This was done with the assistance of the FAO and UNDP and the survey will last for one year. A USAID Agricultural type of programme is also to be developed. The USAID will provide experts to work on livestock work. They shall work with an FAO/UNDP team.

O.E.R.S. ACTIVITIES

- 2 Veterinarians were appointed to co-ordinate the work on livestock activities and harmonize sanitary measures. A book on this has been written and approved by the Ministers.

- No more frontiers exist between the OERS States. There is free movement of Veterinary personnel in all the countries.

- Customs barriers have also been removed to facilitate cattle trade and meat trade between the States.

- Transportation of meat to coastal cities is by cold storage systems.

- Experiments are going on to use the navigable River Senegal to its maximum capacity.

The immediate needs of the OERS sub-region is to ask the FAO to evaluate the proposed joint project against CBPP.

There is enough information about CBPP to go ahead with a Joint Project. What is badly needed now, is the funds.

(iv) NIGER BASIN COMMISSION

The Administrative Secretary, Mr. Bokpe Leon has just assumed duty three weeks before coming to the meeting. No veterinarian has been appointed to work on this project. Mr. Bokpe however promised that the Niger Basin Commission would cooperate with both the OAU and other organizations to make a success of the joint project.

(v) CONSEIL DE L'ENTENTE GROUP

The Administrative Secretary was not present at the meeting because of other previous commitments of his organization. However, the Committee requested the Executive Secretary of the OAU/STRC to report the details of the agreements at the meeting to him so that his organization might take appropriate action on the recommendations of the Committee.

(vi) GHANA: Dr. Oduro, Principal Veterinary Officer of Ghana reported on CBPP activities in his country.

CBPP vaccination has been going on for several years. It is now necessary to have a better plan in which Ghana can be fitted.

CBPP is a major disease problem in Ghana. Outbreaks are on the increase. Practically, the whole of Northern Ghana can be regarded as endemic zone. Of 62 outbreaks in 1968, 40 were in the North; 170,000 vaccinations against CBPP were done that year.

It is estimated that Ghana shall require little funds to finally get rid of the disease. Help in the form of vehicles only is requested from Donor Agencies. The other facilities such as personnel, equipment etc. are already available. Ghana has a good net-work of road system in the North to facilitate this CBPP control campaign. Ghana also now needs a CBPP specialist from the FAO to assist in the work.

(vii) NIGERIA: Dr. Inua Mohamed, Chief Livestock Planning Officer of Nigeria reported that Agriculture is now given priority in Nigeria. Each of the 12 states has its own services.

In Nigeria, CBPP occur mainly in the North which can be regarded as an Enzootic zone. There is a small Exposed Zone in the middle of the country and the southern part is a Free Zone.

The proposed action against CBPP is first of all to concentrate on the Endemic zone. It is to be noted that after Nigeria had nearly got rid of CBPP, it reappeared, increased very fast, and even extended to trade and breeding cattle in 1967.

The National Livestock Committee shall meet to advise the Veterinary authorities to undertake a mass vaccination campaign.

Finance for such a campaign shall not be high and Nigeria may not need additional funds. What is likely to be requested is additional technical assistance.

(viii) The Committee regretted the absence of Liberia, Sierra Leone and The Gambia at the meeting. The Executive Secretary OAU/STRC was asked to convey to these states the recommendations of the meeting for appropriate action.

C. PRESENTATION OF THE TECHNICAL REPORT ON CBPP

Before the start of the Regional Technical Cooperation Committee meeting, a sub-committee of the OAU/FAO/OIE Expert Panel on CBPP had been meeting for 3 days to draw up a Technical Report on the control of CBPP. This Technical Report was presented to the meeting by Dr. Lobry, Animal Health Officer of the FAO.(See Appendix 5).

The report contains a lot of technical details. What the OAU now needs is detail planning, phasing etc. of this proposed campaign following the advice and recommendations of the Technical Report.

Dr. Lobry emphasised the point that vaccination is now the main weapon on our hands to fight this disease. This is fully discussed in the Technical Report. This report also gives the definitions of zones. Countries and Regions should first of all be divided into zones before the joint project starts. Full co-operation of the Veterinary Services is necessary for the success of the proposed joint project. Before vaccination starts, safety trials should be done in the areas of vaccination.

It must be remembered that the Technical Report only gives a general working programme which should be fitted into local conditions.

D. THE OPINIONS OF THE EXPERTS ON CBPP

The FAO members of the sub-committee that produced the Technical Report expressed their views on CBPP and its control.

DR. HUDDART, FAO CBPP specialist now working in Uganda described the CBPP situation in East Africa. The conditions are different from those in west Africa. The incidence of the disease is lower in East Africa than in Central and West Africa and outbreaks are confined to Nomadic areas, and along the borders between countries.

Vaccinations have been done, using mainly T1 vaccine and have erradicated the disease in active outbreaks. The method used is contained in the Technical Report now submitted to the OAU.

The economic problem of CBPP is to control the disease when it is out of the endemic area. Mobile field units have been used - Testing and vaccination being done together. By this method, CBPP can be erradicated quickly. In East Africa, testing and slaughtering is widely done. This is because outbreaks are mainly sporadic.

Uganda having a common border with Sudan has infection spreading from there. Therefore, Uganda is always prepared with adequate equipment to deal with CBPP very quickly.

Application of these methods in the West African plan must be based on widespread use of mass vaccination in endemic areas. First of all, an epizoobiological survey will have to be done. Vaccination coverage must be as near 100% as possible. Low vaccination coverage may not erradicate CBPP and may even make it more difficult to control the disease in the future.

If the disease is controlled in the enzootic producing areas, this will also get rid of the disease in the consumption areas. It is important that sanitary measures are enforced in each area. C.F. testing units should be set up for the diagnosis of the disease. This should be used only after regular vaccinations have reduced the number of outbreaks. It must be noted that even without testing, the disease will disappear if good coverage is maintained. Testing and slaughter only hasten the process of erradication.

Epizootiological survey can be done from the history of CBPP in the country.

The Panel of Experts on CBPP will soon produce a book on "Field Control Against CBPP".

DR. PROVOST, OIE expert on CBPP briefly described the situation in Central African states.

Ten years ago the situation was very bad with 200 - 250 outbreaks a year, in Chad near the borders with Cameroon. Camerron now has only sporadic outbreaks near the Chad/Cameroon border and Nigeria/Cameroon border. In Central African Republic, there was, and still exists an enzootic area.

Chad was the first to do vaccination on CBPP using the "Bisec" - Rinderpest/CBPP combine vaccine. This has resulted in the present imporved situation in this country. "Bisec" can be used for all animals and for any mass vaccination campaign.

Mass vaccination was done in Cameroon enzootic areas, in 1965, and this has controlled the disease except for sporadic outbreaks that sometime occur. Slaughtering of infected animals following quarantine is sometimes practiced.

In Central African Republic, vaccinations have been done for five years but the disease still occurs.

(a) Bisec can control CBPP if used effectively;
(b) With little funds vaccination has been used to control CBPP;
(c) Full cooperation of the cattle owners is very essential to achieve a high vaccination coverage.

DR. LINDLEY, FAO expert, stated that during vaccination every animal within the enzootic zone must be vaccinated.

