

CENTRE AGRO-ENTREPRISE
Mali Sustainable Economic Growth

**STUDY ON IMPROVING THE DISTRIBUTION CHANNEL FOR
VACCINES MARKETED BY CVL
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I. INTRODUCTION

According to statistics published in the World Bank Report edited for the year 1998, livestock accounts for 10% of Mali's Gross Domestic Product (GDP) and 20% of exports, thus ranking third, after cotton and gold.

According to figures drawn from the same report, the current populations of the herd are as follows :

Designation	WAEMU	Mali	Percentage
Cattle	20,000,000	6,124,000	30.62%
Sheep	27,500,000	5,722,150	20.81%
Goats	31,000,000	6,451,000	20.81%
Camels	574,000	270,928	47.20%
Poultry	130,000,000	22,074,000	16.98%

Thus livestock constitutes an essential asset in Mali's economy ; Consequently, its organization is a constant concern to Malian authorities. That's the reason why in the new master plan of the Ministry of Rural Development and the current Government policy of progressively disengaging itself from production and marketing activities for the benefit of the private sector, the Central Veterinary Laboratory, which has simultaneously played a public service role (Diagnosis and Research) since its creation and a private type or transferable role (vaccine production and commercialization) should, in a relatively near future, adapt itself to the new situation.

In this framework, a study initiated by CAMOPA concluded that CVL should be divided into a Diagnosis and Research unit which will keep the public service roles and a Production and Commercialization unit which will be managed according to the rules and principles of business accounting, i.e., getting progressively closer to a private type management which will put a stress on financial and accounting viability.

In the interim phase which is scheduled to last about two years, the institution should seek the best tools in order to face its future.

Thus, several studies have been conducted with the support of different development partners including the CAE; the aim of such studies is to help CVL better sell and sell more of its vaccine production which, through force of circumstances, has moved from the stage of production economy to a stage of market competitive economy in which it must seek the means to generate resources to make it self-sustainable ; this is the only guarantee of its sustainability.

The production of vaccines to be put at the disposal of the herder has gone through several stages which need to be analyzed in order to propose solutions designed to help improve the current system and make it most potentially profitable for CVL and its different partners.

The privatization of the veterinary profession has been a very important stage in the skill and responsibility transfer process described above. It is also convenient to review the different existing legislation and propose some improvements in the framework, notably in the

classification of stakeholders' role and the delimitation of the activities to be carried out by the different categories.

This should help clarify CVL's relations with all its partners: thus, it will have a better grasp of its portfolio and will be able to sell cash. This is a factor which cannot be disregarded in cost recovery and the future provisions which need to be made in order to avoid that certain stakeholders (namely herders) be penalized because of shortages of stocks of finished products, linked to a great extent to the fact that production inputs are unavailable in due course.

CVL currently uses three (3) channels :

- the government (CVL, DNAMR, PARC and ODR Project) for live vaccines ;
- the private channel (CVL, Veterinary Pharmacies, Warehouses, ODR, Herders, etc.) for non activated vaccines ;
- the export channel (government agencies and private foreign wholesalers).

The improvement of the distribution channel would be profitable for CVL, for the different stakeholders and the Malian economy as a whole, given the input of the livestock sector in the overall wealth of the country.

II. CVL

1.1 : BACKGROUND AND EVOLUTION

Since its inception, the CVL has gone through the following stages :

1939 : Creation in Bamako of a research and serotherapy laboratory for the production of vaccines and sera, diagnosis and research and training African veterinarians.

1952 : Vaccine production activities are transferred to the Georges Curasson Laboratory in Dakar ; only diagnostic activities continue to be carried out at the Bamako laboratory.

1960 : Collapse of the Mali Federation, followed by a shortage of veterinary vaccines, highlighting the necessity to establish a production unit for these vaccines.

1962 : Grant in the amount of two million dollars by USAID to Mali for the construction of a modern vaccine production laboratory.

1972 : Start-up of CVL in its form and in the current premises. It will operate until 1978, as a service linked to the National Livestock Office, to which it will yield its entire production free of charge.

1979 : CVL is officially created as an Industrial and Commercial Establishment (EPIC).

1981 : Beginning of cession of vaccines against payment to Rural Development Operations (ODR).

1982 : Development of diagnosis, research and quality control activities thanks to USAID support.

1988 : CVL's functioning is disrupted by an order from the Ministry of Finance making it mandatory for Public Establishments to transfer all their returns to the Public treasury.

1994 : A law turns CVL into a Publicly Managed Establishment and grants it financial management capacity.

2.2 : MISSIONS AND ORGANIZATION

2.2.1 : Missions:

CVL has been turned into an EPA, with managerial autonomy, and carries out both public service and vaccine production functions.

The public service functions involve research activities on animal diseases, diagnosis, seromonitoring, hygiene control of animal origin commodities and training.

In addition to this public service function, CVL has an industrial and commercial mission dealing with vaccine production, vaccine quality control, ongoing research and commercialization of vaccines. Vaccines produced are designed for small and large ruminants.

There are two types of vaccines :

- live, freeze-dried vaccines
- dead, liquid vaccines.

In order to achieve these missions, CVL has :

- human means (129 agents, including 36 senior executives),
- material means (36 laboratories and a modern production and diagnostic equipment),
- financial means (budget with capital funds, government grants and partners' contributions in the form of research projects).

2.2.2 : Organization :

CVL is under the supervision of the Ministry of Livestock. A Board of Directors chaired by the Minister of Rural Development and Water (in charge of livestock) sets the major directions.

CVL is composed of a General Head Office to which are attached two technical divisions (Vaccine Production and Diagnosis/Research) and a support Division (Administrative and General Division) – see organizational chart below.

2.3 : FUTURE PERSPECTIVES

In the course of CVL's evolution, the ruling authority, notably the Board of Directors, has pointed out the difficulties of harmonizing the two essential CVL missions. Thus the CAMOPA (Support Unit in the Implementation of the Action Plan) was entrusted a study aimed at defining for CVL a status enabling it to put its organization and its missions in harmony with the master plan of the MDRE (Ministry of Rural Development and Water); the study concluded to the need to separate the main CVL activities, namely Research and Diagnosis, on the one hand, and Production and Commercialization on the other hand.

Concerning the vaccine production and commercialization unit, such policy should be matched with the adaptation of the range to the demand through the use of local strains for certain vaccines in strong demand such as Pastobov and Clostrivac, broadening such range to live vaccines such as the vaccine against Newcastle's disease.

The production capacities must be adapted to national and sub-regional needs through :

- the acquisition of additional equipment and material ;
- personnel training and motivation ;
- the implementation of adequate production procedures.

The success of such policy goes through reinforcement of the vaccine marketing system. This will involve setting up a commercial policy as close to the private system as possible, integrating several factors (Rebates, Returns and Discounts) and likely to increase turnover.

The distribution channel will be reviewed and corrected in the light of institutional changes which took place (restructuring of the MDRE, implementing the sanitary mandate, etc.)

The vaccine promotion and herders' sensitization activities will be reinforced. The improvement of the Marketing service will come about through staff training (already initiated).

III. THE "VETERINARY VACCINE" MARKET

It comprises :

3.1 : THE SUPPLY

It is composed of imported vaccines and CVL manufactured vaccines (a portion of which is exported, the rest being used in the country).

According to the IMEX (Import and Export) program published by the National Office of Trade and Competition for the year 1998, vaccine imports were as follows :

Item	Quantity	Percentage
Pestos	3,500,000	56.45
Ita- New	1,800,000	29.03
Other (including anti-rabies)	900,000	14.52
Total	6,200,000	

It can be noted that imported vaccines include essentially fowl vaccines and a few special vaccines such as the anti-rabies vaccine.