In the Coastal countries there are about 3 - 4 million humpless cattle. Most Governments are keen to increase their numbers because they are trypanosomiasis resistant. These humpless cattle also do not migrate. The control of CBPP in such cattle therefore is much easier than in migratory zebu cattle.

These humpless cattle live in either free-zone or exposed zone. The method of control here can either be slaughtering of infected herds or mass vaccination. The most important action in this belt is to have proper movement control, through it. This reduces the degree of spread of infection.

If the Exposure rate to CBPP is high vaccinate every animal every 6 months with KH_3J. There are two types of vaccines recommended, KH_3J or T1. Any one is just as good as the other. It is best to use them as lyophilised vaccines.

Another important factor in CBPP control is to ensure that there is maximum cooperation of the cattle owners, to have the proper coverage.

It must be realised that at the present, not enough is known about CBPP, but enough is known to start a joint campaign.

At the end of the mass vaccination operation, the whole campaign must be phased out slowly and not just end abruptly as the Rinderpest one did.

COSTINGS: In the process of attempting to obtain aid for CBPP control, it is important to do some costings of the disease to see how much the disease is costing the economy of the country. See Appendix 6.

There are also other important losses such as the terrific danger that exists if CBPP is introduced into a herd of valuable CBPP free cattle. These may be special animals being trained for specific purposes e.g. ploughing etc. It is important that these animals are kept protected from CBPP.

The "Bisec" vaccine if properly used can reduce the cost of operation by at least 1/3. Presently, Farcha Laboratory is producing a "Bisec" vaccine in which the Rinderpest strain is thermo-stable thereby making it thermo-resistant. Dr. Provost thinks that the "Bisec" vaccine is the vaccine of choice in this proposed vaccination campaign since Rinderpest and CBPP still jointly exist in most countries.

In Central Africa, trials are still going on in the use of T1 vaccine incorporated in Rinderpest vaccine.

E. PROGRAMME OF WORK:

Establishment of a machinery for coordination of a joint project:

During the Kinshasa meeting (December 1969) it was clear that Donor Agencies are reluctant to support this CBPP project alone. CBPP control projects may be considered if incorporated or integrated into Livestock improvement programmes.

It is therefore clear that African countries must now pull their resources together to tackle this disease themselves. The whole area of West and Central Africa which now concerns us in the control of this disease has been divided into the following groupings:

(a) O.E.R.S.	-	Gambia, Guinea, Liberia, Islamic Republic of Mauritania, Senegal Sierra Leone and Mali.
(b) ENTENTE	-	Ivory Coast, Dahomey, Upper Volta Niger, Togo and Ghana.
(c) O.C.A.M.	-	Federal Republic of Cameroon, Central African Republic, Popular Republic of Congo, Democratic Republic of Congo, and Chad.
(d) Chad Basin	-	Nigeria.

International Coordinator's Unit: The headquarters of the unit will be in the offices of the Executive Secretary of the OAU/STRC in Lagos. The OAU International Coordinator of this Joint Campaign is the Director of IBAH, Dr. P.G. Atang. He will be stationed in Lagos and operate from there. He will have direct access to the heads of the Secretariats of all the sub-regional groupings viz OERS, OCAM, Conseil de L'Entente, Niger Basin, Chad Basin and all the Directors of Veterinary Services in the states within these groupings as well as the Directors of Veterinary Services of Nigeria, Ghana, Liberia, Sierra Leone and The Gambia. He will work closely with the Deputy Coordinators appointed for the groups of states outlined above. He must also hold meetings at appropriate intervals with the Deputy Coordinators, National Organizers and the FAO. The International Coordinator shall work in close collaboration with the

Laboratories in West and Central Africa which produce vaccine for the innoculation activities. All Directors of Laboratories shall be invited to all technical meetings convened by the OAU International Coordinator of the Project.

Deputy International Coordinators:

The International Coordinator shall be assisted by four Deputy International Coordinators; one appointed by each sub-regional grouping of: - OERS, Chad Basin Commission ENTENTE and OCAM. Each Deputy Coordinator shall be in-charge of his sub-region and answerable to the International Coordinator in respect of the project. The Chad Basin Deputy Coordinator shall be in-charge of Nigeria and also undertake other duties assigned to him by the International Coordinator or the other sub-regional groupings. These Deputy Coordinators must be very experienced field men and must be serious and hard working officers. They will be stationed in:-

(a) Chad Basin Deputy Coordinator in Fort Lamy
(b) OERS " " " Dakar
(c) ENTENTE " " " Abidjan
(d) O.C.A.M. " " Yaounde.

The names of those appointed as Deputy Coordinators should be sent to Lagos within three months time.

The salaries and allowances of the OAU International Coordinator shall be paid by the OAU while those of the Deputy International Co-ordinators shall be paid by the sub-Regional group that appoints him.

The Executive Secretary of the OAU/STRC was asked to appeal to the Secretary-General of the OAU to issue OAU Laissez Passers to all the Coordinators so that they can have free movement into all the countries under their control.

National Organiser:

Each country participating in the campaign shall appoint a National organiser. They must be highly qualified officers with plenty of field experience. These officers shall be responsible for the whole operation in their respective countries.

Training: The OAU shall apply to the FAO to organize a comprehensive training course for the International Coordinators, the Deputy International Coordinators and the National Organisers. They will be trained in the Laboratory and field aspect of CBPP control.

CBPP Joint Project Activities within the next 3 months:

(a) The International Coordinator shall visit all the Heads of the Secretariat of the sub-regional groupings to obtain the names of the Deputy Coordinators and National Organizers, and also obtain the zones of the different countries.

(b) Convene a Technical meeting of all the Coordinators to plan the details of the joint campaign.

(c) On the instruction of the Executive Secretariat of OAU/STRC the International Coordinator shall put a request programme to the FAO for the training of the Coordinators and National Organizers.

(d) The International Coordinator shall attempt to set up his headquarters office in Lagos.

(e) Convene a meeting of all the Directors of Veterinary Services and the Directors of VOM, Bamako, Farcha, Dakar and other Laboratories in West and Central Africa.

Summary of the role FAO shall play in this project:

(1) Due to lack of funds and because the donor agencies are reluctant to finance the project, OAU shall have to rely more on the FAO for whatever technical assistance they can offer.

(2) The International Coordinator shall work closely with the FAO during this campaign.

(3) The training of technical people for both the field and laboratory work shall be the responsibility of the FAO. Details shall be worked out by the International Coordinator.

(4) On request, FAO shall provide the necessary technical assistance that may become necessary.

I. GENERAL

The meeting called on the OAU Administrative Secretary-General to increase the staff of IBAR to be able to cope with these increased responsibilities.

2. The Joint Project shall start simultaneously in all areas in West and Central Africa.

3. The present work should continue in all the individual countries while the OAU tries to obtain external aid where necessary. It may become necessary for countries to call on the OAU and the sub-regional groupings for additional financial assistance. It is important to note that if all countries and sub-regional groupings cooperate and work together, the total cost of the operation will be very much reduced particularly as it will operate as a part of general livestock development.

4. All Governments should try to help the Coordinators and National Organizers to have free movements in their areas of operation. In this way the border areas between countries shall be adequately covered during the operation.