As for large and small ruminants' vaccines, CVL holds 100% of the local market. The range of CVL vaccines is composed of eight (8) vaccines evenly distributed between :

- on the one hand, freeze-dried or live vaccines :
 - Peri T1 against contagious bovine pleuropneumonia ;
 - Bovipest against rinderpest ;
 - Ovipest against small ruminants pest ;
 - Dermapox against nodular skin disease, Sheep-pox and caprine small pox.
- on the other hand, liquid or dead vaccines :
 - Anthravax against bacterial anthrax for large and small ruminants ;
 - Clostrivac against symptomatic anthrax ;
 - Pastobov against bovine hemorrhagic septicemia ;
 - Pastovin against small ruminants pasteurellosis.

The repackaging of the Newvac (fowl vaccine) is practiced for Poultry Farming Development Project in Mali (PDAM) since the beginning of 1999.

These vaccines manufactured by CVL are submitted to internal quality control and to international control and are formally authorized on the market.

Production levels by type of vaccines in 1995- 1999 :

PRODUCTION

Type of vaccines	Number of doses				
	1995	1996	1997	1998	Prev 1999
Bovipest	3,758,150	1,074,700	791,400	-	
Peri T1	3,821,700	4,058,150	5,813,200	4,665,800	5,248,340
Anthravac	105,400	324,950	140,950	178,850	201,180
Clostrivac	1,118,425	1,352,400	1,595,475	1,866,350	2,099,373
Pastobov	2,248,125	3,268,775	3,152,125	3,250,275	3,656,087
Pastovin	325,900	938,850	954,200	706,775	795,019
Dermapox			206,100	-	-
Ovipest			922,450	-	-
Newvac					
Total	11,377,700	11,017,525	13,575,900	10,668,050	12,000,000

3.2 : THE DEMAND

It depends on the animal population, its zoo-sanitary situation, but also on the vaccination coverage, hence the number of private veterinarians in the field, herdsmen's level of education and purchasing power.

The table presented in the introduction provides us an idea of the significance of the national and sub-regional demand, even though CVL is facing strong competition on the foreign market by the Dakar and above all Garoua laboratories.

The internal and external demand has heavily increased since 1995 with the progressive installation of private veterinarians and the adoption of the sanitary mandate. But the demand from Mali (8,061,025 doses in 1998) is still low considering the size of the herd. It accounts for 70% of sales against 30% for the foreign market. This situation can and must be improved through better organization of the distribution channel.

Situation of sales by type of vaccine from 1995 through 1999 :

VACCINE SALES

Type of vaccines	Number of doses				
	1995	1996	1997	1998	Prev 1999
Bovipest	4,242,500	1,507,100	618,350	-	
Peri T1	3,851,700	4,037,690	4,830,250	5,672,100	5,897,274
Anthravac	125,320	245,300	190,850	146,900	152,739
Clostrivac	1,255,050	1,258,300	1,808,900	1,564,650	1,626,767
Pastobov	2,278,975	3,242,400	2,679,850	2,987,200	3,105,792
Pastovin	526,275	926,275	766,025	856,950	891,014
Dermapox			27,400	155,750	161,933
Ovipest			237,200	158,200	164,481
Newvac					
Total	12,279,820	11,217,165	11,158,825	12,000,000	

IV. THE DISTRIBUTION CHANNEL

4.1 : ORIGIN AND DEVELOPMENT

CVL is nowadays the starting point and the main supply source for currently used vaccines in Mali.

As part of the implementation of its animal health policy, particularly in terms of controlling epizootic diseases, the Government of the Republic of Mali chose immediately after the break of the Mali Federation :

- to create a vaccine production unit for the satisfaction of national needs ;
- the free donation of vaccines, as part of vaccination campaigns.

This is the context in which CVL was established for the satisfaction of needs expressed by the National Livestock Office (DNE) and Rural Development Operations (ODR). CVL, which is entirely funded by the Government budget and foreign aid, received a non profit status and was a public service organization, in spite of the legal status it enjoyed from 1972 through 1979, namely the status of Public Commercial Establishment (EPIC) which should have given it private style management.

Since the Order of standardization of vaccine prices published on July 15, 1981, CVL has been authorized to sell its production through the already traditional channel of the DNE, ODR's and the Malian Company for Textile Development (CMDT), which are the only ones entitled to conduct vaccination operations.

4.2 : THE CURRENT SITUATION

The current situation stems from the deep change which came about as a result of the Law N°86-64 bearing authorization of private veterinary practice, which stipulates in its fourth article "... the veterinary profession constitutes a unique sector covering one or more of the following activities" :

- individual and mass medicine as well as animal surgery ;
- veterinary pharmacy ;
- Consultancy.

Henceforth, the private sector is included in the distribution channel of veterinary vaccines in general and that of CVL manufactured vaccines in particular. At the same time people start having ambitions and thinking about export potentials.

But the start-up is slow; in 1991 again (source : 1991 CVL progress report), vaccine sales were accounted for as follows :

- State and para-statal organizations : 6,188,630 doses, i.e., 97.65%
- National private operators : 129,250 doses, i.e., 2.04%
- Exports : 20,000 doses, i.e., 0.32%
- Total : 6,337,880 doses, i.e., 100%

This situation is accounted for by different factors, notably the lack of preparedness, lack of means and experience of the private sector, the lack of a policy of moving into foreign markets.

In 1992, several factors were going to contribute to a change in the situation :

- the accumulation of arrears by the DNE ;
- The withdrawal of CMDT from medical prophylactic operations ;
- The existence of a network of private promoters in the distribution channel of veterinary products who were interested in the commercialization of CVL vaccines ;
- The opportunity to capture certain markets in the sub-region facilitated by operational difficulties experienced by African laboratories (notably in Dakar, Niamey, and Garoua) which had been the traditional suppliers of Guinean, Burkina, Mauritanian and Ivorian markets.

LCV management henceforth perceives the importance of formulating a coherent business policy, using the private sector as a springboard. With USAID's assistance (Livestock Sectorial Policy), it established a unit linked to General Management called "Marketing Unit".

The new unit gets in the struggle for the promotion of the sales of CVL products and the Reinforcement of CVL's position on national and foreign markets.

In 1993, the figures drawn from the activity report are the following :

- Statal and parastatal structures : 4,355,050 doses, i.e., 69.27%
- National private operators : 1,017,660 doses, i.e., 162.19%

- Exports : 914,000 doses, i.e., 14.54%
- Total : 6,286,710 doses, i.e., 100%

A slight decrease over 1991 may be noted, due to poor performance of the public and parastatal structures. But it is interesting to note the profound modification in the distribution between different stakeholders.

The analysis of the global picture of the annual reports for the years 1991 and 1993 (see annex), makes possible the following assessments :

- There has been since 1993 a specialization of the government channel (DNE, and ODR) in the sale of live vaccines (Bovipest and Peri T1) and a specialization of the private sector channel in the distribution of dead vaccines.

This situation is due to the lack of a cold chain in the private sector and the non adoption of the sanitary mandate.

However, the Minister in charge of livestock , in a circular letter, had invited private sector people regularly installed to participate in vaccination operations against diseases known to be contagious, by getting their supplies through the Regional Livestock Offices. This measure has been only timidly implemented.

There is a gradual increase on the part of the private distribution channel and on the part of the export channel, while the relative share of the government channel is decreasing. The situation has been moving this way and has reached the all times turnover high of FCFA 264,285,000 in 1995.

Such performance, which earned the Management and the entire personnel, the congratulations of the ninth and tenth sessions of the board of directors, was achieved thanks to the following measures :

- dismantling, with DNE support, the illegal distribution network ;
- instituting a profit-sharing scheme for production and marketing agents in the form of bonuses ;
- improving the production input supply system and particularly small equipment, bottles, and other small packaging ;
- instituting a rebate system in the form of samples for the best clients.

It can then be stated without being mistaken too much that CVL is now entering a new phase which could be called modern and liberal, because the Management has adopted private sector methods.

**Evolution of production (in doses of vaccines) and sales (in thousands of CFA francs)
Source CVL Progress Report**

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Production	6 833	6 674	5 507	6 871	11 377	11 333	13 375	10 668	13.127
Sales	78.469	75.598	79.837	129.716	264.285	254.542	259.527	290.232	324.990

The strategic option remaining the choice of independent distribution channels, one can find a real commercial channel which we are going to study based on the following three criteria :

- 1.Efficiency (fluidity)** regular, rapid, and uniform supply ;
- 2.Security** : capacity to avoid counterfeiting and all forms of fraud, poor storage and bad use ;
- 3.Profitability** : Each stakeholder should find it profitable for him, from CVL to the end consumer.

The optimum channel will then be the one which will achieve the best compromise between these different criteria.

The current CVL vaccine distribution channel includes :

4.2.1 : the state and parastatal channel :

This is the oldest and the most stretched, covering the entire national territory DND (current DNAMR) at the central level, (DRE current DRAMR) at the regional level, Veterinary sectors and posts (current SLACAER) at District and Sub-district levels.

After the National Office's approval of their order slips, the Regional offices get their supplies from CVL and provide vaccines to decentralized structures (Districts, Sub-districts, villages, etc.)

The ODRs of the livestock sector also help consolidate this already very important network. Most Rural Development Operations (ODR's) now turned into Offices included a livestock development component (CMDT, Haute Vallée, Office du Niger, ODIPAC, etc.) and to that effect, participated in cattle sanitary protection.

This activity was the main activity for some of them, such as PRODESO, ODEM, Mali-Nord-Est.

With the privatization of veterinary practice and the reforms, they generally withdraw from the vaccine distribution channel.

Sine 1993 and more and more ever since, the government channel has been specializing in the sale of live vaccines. These structures to which the vaccine is already given at factory prices are limited to a fixed margin. The intervention is normally free of charge. Peri T1 vaccination costs a total of FCFA 45 per dose for a CVL price of FCFA 25.

This channel has a certain number of advantages which are :

- the availability of the cold chain which is indispensable for the conservation of live vaccines ;
- the proximity of these services in terms of livestock areas ;
- the availability of equipment (vehicles and engines), financial means (government budget) and human means (qualified personnel : civil servants).

But there are some drawbacks as well :

- the red tape in the replenishing system of sectors which cannot directly refer to CVL ;
- the accumulation of CVL debts on livestock structures, while herders buy vaccines cash ;
- lack of vitality or sales promotion action on the part of livestock workers.

This channel therefore provides the desirable security, but lacks fluidness (administrative red tape) and turns out to be unprofitable for CVL (accumulation of debts) and costly for users.

In spite of all this, the government channel has made it possible to sell 3,863,925 doses in 1998, i.e., 33.48% of sales (source : CVL 1998 activity report).

4.2.2 : the national private channel :

which includes :

- wholesale importers and wholesalers ;
- retailers, including : wholesaler branches, warehouses, clinics, drugstores, mobile veterinarians, herders and herders' groups and mandate holders numbering : 22 in 1997, 58 in 1998, and 97 in 1999 (Source : Annual report and CTAP 1998 and 1999 activity program).

4.2.2.1 : Wholesalers :

There are about ten of those, regularly established. But except one (based in Sikasso), all of them are based in Bamako.

Wholesalers buy cash dead vaccines at CVL and must, in accordance with the regulation, sell them to retail-wholesalers and/or retailers. In reality, all wholesalers have retail sale points, in the form of :

- branches : as is the case of SODRIVET ;
- warehouses or retail sales points : as is the case with Pharmavet Sikasso and Pharmavet Bamako.

Wholesalers generally have cold chain equipment at least at headquarters' level.

4.2.2.2 : Independent retailers :

The legal classification as well as the official designation not being very significant, we are going to group under this designation all private sector people established, who do not depend on wholesalers and who sell vaccines at their retail price (except for mandate holders).

There are many of them but they have only limited material and financial means. They get supplies of dead vaccines directly from CVL at the same price as that of wholesalers and sell to individual herders or groups at a price which is equal to or higher than that charged by branches or wholesalers' warehouses.

Except for a few drugstores or clinics managed by Veterinary Doctors, the other retailer units are run by Engineers, Technicians, or Nurses or even accountants or secretaries turned managers, often on behalf of the individual to whom the legal agreement has been granted.

Many independent retailers are experiencing financial problems and some of them have suspended payments.

4.2.2.3 : Mandate holders :

They are the very final link in the vaccine distribution channel as their first activities were recorded in the course of the 1997/1998 vaccination campaign.

The sanitary mandate is an authorization given to a private veterinarian to practice over a given area, part of the traditional missions of the State, notably in the framework of vaccination. The mandate covers all diseases known to be contagious.

The application for the mandate is submitted to the local DNAMR representative (generally at sub-district level) and is transmitted through legal channels to the DNAMR which transmits it to the CTAP for review. In case of approval, the file is transmitted to the cabinet of the Minister in charge of Livestock, accompanied with a draft decision to grant the mandate.

The mandate, which is granted only to a member of the Order of the Veterinary Profession, is therefore a kind of contract which stipulates that :

- the holder pledges to carry out under conditions provided for by the code of ethics, part of the missions which have been traditionally devolved to the State ;
- the government pledges to withdraw its agents so that the holder of the mandate can fully carry out the missions entrusted to him, without this taking away from the State its right of inspection and its control prerogative.

4.2.2.4 : Herders and herders' groups :

They stand at the end of the distribution channel and constitute in principle the beneficiaries of the entire established system, and at the same time they handle all charges stemming from margins and other access fees engaged by intermediaries ; but unfortunately also the consequences of poor transport , conservation, and vaccine administration conditions.

At this level the sale price of the vaccine as well as the price of the vaccination itself are mixed, amounting to about FCFA 100 per dose. They often benefit from the support of certain NGO's operating in the livestock field.

This private national network is relatively recent and very dynamic as it accounted for 46.54% of CVL's sales in 1998. But this figure masks some shortcomings :

- the wholesalers, who were seven (7) in number, carried 3,056,850 doses, i.e., 26.49% of CVL's sales for the period, while retailers, who were thirty three (33) in number bought only 1,160,250 doses, i.e., 10.05% of sales ;
- there is a concentration of private sector people (even retailers) in Bamako and in the so-called easy regions (Sikasso, Segou, and Koulikoro). As a matter of fact the distribution of CVL clients in 1998 shows a great lack of balance (refer to table in the annex) :
 - six of the seven wholesalers are based in Bamako ;
 - as for retailers, 9 are based in Bamako, 9 in the Koulikoro region, 6 in the region of Segou, 5 in the region of Sikasso, 2 in Mopti, 1 in Kayes, and 1 in Niafunké ;
 - finally, retailers lacking means and equipment may be tempted not to observe instructions in case of vaccines being used by, a situation which could provoke accidents and generate herders' mistrust of vaccines.

This channel offers all the guarantees of profitability for CVL (cash payments) and the fluidity of the channel ; however, the prices applied by herders are three to five times as high as CVL 's, and security notably in the conservation of live vaccines, has not yet been fully proven.

Nevertheless there are advantages in using the national private channel :

- the commercial vitality of the private sector, which has translated into a notable increase in vaccine sales since 1995 (refer to table in the annex, drawn from activity reports for the years 1995 through 1999) ;
- spreading dead vaccine sales throughout the year, which reduces or eliminates the seasonal character of vaccine sales ;
- cash purchases of vaccines by private dealers, which helps the financial situation of CVL, avoiding at the same time stock shortages of inputs and packages, consequently shortages of finished products.

All network actors have access to dead vaccines directly from CVL, therefore at factory price, i.e., for example 25 FCFA per dose for Pastobov.

Moreover, holders of the sanitary mandate can get live vaccine supplies from local DNAMR structures. The Peri T1 for example, is sold to them at 30 Francs per dose, i.e., at factory price, to which 5 Francs should be added for the booklet and the solutes delivered by veterinary services simultaneously with the vaccine in order to guarantee the good quality and non contamination of the vaccine.

Mandate holders practice vaccination at a price ranging between 70 and 100 FCFA according to areas (Source : Evaluation Document of the MDRE Technical Adviser).