5. The Coordinators and Deputy coordinators should have easy access to the highest authorities in each country for purposes of the project.

6. All countries involved in this operation must give CBPP Joint Project top priority in their livestock development activities.

MEETING OF CO-ORDINATORS

As stated on page 11 (b), a meeting of all the Co-ordinators and National Organizers shall be convened soon. This shall be the preparatory meeting for this joint project. The following topics shall be discussed:

A. CBPP Incidence:

(A) Maps shall be produced, showing the different zones in each country or better still in each region.

(b) Total cattle population involved in each zone.

(c) The total number of animals that shall be vaccinated.

and (d) Map showing trade cattle movement in each sub-region.

B. CBPP Control:

(a) Present activities in the field.

(b) Type of vaccines used for mass vaccination.

(c) Safety trials if new vaccines are to be introduced for the first time.

C. Equipment and Personnel:

This involves funds, instruments, vehicles, vaccine supplies, personnel etc. The following information shall be required:-

(a) existing equipment;

(b) what can the region provide for the project?

(c) What is the additional requirements?

(d) Any other relevant matters..

D. Organization of the Campaign:

(a) The method of CBPP campaign to be used in the different zones.

(b) System of vaccination to be used.

(c) Season and period of vaccination.. etc., etc.,

II. LIVESTOCK PRODUCTION AND MARKETING

It was anticipated that Professor Wilson of the ECA was to attend this meeting and submit a scientific paper on Livestock Production and Marketing which was to be discussed. Unfortunately Professor Wilson was on leave and could not attend.

The FAO representative Dr. Lobry then talked about the discussions the Director of Animal Production and Health held with Professor Wilson in Rome while he was on his way on leave. The ECA with the assistance of the FAO and OAU will do a study on Livestock Production and Marketing in Africa. After this study, it shall be possible to fill in the gaps wherever they exist.

The OERS and OCAM have drawn up comprehensive reports on Livestock Production and Marketing in their different Regions. These shall be forwarded to OAU/STRC in due course.

On the question of livestock production and marketing, a paper entitled "Livestock Production and Marketing" (see Appendix 7) was prepared by the STRC Secretariat. This was introduced by the Executive Secretary, STRC and discussed. The members of the Committee agreed with the views stated in this paper. The OAU/STRC is aware of the fact that little attention has, in the past, been given to this important subject of Africa's economic development. This is one of the reasons why OAU/STRC suggested the expansion of the functions of IBAR, and this was approved in November and December in Kinshasa and Mogadiscio respectively by the Directors of Veterinary Services. Efforts are being made to fill the vacant posts in this Bureau to enable it take up the question of livestock production and marketing. Recommendation III (Appendix 4) was passed by this committee.

The question of inadequate roads and other means of transportation make it difficult for meat and other livestock products to get to the areas of consumption which are generally a long way from the producing area.

Another impediment to marketing is the difficulties cattle traders sometimes encounter at the borders, when moving from one country to another. Some of them pay very high taxes etc... An appeal was made at the meeting for liberal Customs barriers among OAU Member States. It would be a lot cheaper to most African countries, if meat is imported from another African country than from Europe, as is the practice today. With well organized marketing and distribution systems, the supply of these products could be regular and reliable. Recommendation IV passed after the general discussions is contained in Appendix 4.

III. CLOSING OF THE MEETING

Before closing the meeting, it was generally agreed that the next meeting shall be held next year at about July, in Dakar, and the OERS Administrative Secretary shall convene it.

The meeting finally closed with votes of thanks to the people and Government of Federal Republic of Nigeria for making it possible to hold the meeting in Lagos. The Executive Secretary of the OAU/STRC and his staff were also congratulated for the hard work done in making this conference such a success.

IBAH July, 1970.

REGIONAL TECHNICAL CO-OPERATION COMMITTEE FOR WEST AND CENTRAL AFRICA

(Lagos, 21 - 23 July, 1970)

ADDRESS BY MR. A. O. ODELOLA EXECUTIVE SECRETARY OAU/STRC

Distinguished Delegates,

I welcome you all to this first meeting of the OAU Regional Technical Co-operation Committee and all the sub-regional groupings in Western and Central Africa. The most important item on the agenda is, of course, the discussion of the proposal to launch a Joint Campaign against Contagious Bovine Pleuro-Pneumonia (CBPP). We are all aware of the loss being incurred by all OAU Member States as a result of the spread of this disease. Nonetheless we agreed during our discussions in Kinshasa in December 1969, that there is still much to be done before this disease can be effectively checked. This uncertainty as to the technical feasibility of an eradication project prompted the decision to ask the OAU/FAO/OIE expert panel for a reaffirmation of their 1967 stand; it also led to the proposal to constitute this committee which will work on permanent basis to deal with the project and, as time goes on, handle other technical co-operation matters of common interest.

Our terms of reference are as follows :-

(i) immediate steps be taken by the Executive Secretariat of the OAU/STRC with the collaboration and assistance of the FAO to prepare a feasibility report to enhance the launching of the campaign; and

(ii) that officials of the Executive Secretariat of the OAU/STRC and the Secretariat of all the Sub-Regional Groupings in West and Central Africa meet at a Technical Cooperation Committee for the planning and execution of the project.

We also appealed to all Member States of OAU where CBPP occurs should take immediate action to combat the disease within their national borders using the usual classical methods of control outlined in the FAO/OIE/OAU Expert Panel on CBPP Report of 1967.

Our objective at this meeting is to plan for joint action against this disease taking account of the work already done by the subregional organizations viz OCAM, Niger Basin Commission, OERS, Chad Basin Commission and Conseil de L'ENTENTE. During the discussions in Kinshasa we were informed of the progress of the work already done by each of these organizations. We hope we shall be able at this meeting to consider these programmes together against the general background of an integrated plan for livestock production, distribution, and disease control. I am aware that the programme by each of these Organizations are in different stages of advancement. It is our intention that at the end of this meeting, we should evolve a plan of operation which will enable each regional grouping in West and Central Africa to combat the disease in its area under a Joint machinery to be coordinated by the OAU.

I must thank the Members of the expert panel who have been meeting in Lagos since the 17th of July for their hard work and for their devotion to duty. Africa is grateful to them for their contribution to the problem of disease control in Africa and I am sure that the Report they are submitting to this Committee will guide us effectively to a useful decision in respect of the Joint Project. I must thank the FAO specifically for the effective way they have been co-operating with the OAU and all other Organizations represented in this Committee. I am sure, when we come to discuss the problem of Livestock Production, Distribution, and Marketing, the FAO will inform us of their plans for the future development of Livestock Resources in Africa.

One point that became clear at the end of the Kinshasa Meeting was the need for each OAU State to commence systematic national stock-raising programme in order to reduce the dependence of the most industry on nomadic cattle. I am not pretending that nomadism will be wiped out; it is however necessary both for the health of each nation and for revenue to reduce its dependence on nomadic cattle for beef meat. High quality meat will be produced only from well bred cattle. It was time therefore that stock-raising becomes a matter for the active consideration of economic planners in all OAU States. Of course, such a programme will be very expensive unless it is tackled as a part of an over-all national or regional agricultural development programme. In this way, the importance of the livestock industry will dictate to the planners what priority should be given to a systematic livestock farming programme.

In view of this situation, our disease control activities must be viewed as a part of a general livestock development programme. An integrated livestock development programme will include production, distribution, marketing and disease control. Distribution and marketing face a number of problems. Within each state the most important problem is transportation difficulties while at the regional level we face the problem of customs barriers which hamper the free movement of both cattle sellers and buyers. These inter-state problems can best be solved by bilateral multilateral agreements among member states; this is the value of the OAU and the other sub-regional groupings - to breakdown all barriers to freedom either of movement or association.

I hope that as time goes on our future meetings will be able to tackle these problems in an effective manner.

Once again I welcome you to Lagos and I thank you all for honouring the invitation of the OAU. THANK YOU.

TECHNICAL CO-OPERATION COMMITTEE : JOINT CAMPAIGN AGAINST C. B. P. P.

Lagos, 21 - 23 July, 1970

A G E N D A

1. Disease Control : Joint Campaign against C.B.P.P.
2. Livestock Production in Central and West Africa
3. Marketing and Distribution Problem
4. Any other business

REGIONAL TECHNICAL CO-OPERATION COMMITTEE MEETING OF THE OAU AND ALL SUB-REGIONAL GROUPINGS IN WEST AND CENTRAL AFRICA

(Lagos, 21-23 July, 1970)

REUNION DU COMITE DE COOPERATION TECHNIQUE REGIONALE OUA - GROUPEMENTS SOUS-REGIONAUX EN AFRIQUE DE L'OUEST ET DU CENTRE

(Lagos, 21-23 Juillet 1970)

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RECOMMENDATIONS

I. PROCEDURE. The Committee AGREES that

(a) The host Organization should provide the President for one year. The current President should also invite the next host Organization to convene a subsequent meeting.

(b) It is not necessary to appoint a large Executive for the work of the Committee. Only a president should be appointed to preside over meeting.

(c) The current President should provide the Secretariat for the conference until the following year.

(d) All interested International Organizations be invited to the work of the Committee on each occasion.

(e) The committee should always invite Nigeria, Ghana, Sierra-Leone, Liberia and Gambia to its meetings to ensure effective involvement of the governments of these countries in technical co-operation matters being discussed.

Furthermore, the country in which the sub-regional grouping has its headquarters should actively participate in the meeting of the Technical Cooperation Committee.

II. PROGRAMME OF WORK

A. Machinery for coordination

(a) The committee notes that member states are agreed that a joint project be launched. This proposal has also received the support of the Heads of State of OCAM, OERS, Chad Basin Conseil de L'Entente and the assembly of Heads of State and Government of the OAU. The committee notes that from the discussions held during the 2nd African Regional FAO Conference on Animal Production and Health (Kinshasa of 27th November - 6th December, 1969), international donor agencies are rather reluctant to give financial aid to this project. In order to give effect to the wishes of the Heads of State of Africa, the Committee has forged the following machinery for the execution of the project:-

(i) There shall be an OAU International Co-ordinator of the project to be based at the Executive Secretariat of the OAU in Lagos. He will have responsibility for activities in the entire West and Central Africa.

(ii) He will have four Deputy International Co-ordinators to be appointed as follows:-

(a) By OERS to supervise 7 countries - The Gambia, Guinea, Liberia, Islamic Republic of Mauritania, Senegal and Sierra-Leone.

(b) By OCAM to supervise 6 countries - Federal Republic of Cameroon, Central African Republic, Popular Republic of Congo, Democratic Republic of Congo, Gabon and Chad.

(c) By Conseil de L'Entente to supervise 6 countries- Ivory Coast, Dahomey, Ghana, Upper Volta, Niger and Togo.

(d) By Chad Basin to supervise Nigeria and assist International Co-ordinator on other jobs to be assigned from time to time by the Co-ordinator, the OAU or the sub-regional grouping.

(b) The Deputy International Co-ordinator shall be paid by the sub-regional grouping which appoints him. His services shall be placed at the disposal of the OAU International Co-ordinator for purposes of effective field activity in the area defined for him.

(c) Each state will appoint a national organiser. The national organiser should be an experienced veterinarian. He must be an employee of the state veterinary service.

The national organiser will be in regular touch with the international co-ordinator's unit. The national organiser must ensure that tests against CBPP are done in his state.

(d) Each of the sub-regional grouping vize OERS, OCAM, Conseil de L'Entente and Chad Basin Commission should ensure that the Executive Secretariat of the OAU receives the names of the Deputy International Co-ordinator within three months after this conference.

(e) As soon as all nominations to the posts of Deputy Co-ordinators have been received by the Executive Secretariat of the OAU/STRC, the OAU International Co-ordinator must hold a consultative meeting with them to plan the field activity in each area of jurisdiction of each of the sub-regional grouping.

(f) The international co-ordinator must also organize with the assistance of the FAO training courses for the national organisers and other technical personnel working on the projects.

(g) The International Co-ordinator must ensure that the project is carried out in accordance with the technical advice of the FAO/OIE/OAU Panel of Experts on CBPP contained in the report submitted in Lagos, July 1970. He should also seek FAO assistance in all his activities where feasible.

(h) The International Co-ordinator should at the request of a Member of sub-Regional grouping obtained from the FAO any technical assistance that might be required for the efficient execution of the Project.

(i) The Committee request the Executive Secretariat of OAU/STRC to apply to the Administrative Secretary-General of the OAU for OAU Laissez-Passer for the 4 Deputy International Co-ordinators to enhance their free movements at inter-state boundary.

MEETING OF THE SUB-COMMITTEE OF THE FAO/OIE/OAU EXPERT PANEL ON C.B.P.P.

Lagos, 17 - 20 July, 1970

Following a recommendation of the 2nd African FAO Conference on Animal Production and Health held at Kinshasa, 28th November to 6th December 1969, a meeting of a sub-Committee of the FAO/OIE/OAU expert panel on C.B.P.P. was held at Lagos, Nigeria from 17th to 20th July 1970, to draft proposals to be submitted to OAU for the organization of a joint regional campaign of control against C.B.P.P. in Central and West Africa.

The sub-Committee was composed of :-

Dr. P.G. Atang	Director, IBAH/STRC/OAU
Dr. M. Sall	Deputy Director, IBAH/STRC/OAU
Dr. J.E. Huddart	FAO Expert
Dr. E.P. Lindley	FAO Expert
Dr. A. Provost	FAO Consultant/OIE Representative
Dr. M. Lobry	Secretary of the Panel

INTRODUCTION

These proposals for the control of CBPP are intended to amplify the recommendations made by the FAO/OIE/OAU Expert Panel on CBPP in 1967.

The adoption of a uniform approach is recommended, although it is accepted that local modifications to methods might have to be accepted. The adoption of regional schemes is recommended. National control program already in operation should be continued.

1. ASPECTS OF VACCINATION

1.1 Choice of vaccine

1.1.1. Of the live vaccine available those made from the strains T_1 and KH_3J are recommended. Safety trials of T_1 vaccine should always be carried out before widespread use in a population of unknown susceptibility. (See paragraph 2.17). Vaccines made from strain KH_3J may have to be used until such time as it has been confirmed that vaccines made from T_1 strain can be used without undue complications.