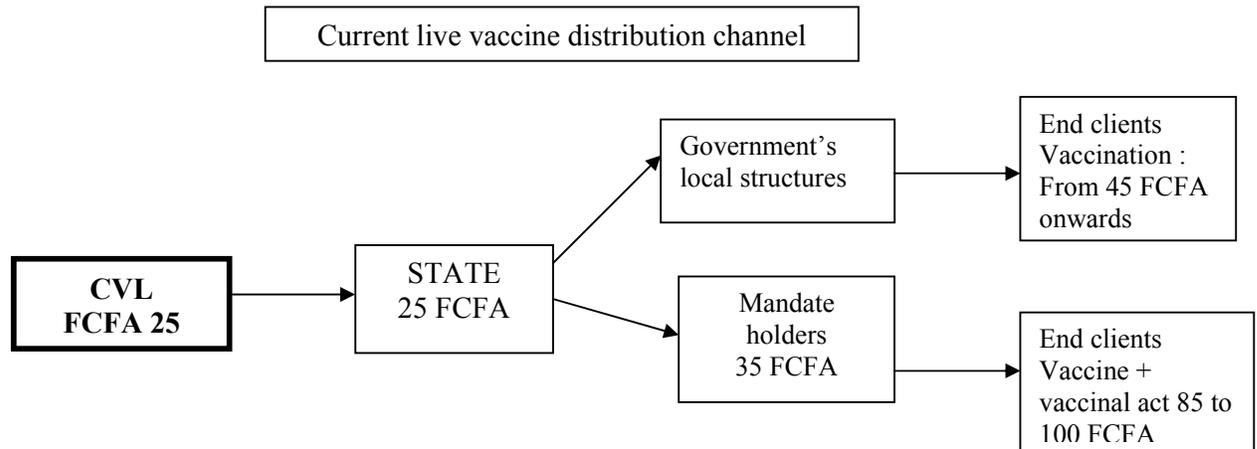
In any case, the thirty (30) francs of the mandate holder as well as the 45 francs of the herder are paid cash to veterinary services. It is therefore surprising to find CVL claims on DRAMRs which are growing as indicated by the following table and graph, drawn from CVL's 1999 financial reports.

Table showing the evolution of the CVL claims over the DRAMRs (source : CVL 1996 -1999 financial reports)

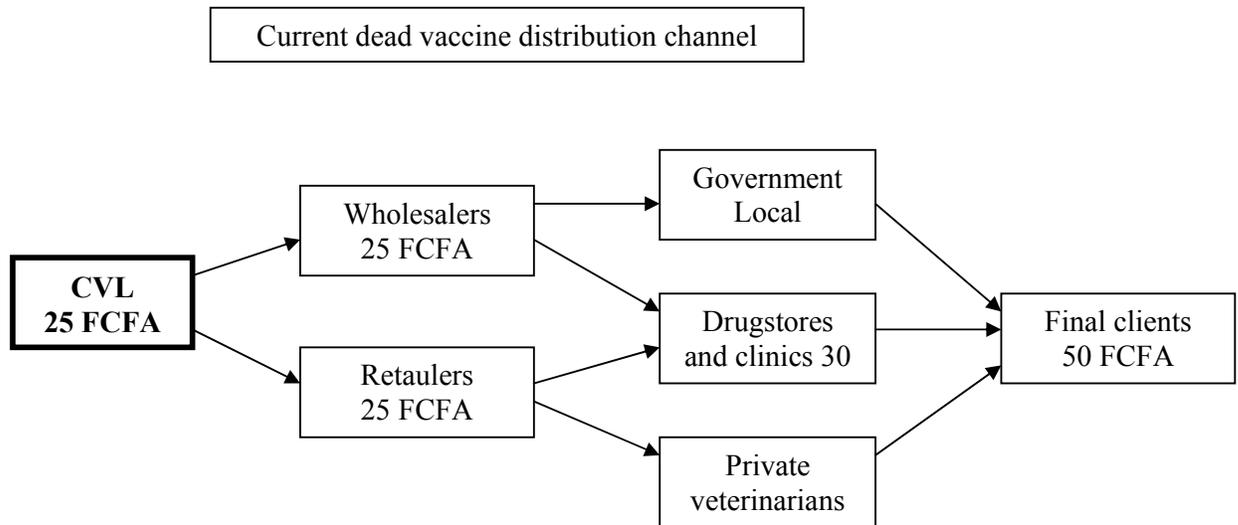
Régions	1996	19997	1998	1999
Kayes	2, 521, 200	4, 898, 750	0	4, 175, 000
Koulikoro	950, 000	1, 350, 000	4, 475, 000	1, 175, 000
Sikasso	0	8, 127, 000	17, 714, 300	18, 116,000
Segou	0	645, 300	10, 947, 335	8, 593, 285
Mopti	20, 099, 000	14, 004, 700	10, 535, 000	12, 000, 000
Timbuktu	0	0	1, 803, 000	2, 553, 000
Gao	0	814, 500	3, 120, 000	3, 339, 950
Total	23, 570, 200	29, 840, 160	48,595,435	49, 952, 585

**Evolution of CVL claims over DNEs (DRAMR) from 1996 through 1999
(source : CVL financial reports 1996- 1999)**

This situation which largely takes any credit away from the government channel in particular and public agents in general, must be tightly handled by ruling authorities, because in the best of cases, the amounts received have rather served to pre-finance service operation in case of delays in the release of operating credits : and in the worst case (unfortunately the most likely to happen) the money received will have been used for personal ends by certain agents.



Discrepancy between vaccine sale prices based on supply sources (government services or private service providers)



4.2.3 : The export channel :

It is composed of government structures as well as private wholesalers in countries of the sub-region. According to figures drawn from CVL's annual reports for closed fiscal years and intermediate 1999 situations, vaccine sales abroad are carried out approximately under the same rules as those applied in Mali. In 1998, CVL sold :

- 945,000 doses of T1 to government services in Burkina ;
- 281,000 doses of dead vaccines to private structures in Burkina ;
- 950,000 doses of T1, 100,000 doses of Ovipest and 50,000 doses of Dermapox to government services in Côte d'Ivoire, against ;
- 257,000 dead vaccine doses to the private sector in Côte d'Ivoire ;
- 850,000 T1 doses to veterinary services in Mauritania.

This list of clients has been broadened to Benin and to Guinea in 1999. The channel has an increasingly larger role in CVL vaccine sales (see annexed table made according to activity reports from 1995 through 1998 and the 1999 activity program).

The vaccines are sold at their domestic prices plus 1 FCFA. But the handling costs (packaging, transit and transport) are charged to the foreign customer. It should be pointed out at this level that there are no vehicles at CVL equipped for the transport of vaccines, notably live vaccines, and that no company specialized in handling, packaging, and transit, has been operating locally in vaccines.

Shipments are made by road or by air depending on the urgency of the situation and client requirements. Casual packaging is made either by CVL, or by its traditional transit agent and shipments are made in the same conditions as those of any other good.

The evolution of this channel presents several advantages, including :

- the reputation that the development of these sales confers to CVL in the sub-region at the time of sub-regional integration, if not globalization ;
- the effect that these exports have on Mali's trade balance.

However, in spite of this undeniable commercial success, it should be kept in mind that CVL, in its current form, is still an EPA, i.e., an autonomous management structure, but managed primarily according to the public accounting principles, and particularly a government subsidized body.

To the extent that the analytic accounting data show that certain vaccines such as the Anthravac and Ovipest are sold below their cost price (source : cost price estimate as of December 31, 1997, in the annex) ; any export of these types of vaccines amounts to subsidizing livestock in neighboring countries ; this will be the case as long as the sales prices (set by the Board of Directors) are not increased.

At the same time and along with the development of these three distribution channels, two leader vaccines appear :

- a live vaccine : the Peri T1 vaccine with 5,672,000 doses sold, i.e., 49.14% (source : CVL 1998 activity report) ;
- a dead vaccine : the Pastobov, with 2,987,200 doses sold, i.e., 25.88% (source : CVL 1998 activity report).

Thus, this represents, for these two vaccines, a total of 8,659,300 doses, i.e., 75.03% of CVL vaccine sales in 1998 (see table in the annex).