1.1.2. Simultaneous vaccinations with any other compatible vaccine, such as Rinderpest vaccine, is strongly recommended. Advice as to compatibility is obtainable from the laboratories concerned.

1.1.3. It is strongly recommended that lyophilised vaccines should be used in any mass vaccination campaign. Advantages include more satisfactory standardisation and much greater convenience in use.

1.1.4. Bearing in mind the dangers associated with avianised vaccines, the use of this type of vaccine should be discouraged.

1.2 PRODUCTION OF VACCINES - LABORATORIES

1.2.1 Vaccine supplies - CBPP vaccines are at present available from the following laboratories : Dakar, Farcha, Bamako, Vom. In view of requirements of staff and equipment, and the exacting standard of production required, it is desirable that production should be centralised as far as possible.

1.2.2 Methods of vaccine production are described in the literature. Special attention should be given to the standardisation of all vaccines for use in large scale campaigns.

1.3 It is important that all rules for transport, storage and handling of vaccines should be faithfully observed according to the instructions issued by the producing laboratories.

1.4 Use of Vaccines:

1.4.1 Route - subcutaneously.

1.4.2 Sites of vaccination - 3 main sites

1.4.2.1 TAIL as used in East Africa and there considered to be the safest site.

1.4.2.2 OVER THE NASAL BONE (Chanfrein) restraint is difficult and serious lesions are more likely to cause death. The use of this site is to be discouraged.

1.4.2.3 NECK OR FLANK - the more conventional sites but may result in larger lesions with reaction producing vaccines.

1.4.3 In the case of T_1 vaccine choice of site must depend on local experience - KH_3J can safely be given at conventional sites.

1.4.4 Post vaccinal reactions - the ill effects of vaccination consists of local swelling at the site of inoculation in a small proportion of animals. This

swelling is usually apparent by about 2 weeks after vaccination and reaches its peak at 3 to 4 weeks.

1.4.5 Chemotherapy to control local post vaccinal reactions is not objectionable.

1.4.6 Safety trials for T_1 vaccine should be set up immediately in as many countries as possible (See paragraph 2.17).

1.5 COVERAGE

1.5.1 High vaccination cover is essential in mass vaccination campaigns. Inadequate vaccination coverage is dangerous in that it tends to perpetuate the disease.

1.5.2 Vaccine should be used every six months in high incidence areas.

1.6 MARKING - all vaccinated animals should be marked distinctively.

2.0 OUTLINE PROPOSALS FOR CONTROL SCHEME

The proposed control scheme is based upon repeated mass vaccination campaigns in the enzootic areas. Ancillary measures such as testing and slaughter are recommended also but only after the incidence of disease has become greatly reduced through vaccination.

2.1 The detailed planning of control programmes depends on the availability of precise information on the distribution of the disease in each country or region. It is essential to define enzootic, free and exposed areas, and for this purpose, epizootiological surveys may be necessary.

Enzootic area - an area within which there has been infection within the last two years. It is essential to select readily definable boundaries based on

physical features or tribal boundaries or other features likely to present an effective obstacle to cattle movement. Occasionally, such an area may have to include some non infected populations.

Free area - an area within which there has been no infection during the past two years and in which there is little risk of future introduction of disease.

Exposed area - an area in which disease is normally absent but in which sporadic outbreaks are liable to occur due to introduction of infection by migratory or trade cattle.

Areas of which the status is unknown must be regarded as suspect (enzootic) areas until proved otherwise. Epizootiological areas may overlap national boundaries and call for co-operation between neighbouring states.

2.2 Mass vaccination programmes should be started in enzootic areas offering the most favourable prospects for high cover rate. More exact estimates of time scales can be given when epizootiological findings are known and the availability of resources can be assessed.

2.3 Programme for an enzootic area :-

2.3.1 Preliminary safety trials on an adequate scale (including calves) (Also see paragraph 2.17).

2.3.2 Preliminary educational propaganda and enlistment of support from local administration, police, army and judiciary etc. Everything should be done to ensure cattle owner co-operation and good vaccine cover.

2.3.3 Vaccination of all cattle including calves:

i in case of T_1 according to the plan.
(T_1) - 6 months - (T_1) - 12 months - (T_1) - 12 months - (T_1) (a total of 4 times in $2\frac{1}{2}$ years);

in the case of KH_3J vaccination should be carried out every 6 months.

Either scheme results in an effective immunity level for approximately $3\frac{1}{2}$ years. Note that this first phase must last for at least $2\frac{1}{2}$ years from the beginning of vaccination.

2.3.4 Special attention is to be paid to herds identified as infected on clinical grounds. The intervention consists of vaccination with T_1 vaccine repeated after two months. It is not essential to slaughter clinical cases at this stage.

2.4 Each country will require at least one diagnostic unit (testing). This should be established if not already available within 1 to 2 years.

2.5 The policy of slaughter would not be used as an instrument of control in a vaccinated enzootic area until it could be supported by CF testing. This would normally take place at a late stage after the incidence had been substantially reduced by vaccination and the area is approaching free area status. The basic object of testing and slaughter is the early removal of carriers.

2.6 When compulsory slaughter is carried out, adequate compensation should be paid as soon as possible and every effort made to salvage the carcase.

2.7 When the incidence is lowered and testing becomes available, outbreaks should be dealt with by the most suitable of the following techniques. Note that these are applicable whenever active disease is discovered. These represent 3 methods of eradicating infection from infected herds.

2.7.1 Testing with herd slaughter. This is always particularly applicable in sedentary areas and in areas approaching final eradication.

2.7.2 Eradication within a quarantine. This involves the provision of suitable quarantine areas in suitable localities or alternatively involves ability to maintain an infected herd in isolation in situ. An infected herds is treated as follows:-

(i) Clinical cases are slaughtered
(ii) The herd is tested and reactors slaughtered
(iii) The remainder of the herds is vaccinated with T_1 vaccine
(iv) Clinical cases are removed during the next 2/3 months while CF testing cannot be used.
(v) The herd is tested at 2/3 months after vaccination and reactors slaughtered.
(vi) The test is repeated a month later and if clean the herd is re-vaccinated and released from quarantine.

2.7.3 A useful and economical modification of the method described in 2.7.2 is to vaccinate an infected herd after slaughtering clinical cases, then hold in quarantine, slaughtering new clinical cases as they can be identified during the next 2/3 months, then test to remove chronic disease and complete the eradication process as in 2.7.2.

2.7.4 The methods of 2.7.2 and 2.7.3 have the great advantage of attracting co-operation of cattle owners. Note that this is the only proposed use of testing in the originally defined enzootic area - to hasten the process of eradication by removing carriers or potential carriers as soon as they can be identified; thus avoiding persistence for perhaps several years under a regime of vaccination alone. But note also that vaccination (without testing or slaughter) can achieve eradication in time.

2.8 Testing can also be used in the later stages in the original enzootic areas to demonstrate freedom from disease, but this can hardly be regarded as a practical necessity of general application as eradication will become evident through the lapse of time without such effort.

2.9 Basic programme for free areas - Here the policy should be the maintenance of freedom from infection by routine sanitary measures of CBPP control. These primarily relate to movement control but also include such services as patrolling, reporting, and diagnosis. In case of outbreaks testing and slaughter of entire herds should be applied; vaccination should not be used.