This channel provides many advantages :

- **efficiency** : important, regular, and easy to program orders ;
- **security** : deliveries made from producer (CVL) to consumer without any intermediary.

But the profitability is not maximal, to the extent that prices are significantly equivalent to those of the domestic market, and are not determined by market laws.

4.3 : CLIENT EXPECTATIONS

Whoever they are, nationals (government and private sector) or foreigners, CVL clients do not complain either on the quality or on the price of manufactured products. A few grievances have been voiced about labels which lose their color or even fall off in ice. This situation had been corrected since the end of 1997.

At the end of our questionnaire survey in Bamako and the information gathered upon our request by the recovery mission in the regions of Sikasso, Segou, and Mopti, most criticisms have been made against the distribution channel which everyone finds efficient.

But the reasons used are diverse and sometimes even conflicting :

- For wholesalers : the veterinary services should withdraw from any commercialization. Any CVL production (live or dead vaccines) should be sold to wholesalers with means, equipment and qualified personnel necessary to that effect.
- For retailers and mandate holders, wholesalers engage in illegal competition against less powerful ones. They should withdraw from the retail trade. Veterinary services should not carry out vaccination where private sector people are installed.
- For veterinary services, private sector people should not claim for the time being the commercialization of live vaccines.
- Herders and herders' groups want to have direct access to vaccines, without any intermediary, in order to reduce vaccination costs.
- Margin rate proposals range from 10% to 25%, depending on the category involved and the quality of the stakeholder asked.

All CVL partners agree on a few points :

- the supply system at CVL's level has improved in the course of the past years, but there still persists some administrative red tape in the internal channel of order forms. Stock shortages must be avoided ;
- the vaccine is not a good like any other one ; but it is rendered common place and one can find it in the hands of anyone in the field, this is not normal at all ;
- the focal point is constituted by texts on privatization of veterinary medicine that all stakeholders find obsolete, unfit and out of fashion.

V. CRITICAL STUDY OF LEGISLATIVE AND REGULATORY TEXTS

5.1 : THE NON OBSERVANCE OF EXISTING LEGISLATION BY STAKEHOLDERS

Legislation on the privatization of veterinary medicine is ten (10) years old and has never been updated. It has therefore become obsolete with time. On the other hand, this legislation has been proposed by the central administration without any consultation with the field and was adopted in a relative enthusiasm about liberalization.

Statistics on the number and location of private sector people installed are quite variable, because :

- certain applications for setting up which have been accepted have not had any effects ;
- certain people got installed illegally, without any authorization ;
- some regularly installed units vanished subsequently because of insufficient means, often as a result of mismanagement.

Existing businesses have multiple names, which in addition often vary from one purchase order to another and do not always observe official designations. A given business will be called indiscriminately : "Veterinary Clinic", "Veterinary Drugstore", or "Veterinary Unit", etc.

The content of the activity conducted is often at odds with the designation "Veterinary Clinic" in order to designate a simple warehouse for veterinary products.

While the legislation emphasizes code of ethics and professional qualification, stakeholders easily fall in the exercise of a purely commercial, or even mercantile profession. Thus, some warehouse managers complain that the legislation does not provide for any regulatory distance between units.

All this goes with an almost total lack of knowledge of legislation on the privatization of veterinary medicine. Out of eleven (11) retailers interviewed in the city of Bamako, less than half answered the question whether legislation on privatization is favorable or not to the development of the distribution channel.

The rules set by the legislation are not observed, notably those relative to infrastructure conditions, the number and quality of technical personnel and operating conditions.

But the legislation itself constitutes nowadays a bottleneck for the harmonious development of the private exercise of the profession in general and for the dynamic evolution of the vaccine distribution channel in particular.

5.2 : INAPPROPRIATE LEGISLATION

5.2.1 : Legislation on the Authorization of private practice of the veterinary profession :

5.2.1.1 : Law N° 86-64/AN-RM dated July 16, 1986

Chapter I : It authorizes the private practice of the profession, the missions of the private veterinarian and his relations with public authority and defines the activities covered, namely :

- Individual and mass medicine as well as animal surgery ;
- Veterinary pharmacy ;
- Consultancy.

Chapter II : It determines the required conditions, the rights and duties of the private veterinarian and formalizes the representative body : the order of the veterinary profession. Like any law, it limits itself to major orientations.

But some shortcomings can be noted :

The law covers details concerning how items, such as accounting, which is regulated by other legislation, remains evasive or silent on :

- The sale of veterinary products (including vaccines)
- The degrees required, the duration, the nature and quality of the training in order to apply for private practice of the profession.

5.2.1.2 : Decree N°.313 dated October 8, 1986

It specifies the significance of veterinary establishments which are : the veterinary clinic, the veterinary cabinet, the consultancy, and the analysis laboratory.

It provides good definitions of the client, of the veterinary pharmacy, and of the types of medicines, by specifying that their issuance is conditioned to the presentation of a prescription.

Article 10 : confers exclusively to the members of the profession the prerogative to prepare and retail veterinary drugs.

Article 11 : submits to an administrative authority the preparation, sale or wholesale distribution of drugs, without any additional precision.

The decree includes 27 articles, against 21 for the law it is supposed to develop ; i.e., the decree is not very explicit.

5.2.1.3 : Order N° 90-2439 dated August 14, 1990

It includes lots of details, but remains silent on the sale of veterinary drugs (retail or wholesale). It does not even make a reference to Article 11 of the above mentioned decree ; while each item in the text must be detailed and explained in its implementing legislation.

5.2.2 : Legislation n the National Order of the Veterinary Profession :

5.2.2.1 : Law N° 88-45/AN-RM dated May 6, 1988

This is a very detailed text (61 articles) which, after defining the missions, addresses the organization, the registration conditions being addressed only from article 29; then comes the discipline and the text ends with the corporate self-defense reflex: “on illegal practice of the profession”.

No trace of categorization which could help stakeholders in the field of the distribution of veterinary products, specifically vaccines.

5.2.2.2.: The code of ethics of the veterinary profession

This is where the duties (general duties and duties in the private practice of the activity) are reviewed. The texts then addresses the issue of fees and ends with an article inviting any applicant to registration on the board to state in front of the regional council that he has read the code and commits himself in writing to comply with it.

However, the picture is not totally bleak in the sector of the privatization of veterinary medicine. The veterinary profession, because of the quality and efficiency of its services, has contributed to a substantial improvement of the herder’s income and to a considerable increase in CVL’s vaccine sales.

The private veterinary profession must simply be better organized and should provide the herder with a complete service (medical care and veterinary products) to cover the sector’s health needs.

According to CTAP reports confirmed by the DNAMR, the current distribution of private veterinary establishments is as follows :

Region	Number of establishments	% over national total
Kayes	15	7
Koulikoro	31	14.6
Sikasso	78	36.7
Segou	29	13.6
Mopti	18	8.4
Timbuktu	4	1.8
Gao	1	-
Kidal	0	0
Bamako District	36	16.9
Total	212	100

5.3 : PROPOSALS FOR IMPROVEMENT

The shortcomings noted and numbered in the different reports and studies did not escape the attention of decision making authorities; thus, in 1996, CAMOPA undertook an investigation on private installations, in their structural, technical, and financial aspects.

The study concluded that there was a lack of a clear policy about veterinary drugs, and veterinary pharmacy, supply sources, distribution channels, quality control and modes of use.

Thus, the MDRE cabinet initiated a review of legislation and proposals are very advanced. The essential objective is the harmonized regulation of the veterinary profession with international norms.

After adoption of the new legislation, no engineer will be able to integrate the order of the veterinary profession.

Simultaneously, the Department has invested eleven (11) million CFA Francs into training in order to upgrade the knowledge of engineers who, after three (3) months in Dakar, will access the Veterinary Doctor diploma.

In order to resolve the issue of the unequal vaccine sale prices to herders by veterinary services (45 FCFA) and by the mandate holders (70 – 100 FCFA), the MDRE has proposed that after discussion with the mandate holders in order to set a single price per zone, the veterinary services should align themselves on the mandate holders' rate in order to avoid engaging in illegal competition against them.