2.10 Exposed Areas - Each such area must be considered strictly on its merits. If the risk is particularly high or sanitary measures difficult to apply, then these are both indications for the use of protective vaccination. If the risk is not particularly high and sanitary measures are adequate, vaccination is to be avoided. It is believed that in many of the high risk areas vaccination is likely to be the preferred policy, especially in the early stages. Note however that whatever immediate decision is made the time will arrive when these areas will approach the status of free areas and control must then be based on test and slaughter.

Special mention is necessary of high risk countries in which mass vaccination is deemed necessary for the time being, and in which outbreaks might occur sporadically until effective cover is achieved. In such cases repeated vaccination in the herd and surrounding herds offers an effective approach to control. Rigorous slaughter of clinical cases assists in early achievement of control, as also does testing applied at an appropriate stage.

2.11 Note that test and slaughter of individual animals with the object of eradicating disease from a herd HAS NO PLACE IN THIS SCHEME.

2.12 Testing Units - It is immaterial whether these are mobile or static in a laboratory. Each unit needs 8 middle grade staff plus 2 professional officers to supervise testing and to interpret and apply the results of testing. Basic facilities required include a supply of sheep. Capital cost say 20,000 dollars US with a recurrent cost of 10,000 dollars per annum excluding salaries. Each unit can test up to 1000 cattle per day - the limiting factor probably being the rate of collection of blood samples. The unit could probably be sited so as to test in support of disease control in trade cattle.

2.13 RECOMMENDATIONS REGARDING TRADE CATTLE MOVEMENTS

2.13.1 It is recognised that the existing system is based on movement permits and vaccination. It is desirable to include the certification of vaccination in the movement permit with details of the vaccine used. It is desirable to use distinctive marking. It is to be observed that export taxes levied by exporting countries introduce an element of tax evasion which is reflected in evasion of sanitary control.

2.13.2 Branding - "S" on the head for slaughter cattle is strongly recommended.

2.13.3 For imported slaughter cattle close supervision up to the time of slaughter is essential together with effective precautions against contact with local cattle. Such imported slaughter cattle should be slaughtered as soon as possible.

2.13.4 For imported breeding cattle the use of the CF test is recommended - two CF tests with a minimum period of isolation of at least one month between tests. All such cattle should be derived from disease free areas and contact with imported slaughter stock should be avoided.

2.13.5 Every effort should be made to move slaughter stock by mechanical transport from their place of origin to the abattoir.

2.14 PHASING

Phase 1 - Vaccination in enzootic areas
Set up diagnostic facilities in lab. and field,
Staff training
Cattle Trade - improve movement control
Improve sanitary services generally.

Phase 1 comes to an end at about the end of three years, when a review of progress is held and zones are re-defined. In some areas the disease should be ready for eradication, with less progress in others. In the latter vaccination is continued into Phase 2.

Phase 2 - Vaccination continuing in many areas. In the more advanced areas testing can be introduced to speed up eradication. Re-definition of zones to continue.

At this stage complete reassessment of the problem is necessary. Good progress should have been made in reducing incidence but the additional effort required for complete eradication cannot be estimated at this time. It is emphasised that any abrupt termination of these operations would be most undesirable. All countries concerned must be prepared to take over and continue control measures as necessary.

2.15 There is a real need for standardisation of methods and techniques throughout the region. The FAO/OIE/OAU expert Panel on CBPP is able to provide the necessary technical information.

2.16 A CBPP technical officer is recommended for each country, to be responsible for all aspects of control in that country. He must be competent in both field and laboratory techniques. He should have an understudy and both should be basically field rather than laboratory officers. Both should be professional officers with established seniority. They need technical training at a high level and should be able to train their own subordinate staff in both lab and field when their own training is complete. Technical training for this purpose might well be sponsored by an international organization. These two officers are the two professional officers mentioned in paragraph 2.12.

2.17 Safety trials are urgently recommended now in every country concerned. These should take the form of T_1 inoculation first in 10 then 100, then in 1000-cattle representative of the population of the area concerned. Lyophyllised vaccine should be used and trials are necessary only for T_1 strain. A standard recording method for the results is suggested as follows:-

Nech or flank site - measure diameter of swelling at 1,2,3, and 4 weeks after inoculation. Record presence of ulceration, any slough of necrotic tissue, and any systemic disturbance (note might lead to death in extreme case)

Tail Site - measure length of swelling along tail (note inoculation site is 5 cms above the brush) at 1, 2, 3 and 4 weeks after inoculation. Record also ulceration, slough, spread to the perineal region, loss of tail or death.

A study of the results should indicate the suitability of the vaccine, and these results should be made available throughout the region.

THE COSTING OF CBPP IN WEST AFRICAN TERRITORIES

1. SUMMARY

A method of estimating the cost of CBPP is presented.

This is based on the :

- capital loss due to an outbreak of the disease in an average herd added to the
- cost to Government of controlling this outbreak multiplied by the
- number of outbreaks.

The cost of prophylactic vaccinations and other causes of loss are discussed.

The author suggests that such a costing should be attempted in all countries in West Africa and where specific data is not available, estimates should be based on local experience, until more accurate data is collected.

II. INTRODUCTION

There are so many unknowns in trying to estimate the cost of a disease to a country that the attempt is seldom made. It is becoming increasingly necessary to make the effort in order to wring the funds for disease control from reluctant Governments.

Such a study will enable a reasoned evaluation of the cost of the disease to the country and of the different control measures used; it will focus attention on the deficiencies in animal health returns so that these can be amended.

The costing described has been employed successfully in West Africa and it may therefore be considered as a basic method, throughout the region. The fundamental idea is to estimate the cost of a "typical outbreak" in an "average herd" and to multiply by the number of outbreaks in the locality in that year.

The writer is aware of the inexactitude of applying a rule-of-thumb formula to an outbreak of CBPP but makes the plea:

a. that some estimation is better than none.
b. that in one country of West Africa where data was reliable, the results were accepted by experienced people as useful and a fair approximation to the truth.

Losses are considered as follows:

A. Due to Outbreaks of the Disease

I. Capital loss of dead or slaughtered animals and subsequent reduction in animal production, etc.

II. Government expenditure in the control and limitation of the outbreaks (slaughter, vaccination, compensation scheme if in existence, etc.).

B. Cost of Prophylactic Measures, e.g. vaccination campaigns, frontier quarantine stations etc.

C. External Currency Loss due to marketing restrictions imposed because of the presence of the disease.

D. The Impediment to the development of animal production in the disease areas, especially regarding specific projects.

To make the calculations the following facts are required:

a. The number of outbreaks of the disease,
b. The number of animals dead or slaughtered because of the disease outbreak. These are considered at a specific period in time which is usually the time of intervention by the Animal Health Service (see footnote+)
c. The size of the average herd involved.
d. The average "herd" composition - cows, calves, etc.
e. The average value of the herd which is calculated on middle prices ruling at the nearest market according to the different grades of animals (old cows, calves, etc.)

+ The writer holds the view that it is prudent to consider each outbreak of CBPP (under West African conditions) as "active" for up to two years.

f. The number of animals vaccinated for outbreak control and prophylactic purposes.

Some of these figures may not be known exactly and estimates may have to be substituted. However, once a study is started it is surprising to discover the wealth of data available and the mass of local experience which helps in assessment.

It must be emphasized that the more accurate the data, the nearer to the truth will be the final result.

3. EXPLANATION OF THE COSTING FORMULA

The term "herd" is used for convenience in describing the group of animals involved in an outbreak; it does not necessarily indicate a "breeding herd".

The calculation of loss is based on the value of a "cattle herd unit" on consideration of the total number of the herd, its composition and the total valuation related to the locality in which the study is made.

The following figures show that assessment of an average herd of "taurins" in the Guinean Zone, taking account of the relative proportion and values of Zebu, N'dama and Baoule cattle.

	Composition %	Unit value (Francs CFA)
Bulls	3	25,000
Cows	50	20,000
Heifers	13	15,000
Young males	9	13,000
Calves	25	8,000

An average "herd" consisted of 152 animals and the valuation was therefore 2,100,000 francs CFA.

The number of clinically sick cattle (which die or are slaughtered) per outbreak (per herd unit) varies but it is fairly constant in one locality in any one year. Over longer periods, it seems to vary in a direct proportion to the number of outbreaks in any one cattle population. For example, when the disease first

spreads in an area there are a large number of outbreaks and many animals are affected in each outbreak. The next year both the number of outbreaks and losses will have diminished. Although this fact is not so applicable in nomadic herds it still holds good in a particular cattle population.

It appears that in each area (closed or static cattle population) exposed to CBPP there is a relationship between the number of outbreaks and the morbidity of the disease. For example, if it is known that in one year there are 50 outbreaks with 7% of the cattle dead or slaughtered per outbreak and that in the previous year there were 100 outbreaks then, in all probability, the previous year's losses per outbreak were much greater (nearer 14%).

Thus although discretion is needed in transposing data, the percentage losses in any one year are frequently useful in making assessments of the previous or following year.

A. LOSSES DUE TO OUTBREAKS OF CBPP.

1. Capital loss.

a. An assessment is made of the direct capital loss of animals dead or slaughtered because of CBPP and from this sum a deduction is made of any Salvage money obtained from the sale for meat which is usually fit for human consumption, only the lungs being seized; it has been found sometimes that 50% of the average capital value has been realised but in isolated areas where markets do not exist the salvage price is less - perhaps 30%. Even if the animal is unsold but the meat is eaten by the owner's family, some salvage value should be allowed. In cases of death due to the disease there is naturally a total loss of value.

The assessment of numbers clinically affected, dead or slaughtered must not be made on a few herds only or on figures several years old. If there are no available figures from field staff an experienced officer armed with a questionnaire must search out the information.

Herd composition is remarkably uniform in each locality and this fact can be used in estimating losses; if a susceptible herd has been infected by CBPP the resultant differences in its composition often help in reaching a reasonable assessment of loss.

b. The next capital loss is more difficult to estimate.

In any outbreak there are always some infected animals with no clinical signs. This statistic can be obtained by sample serological testing. For example, it has been found that where 7% animals were clinically ill, an additional 7 - 14% cattle were serologically positive to the Complement Fixation Test. Factors affecting this number include how long the herd has been infected, the timing of the Animal Health Service intervention and the immune state of the animals.

Some of the infected animals which have lung damage without showing obvious signs may later succumb from CBPP. However, if at the time of intervention by the Animal Health Service, the herd is vaccinated with an efficient vaccine the course of the disease in the herd will be altered and the losses decrease (see footnote+).

Of the animals already infected but without clinical signs at the time of intervention (which number usually equals twice the number clinically ill) a quarter will later succumb and become a loss (offset by salvage value).

A proportion of the rest of the infected but not clinically sick animals which survive will be responsible for reducing animal production in the following ways:

i. Deaths of calves from loss of milk due to disease in the cows

ii. Abortions of pregnant animals.

iii. Feeble calves which are deformed or arthritic.

+ It is assumed that vaccinations are repeated at six monthly intervals for two years such that the disease is arrested.

iv. Reduced condition leading to secondary infection, e.g. trypanosomiasis, tick-borne disease or parasitic infestations.

v. Fall-out on the long march to market due to chronic lesions in the lungs, etc.

These losses cannot be calculated accurately but an approximation may be made by accepting that all infected but not clinically sick animals which do not eventually succumb, suffer a 25% loss in value.

2. Government Expenditure in the Control and Limitation of Outbreaks.

An intervention by the Animal Health Service in an outbreak of CBPP is a specific event quite apart from routing vaccinations and, indeed, a special team may be concerned. The site of the outbreak is important for it may be near or far from the Veterinary post and one or several visits may be necessary, Minimum running costs for a car will be of the order of 0.15$ per km.

It is desirable that not only the infected herd but also the neighbouring herds should be vaccinated to arrest and limit the disease. It has been calculated that these vaccinations costs twice as much per animal as routine prophylactic inoculations. Where numbers are not recorded precisely a figure three times the number of animals in the infected herd should be sufficient to allow for vaccination of in-contact herds (or herds at risk).

B. Cost of Prophylactic Measures

These charges are in a different category from the wastage caused by the disease itself. But annual vaccination campaigns tie down limited financial and technical resources.

In view of the many tasks and responsibilities of the Animal Health Service, it is difficult to apportion the cost of CBPP duties. However, JP 15 (Rinderpest Control) provided a West African vaccination figure of 50 Francs CFA per animal and this could form a basis for calculation. For the settled herds of "taurins" the cost is more than 50 francs but, weighed against this in considering an average is the cost of vaccinating the large zebu herds in savannah country where the amount per head is less than 50 francs CFA.

Where multiple simultaneous vaccinations are made e.g. Rinderpest and CBPP, the cost per head per vaccine is proportionally less.

Another factor to consider is that the major part of this cost is the payment of staff and the administration; the cost of vehicles, petrol and vaccine is proportionally small. This staff is usually only fully employed for part of the year but it is paid for all the year. Thus the cost of annual vaccinations can be much reduced by spreading them over more than months.

A realistic costing of prophylactic vaccinations is most desirable and it can point the way to better organization and drastically reduced costs.

The expenses of quarantine and frontier controls can be calculated directly; these facilities are always necessary and only a fraction of their costs should be set against CBPP control. It is hoped that when the marketing of animals and meat in West africa is better organized much of the cost of these sanitary control measures will be charged to the trade.

C. The Loss of External Currency.

The loss of external currency because of import restrictions may be calculated directly and listed as a separate item. But one should verify whether or not CBPP is actually the cause of any restriction. The FAO/OIE/OAU Expert Committee on CBPP have stated clearly that meat, as opposed to the living animal does not constitute a danger as far as transmission of the

disease is concerned (Rinderpest and Foot and Mouth Disease are of course in another category).

Also there could be no objection to the import of live animals as long as they are under supervision until slaughtered which should be done as soon as possible after arrival in a country.

D. THE IMPORTANCE OF CBPP AS AN OBSTRUCTION TO THE DEVELOPMENT OF ANIMAL PRODUCTION.

This should not be overemphasized. Any country, where the Animal Health Service cannot control CBPP on a ranch or other livestock development project would not be suitable for large investment in Animal Production. However, there may be instances where CBPP has jeopardized a specific project and these should be listed, although the actual costing would present a difficulty.