The returns from the implementation of the new tariff could serve to fund a special vaccine fund component which will be used for the installation of new private sector people.

It is already known that wherever a mandate holder settles, the Government withdraws its agent.

As far as the distribution of vaccines is concerned, the draft projects include :

- the clarification and control of supply channels through the adoption of a law addressing only Veterinary Drugs;
- the fight against fraud through the institution of a control system and the obligation of the Authorization to Put Up for Sale (AMM) ;
- a program for training and support to privatization.

VI. DEFINITION OF A FULLY OPERATIONAL CVL VACCINE DISTRIBUTION CHANNEL

The adoption of draft legislation will help classify private veterinarians and will facilitate their relations with CVL. However, the Central Veterinary Laboratory must make some strategic choices, in order to better control and coordinate its actions and make fully profitable its vaccine production and distribution activities and give them a look which is closer to private sector style.

6.1 : THE DOMESTIC CHANNEL

It represents 70% of CVL's sales, and therefore deserves a very special attention. The optimum channel will be the one which achieves the best compromise among the already defined criteria, namely :

- efficiency (fluidity) ;
- security ;
- profitability.

6.1.1 : Live Vaccines :

The essential problem which arises is that of the recovery of sales products. The only bottleneck is constituted by the DRAMRs which collect local structures' funds but do not transfer them in time.

The replenishing is then made on behalf of zones which have used up their vaccines and the arrears are put on behalf of areas still having stocks. Good management would have led to internal redistribution at the level of the region before addressing CVL, but good faith is not always here as was already pointed out above.

Given that private sector people do not have any cold chain in the field, it would be risky to try to do without the services of veterinarians. Even mandate holders have to get their supplies from these structures.

The solution consists in a first stage to eliminate the DRAMRs from this channel and to enable SLACAERs (local structures) to get their supplies directly from CVL.

At the level of CVL, there will be instituted a rigorous check of deposits of funds, in relation with previous deliveries prior to any replenishing.

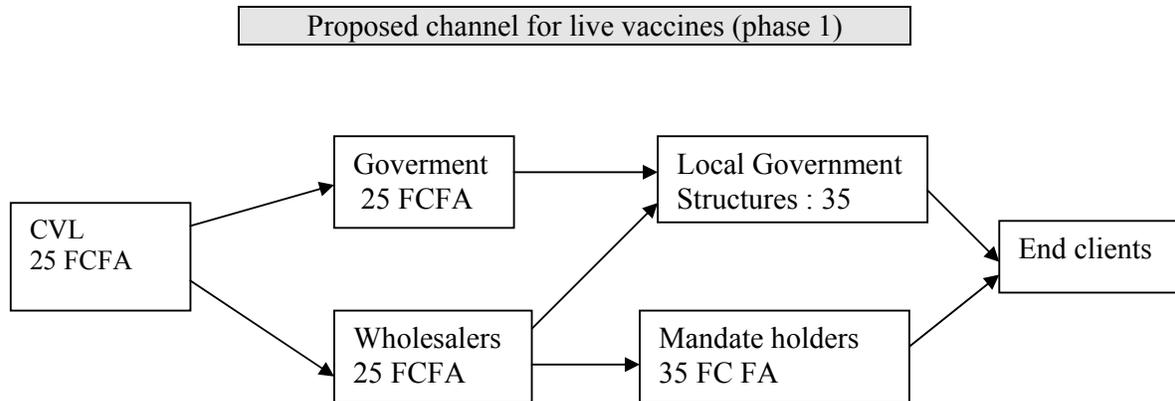
At the same time, private sector people having important means and cold chain equipment at least at the regional level, are authorized to get their supplies directly from CVL. The SLACAER and the mandate holders could then get their supplies at this level.

If this scenario (phase 1) is not workable in all regions, it could be implemented, based on a partnership, in those regions where this is possible (Sikasso, for example).

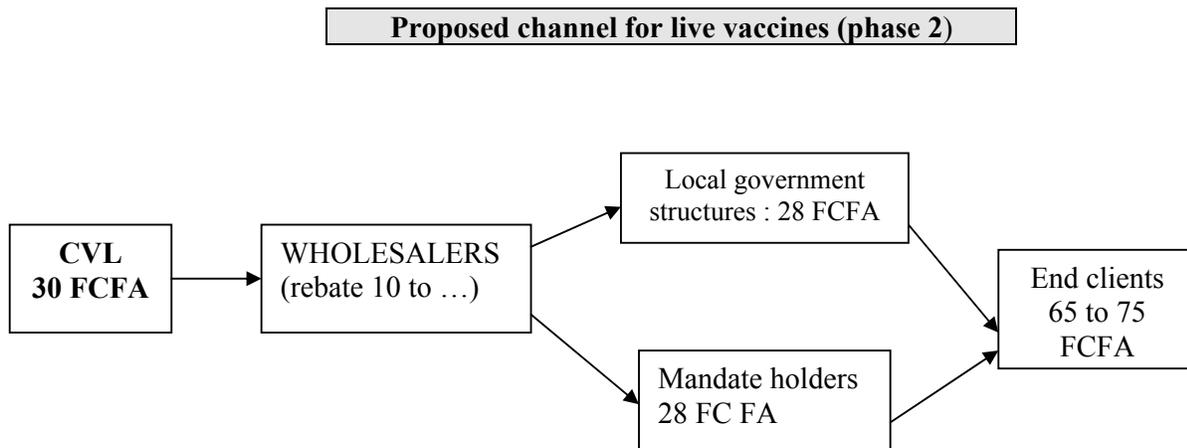
Vaccines are periodically controlled by State agents, and if necessary, samples are sent to CVL for verification purposes. If it turned out to be conclusive, the process could be extended gradually to other regions.

In a second stage, when the capacity of private wholesalers will have been proven, government structures will be replaced by the private sector (phase 2).

As a matter of fact, the distribution of roles between veterinary services and private veterinarians should make possible a true growth of the private sector and the improvement of public service efficiency in the conduct of the country's health policy.



CVL maintains its sale price and the end user saves 10 to 20 FCFA per dose



GOVERNMENT SUPERVISION AND CONTROL

CVL increases its sale price by 5FCFA per dose ; the end user saves 15 to 25 Francs per dose over the former situation.

The two schemes described above show the stages through which CVL must pass in the liberalization of the live vaccine channel, namely :

- in a first stage, the sale of vaccines to wholesalers in locations where the latter have cold chain material and the qualified personnel necessary to the good distribution of live vaccines, and to government structures in locations where these conditions are not fulfilled.

Local government structures and mandate holders may indiscriminately get their supplies from central government agencies or wholesalers. The sale price at the end consumer level will then be brought back from a range of 80 to 100 CFA to a range of 70 to 80 FCFA, i.e., a gain of 10 to 20 FCFA, without CVL having to reduce factory level prices.

- in a second stage, and when the majority of wholesalers will have fulfilled the conditions defined above, CVL will sell its entire production to the private sector and the State will limit itself to its traditional supervision and control role in order to protect the different stakeholders (producers, intermediaries, and particularly consumers) against fraud, counterfeiting and illegal activities of any kinds, including the marketing of expired products.

CVL may increase its sale price from 25 to 30 FCFA, while the end consumer will pay 65 to 75 FCFA, thus saving 15 to 25 FCA per dose of vaccine.

In order to adopt a commercial strategy which comes closer to private sector style, CVL must practice a policy combining harmoniously a sale price and rebate system depending on quantities sold. It will gradually go through the two stages represented by the above graphs. The following table illustrates somehow such combination :

Quantity (doses)	Rebate	Cash	Terms of Funding
1,000 to 10,000	0%	100%	No CVL funding
10,000 to 25,000	10%	25%	2% per month (24% per year)
25,000 to 50,000	15%	35%	3% per month (36% per year)
>50,000	20%	45%	4% per month (48% per year)

Through this system, CVL agrees to grant credit to clients who buy large quantities. At the same time, the cash sale counter will provide clients with the possibility to get supplies, a fact which compels intermediaries to observe reasonable prices; this situation is advantageous to the end consumer.

An analysis of this table shows that wholesalers who buy over 50.000 doses will obtain a profit margin which may reach 25% by selling at the same price as the CVL counter. This margin is progressively reduced down to 10% and herders' groups can benefit from it by putting together their needs and by then using the services of a mandate holder for the vaccination.

Large quantity sales will enable CVL to reduce its operating charges. A regulatory text can be initiated in order to codify this policy.

To implement this policy, the government should limit its intervention to surveillance through the Board of Directors, which should lead to ensuring a good vaccination campaign to sensitize herders.

In order to better assist CVL, the government should ensure strict observance of regulation relative to the control of vaccine use in the field, fighting against fraud and quality control at the production level.

Thus, CVL, relieved from administrative constraints, should select the most reliable markets in the long run and produce quality vaccines destined to the targeted markets. It should let the private sector determine the most efficient channel in satisfying the needs and means of the market. No monopoly will be granted.

The most significant aspect consists in assuring a rigorous management of the entire vaccine production chain and a permanent monitoring of production costs (hence the necessity to establish an analytic accounting system).

The sound implementation of this commercial strategy will depend on the rhythm of the development of CVL's status as determined by the State, and particularly the mastery of production costs and the freedom to set sale prices in accordance with market potential and requirements.

6.1.2 : Dead vaccines:

Here, there are considerably fewer problems but the situation can still be improved upon. CVL may choose one of two strategies :

6.1.2.1 : Sell exclusively to wholesalers :

In this case, the adoption of new legislation will enable it to clearly identify its future clients, to get in touch with them and to define the collaborative framework.

Thus, a few operators (not exceeding ten) will have to express their needs, the frequency desired for deliveries, etc.

CVL will then be able to program and budget its vaccine productions and deliveries, manage a limited number of clients and sell large quantities and for cash which, by alleviating its financial burden, will avoid the risks of shortages of all kinds.

6.1.2.2 : Wholesale :

In this case, the operator's category matters very little ; a minimum delivery level is set and clients must comply with it. Retailers or other groups may form associations within GIEs, express their needs, pay cash and have it delivered.

This procedure was already tried at CVL, but has not been conclusive. It failed because stock quantities are sometimes inadequate, or because the demands are too low for certain vaccines.

In any case, CVL cannot continue receiving all clients. In 1998, a client bought over the entire fiscal year 1,375 doses of pastobov in two deliveries.

At the price of 25 FCFA per dose, this sale brings 34,375 FCFA to CVL. If one had to keep an analytic accounting of this operation, it would be easy to demonstrate that it cost more than it brought.

6.1.3 : Margin rates :

Available data confirm approximately the results of surveys per interview which call for the following margin rates

- wholesaler: 20%
- retailer : 20%

The computations below of margin rates for wholesalers and retailers are made from a document developed by the MDRE to depict the situation of mandate holders.

Situation of the Mandate Holder who gets his supplies from a retailer, who gets his own supplies from a wholesaler with a margin rate of 20% for the wholesaler, and 20% for the retailer.

Data taken from : **ESTIMATES OF VACCINATION CHARGES IN A SUB-DISTRICT UNDER SANITARY MANDATE**
(Document developed by the Technical Adviser to the MDRE in charge of livestock)

I - Baseline data

Average population : 20,000 heads
Personnel : 1 agent hired for 3 months

II - Costs for a vaccination campaign

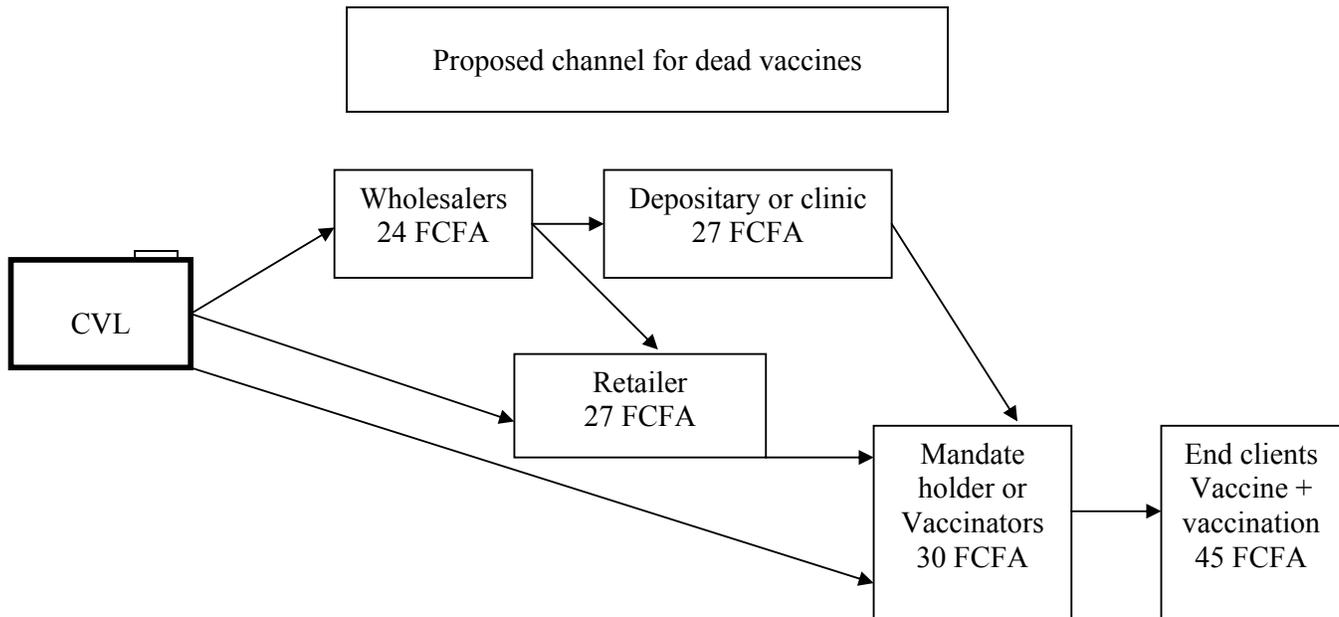
1 - Personnel :	50,000 FCFA x 1 pers x 3 months	150,000
2 - Equipment		
- Ice box:	1 x 40,000 FCFA	40,000
- Syringes + needles + clover pliers		50,000
- Cold chain equipment (depreciation 5 years) :	600,000/60msx3s	30,000
- Motorbike (depreciation 3 years)	540,000/60mos.X3ms	45,000
3 - Operation		
-Kerosene :	50l x 3 months x 200 FCFA	30,000
-Gasoline :	4l x 2l x 90 days x 430 FCFA	309,600
4 - Vaccine purchasing + solute + booklet :	36 FCFA x 20,400	734,400
- Wholesale margin 20% x 25 FCFA	=	30.00
- Detail margin 20% x 31.25 FCFA		36.00
Total costs		1,389,000

III – Cost price per dose of Peri T1 vaccine 69/45

This amount is rounded off to 70 FCFA per dose

If the mandate holder charges	100 FCFA, the profit will be :	600,000
If the mandate holder charges	95 FCFA, the profit will be :	500,000
If the mandate holder charges	90 FCFA, the profit will be :	400,000
If the mandate holder charges	85 FCFA, the profit will be :	300,000
If the mandate holder charges	75 FCFA, the profit will be :	100,000

Proposed distribution scheme for dead vaccines



CVL increases its sales price by 5 Francs per dose, while the end user saves 5 Francs per dose over the former system

6.2 : THE EXPORT CHANNEL

6.2.1 : Live vaccines :

Because of the delicate nature of vaccines and the brand image that CVL must safeguard with foreign clients, live vaccine exports can still remain in the portfolio of the production structure, particularly as a proportion of orders from abroad result from calls for bids under the vaccination campaigns of these countries.