Directors of animal Health Services should insist that the presence of CBPP is not used as an excuse for turning down an otherwise feasible project.

4. AN EXAMPLE COSTING OF AN OUTBREAK

(Specific figures are inserted so that the calculations may be understood. They are of no special significance).

1. From available records or other sources the average "herd" involved can be ascertained, e.g. 200 cattle, including cow, calves, etc.

2. The composition of this herd and the value of the calves, cows, etc. are used to estimate a "herd" valuation, e.g. $6,000.

3. An outbreak of CBPP occurs; at some stage the Animal Health Service intervenes. At this instant, the cost of the disease is calculated.

Let us suppose that 20 animals are reported as clinically sick and included in this number are some that have already died or been slaughtered. 20 animals in a herd of 200 is 10% of the herd. With a herd valuation of $6,000 this 10% loss is $600. Some of this amount will be salvaged on being sold to the butcher, etc. Assuming that 15 of these animals are sold at 50% of their normal market value, then the owner recoups 50% of 7.5% of $6,000 = $225.

4. The disease is not finished but it is expected that more animals will die in spite of vaccination, e.g. if there have been 10% clinically affected then some 20% will also be infected (this fact has to be ascertained by serological testing of infected herds). Of this 20% one quarter will succumb to the disease and become a further capital loss to the owner of 5% of $6.000 = $300, but again he may recoup 50% of 7,5% = $112.

5. The remaining 15% infected animals may recover but some will suffer from secondary infection, produce sick calves or become "bad-doers". They represent a loss in animal production estimated as a once for all capital loss of 25% of 15% of $6.000 = $225.

6. Thus the total direct loss is:

(3)	$600 = $225	= $375
(4)	$300 = $112	= $188
		= $255
Total capital loss		= $788

The cost of controlling this outbreak is that of vaccinating 3 x 200 animals at $0.40 per head - $240.

In this hypothetical case, the cost of the outbreak and the immediate control has been :

	Total capital loss	= $788
plus	Total outbreak control	= $240
	Grand Total	$1028 i.e. about a thousand $

Using experience and available data such a calculation can be made in the various zones of a country and on multiplying by the number of outbreaks recorded, an estimate of the direct cost to the country of the disease may be made.

The cost of compensation schemes and prophylactic vaccination should always be calculated and presented so that a comparison between various methods of control may be made e.g. barrier vaccination and stock route control as against mass vaccination (countrywide).

E.P. Lindley
Animal Health Officer
F. A. O.

LIVESTOCK PRODUCTION AND MARKETING IN CENTRAL AND WEST AFRICA

In Africa today, Agriculture remains the back bone of the economy, and many countries rely on it for the generation of the very badly needed foreign exchange.

In the past few years, there has been a certain amount of fluctuation in world prices of cash crops, such as cacao, ... bananas etc. This has already affected the economy of those countries that depend solely on such crops.

On the other hand, the world market value for livestock and livestock products, such as milk, butter, hides and skin etc. has been high and shall continue to rise. This means reliable present and future foreign exchange for Africa.

We are also aware of the world needs for protein, especially animal protein. Africa is very short of this essential element of the diet. Therefore, any amount of animal protein that can be raised in Africa shall no doubt be placed in very good use.

Africa is presently faced with a number of problems that hinder its livestock production and marketing. Some of these are:

(a) Insistence on old unprogressive traditional farming methods, such as the well known nomadism.

(b) The practice of poor traditional Management methods.

(c) Slowness in the introduction of mixed farming methods.

(d) Lack of proper capital for large scale farming

(e) Poor Marketing arrangement

(f) Heavy taxes levied on imported animals from some neighbouring countries.

(g) The presence of diseases that hinder the quick production of cattle.

In an attempt to solve some of these problems, the then CCTA and later the OAU launched and successfully completed in 1969, an International Joint Campaign against one of the most deadly cattle diseases called Rinderpest. Work has also made great progress towards the start of another major joint campaign, this time against CBPP.

After the successful control of Rinderpest, there has been a certain amount of increase in livestock population. This has in turn brought with it the usual problems of over-stocking in certain parts of Africa.

In order to overcome these problems, it is essential that livestock production should be given a lot more emphasis than it is presently done in most African countries. This involves:-

a) The study of the ways and means of fighting the problems involved with Nomadism.

b) The development of grasslands and the introduction of Ranches.

c) The encouragement of integration of crop production and livestock production - mixed farming.

d) The improvement of cattle marketing system including transportation of livestock for slaughter.

e) Calling for intra and international and regional co-operation in cattle trade. The paying of cattle trade taxes in certain countries should be discouraged.

f) Formation of farming co-operatives.

g) Introduction of proper educational machinery with trading course for cattle owners.

h) Research and extension work should be encouraged.

It is realised that this will not be an easy task.

In the past years, some work has been done to improve the African livestock production and marketing in certain countries and regions of Africa. In order to obtain uniform development through out the whole Region of West and Central Africa, it is now

necessary to review what has been done so far in this Region. The FAO with the assistance of the OAU and other International Organizations shall soon start work on this general review. On completion of this work, it shall easily be known, where the gaps exist and these can then be more readily filled during the process of livestock development.

The OAU/STRC realising the need to improve livestock production and marketing is overhauling its approach towards livestock development generally. Disease control must go hand in hand with livestock production and marketing. This means a greater emphasis in the present livestock production and marketing system.

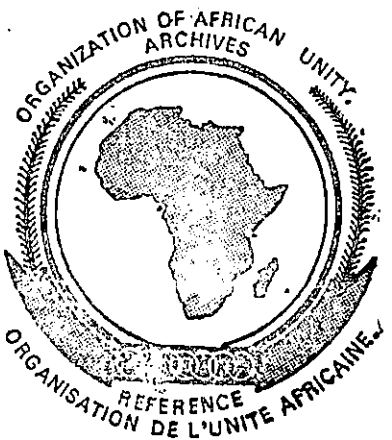
It is this new thinking that prompted us in Mogadiscio in December, 1969 to propose that IBAH should now be called IBAR i.e. Inter-African Bureau for Animal Resources. The new functions of this Bureau shall lay a lot more emphasis on Livestock Production (See document L (69)5).

There has never been a real united front in the way Africa has been fighting its livestock and marketing problems in the past years. Each International Organization or sub-Regional grouping has been calling conference with little reference to the other Organization or Regions. As a result of this 3 - 4 Conferences are organized within the same period dealing with virtually the same topic. This we regard is wasteful duplication of efforts.

It is therefore increasingly become more and more essential for us in Africa to concentrate together our forces and full efforts to fight the problems of Livestock Production and marketing we now have on our hands. Therefore, joint and cooperative action is badly required in Africa to enable every unit of investment in any development activity to bear maximum results. Planning in Livestock like in any other field must therefore take account not only of the ecological zones, but also of the need to bridge the gap of language by an effective organizational machinery

at a higher regional level. This is why we believe that OAU/ STRC is eminently qualified to handle the organization of this machinery for regional development.

An appeal for full cooperation is therefore asked for, from all those present here.



1971-02

The First Regional Technical Co-operation Committee of the OAU and All Sub-Regional Groupings in West and Central Africa (Lagos 21st-23rd July 1970)

Organization of African Unity