Vaccines are not goods like any other one and one should avoid trivializing them. The export channel represents 30% of CVL's sales, a very significant fact ; but this channel does not raise any major problem and payments are made on a regular basis.

It will behove CVL, in the context of a better monitoring, to set up a system of periodic reminder to its foreign clients.

6.2.2 : Dead vaccines :

Like the domestic channel, the distribution of dead vaccines abroad should be carried out by private wholesalers.

One advantage will be the inter-professional link which will be created between private sector people in Mali and private sector people in other countries of the sub-region, and the boost that this will give to the development of CVL vaccine sales.

Currently, moreover, information from agreeing sources is mentioning the re-export of a portion of dead vaccines dispatched to the border regions of Mali.

6.2.3 : Margin rates :

The export margins are currently very limited ; generally speaking, an increase by 1 FCFA over domestic prices. This situation may not be very stimulating for private sector people.

Whenever there is evidence through analytic accounting that there is sufficient margin on a given vaccine, a promotional price will be granted to the wholesale exporter particularly in the framework of the conquest of new markets.

VII. CONCLUSIONS AND RECOMMENDATIONS

The analysis helps retain a business strategy adapted to the desirable evolution for CVL, and comprising :

- domestic measures, namely the reinforcement of the marketing service and the cost analysis based on the development of analytic accounting,
- external measures tending towards freeing CVL from the heaviness related to its current legal status.

The current production capacity of CVL enables it to produce 20 million doses of all vaccines. This quantity may be kept as the objective of sales by the year 2003. If current trends are confirmed, 35% to 40% of these sales will take place abroad, i.e., 7 to 8 million doses.

At the domestic level, the strategy will consist in reducing the average consumer cost through reducing the number of charges imposed by intermediaries who do not produce any value added.

We will then try to implant a dynamic which will stimulate the demand through an increase of the vaccination coverage of the herd, thanks to the interest that the private sector will express in the development of the vaccination activity.

Finally, there will be a gradual increase in the sale price at factory level. CVL already has its cash sales counter which will be revitalized through the use of a rebate policy ranging from 10 to 20% depending on quantities purchased.

This policy will be profitable to CVL ; it will also protect consumers through the stabilization of prices practiced by intermediaries.

A good distribution channel is a strategic method and (human, material, and financial) means for its implementation.

7.1 : The method :

It consists in developing and implementing a marketing plan articulated around the following points :

- Identification and selection of “pilot mandate holders” ;
- Management training of private distributors ;
- Information and sensitization mission of herders on the topic of vaccination ;
- Exploration of markets in the sub-region ;
- Achievement of promotional and advertising activities ;
- Regular contact and client monitoring ;
- Debt recovery.

These actions will be consolidated by actions already under way for a better control of production costs, thanks to the reduction of matter and energy spoilage.

7.2 : Human means :

Through continuing education, the marketing section personnel should be “trained”, and qualified personnel should be hired to support this unit. A short, medium, and long term training program will be developed and implemented with partnership assistance.

7.3 : Material means :

- Plan the acquisition of a vehicle adapted to the transport of live vaccines.
- Plan the reinforcement and replacement of production equipment in order to ensure the development or production, and satisfy the needs in their evolution qualitatively and quantitatively.

7.4 : Financial means :

Develop and implement an individualized marketing budget, which will take into account distribution constraints and the opinion of agents involved, setting specific objectives and performance criteria.

7.5 : Evaluation criteria :

- Overall vaccine sales should increase by 10% per year in the course of the first three (3) years, to reach the turnover of 400 million francs.
- Exports should increase and CVL must reach 50% of the sub-regional market in three years, through a 10% increase per year over previous markets (Burkina, Côte d'Ivoire), the consolidation of newly reached markets (Benin, Guinea Conakry) and the penetration of new markets (Ghana, etc.).

7.6 : The workshop will strive to :

1. Examine and validate the review document, notably the current distribution channels and the distribution channels proposed for the two vaccine categories (dead and live);
2. Study the situation of the mandate holder (page 31) for amendment, in order to harmonize the costs of vaccination (government services and private providers) for the end consumer ;
3. Determine a legislative framework for the role of each of the main stakeholders (CVL, wholesalers, government structures, retailers, end users) and the means to gradually lift the bottlenecks in order to make the channel fully operational ;
4. Define a business strategy for an autonomous unit for the production of veterinary vaccines (production, commercialization, pricing policy) with a time frame.

ANNEX

ANNEX I

LIST OF STRUCTURES AND PEOPLE MET

- Dr Hery Coulibaly	Technical Adviser MDRE
- Dr Oumar Diall	DG – CVL
- Dr Boubacar Diallo	CVL Production Manager
- Mr Amadou Diarisso	CVL Marketing Section
- Mr Oumar Baba Touré	CVL Marketing Section Manager
- Mr Ousmane Sanogo	Accountant – CVL
- Mr Almahamoudou Sadidi	Analytic accountant CVL
- Dr Daouda Diarra	CTAP Manager
- Dr Habibou Coulibaly	CTAP
- Dr Vincent	AGIR
- Dr N’Diaye	CTAP
- Dr Modibo Kouyaté	ANAVEM
- Dr Boubacar Keita	SODRIVET
- Dr Modibo Dembélé	OPNV
- Mr Alou Ballo	SODRIVET
- Mr Hama Daou	CEPROVET
- Dr Fama Doumbia	DRAMR District Bamako
- Mrs Ongoïba	SERU
- Dr Tounkara	CAVET
- Miss Yagare Sidibé	Pharmavet Avenue Mamadou Konate
- Mr Seydou Camara	Pharmavet Badala
- Mr Modibo Kouyaté	Mama Koïta Drugstore
- Boubacar Keïta	Didi Drugstore
- Mr Makan Keïta	Bougoufè Veterinary Clinic
- Dr Fodé Keita	Pharmavet Bamako

ANNEX III

STUDY ON THE IMPROVEMENT OF THE DISTRIBUTION CHANNEL OF VACCINEES COMMERCIALIZED BY CVL

QUESTIONNAIRE

I – Identification of the interviewee :

- 1 – Location :
- 2 – First and Last Names (or Business designation).....
- 3 – Legal status : SARL _ SA _ GIE _ One individual company _ Individual _
- 4 – Professional status : Wholesaler _ Importer _ Drugstore _ Wholesaler _
Health Care Firm _ Veterinary Clinic _ Warehouse _ Veterinary Mandate Holder-
Other..... _ Herders' group _ Herder _ Veterinary service _

II – Assessment of the current channel :

1 – Supply	Live vaccines	Dead vaccines
Who do yo buy from ?		
Who do you sell it to ?		

6 - Is the regulatory environment favorable to the development of the commercial channel ?

* Law on veterinary pharmacy Yes __ No __

Why ?

* Law on the order of the veterinary profession Yes __ No __

Why ?

* Law on the practice of the veterinary profession Yes __ No __

Why ?

Are you satisfied with the current distribution channel Yes __ No __

Why ?

III – Proposals for improving the current distribution channel :

1 - In your opinion, should CVL sell :	Live vaccines	Dead vaccines
- only to wholesalers ?	Yes No	Yes No
- to veterinary services and wholesalers ?	Yes No	Yes No
- to any clients (status quo) ?	Yes No	Yes No
2 – What should the margin rates be ?	Live vaccines	Dead vaccines
- Wholesalers ?		
- Semi-wholesalers ?		
- Mandate holders ?		
- Veterinary services ?		

**Central Veterinary Laboratory
(CVL)**

**Centre Agro-Entreprise
(CAE)**

Introduction Letter

We undersigned, Central Veterinary Laboratory (CVL) and the Chemonics Center (CAE), certify having given Mr Sinsé BAGAYOKO, Consultant - Management Counsel, mandate to carry out the « Study on Improving the Distribution Channel of CVL Marketed Vaccines » which will be followed by a workshop.

Also we would like to ask all stakeholders intervening in the said channel, to be kind enough to facilitate Mr BAGAYOKO's job as much as possible.

Done in Bamako on November 18, 1999

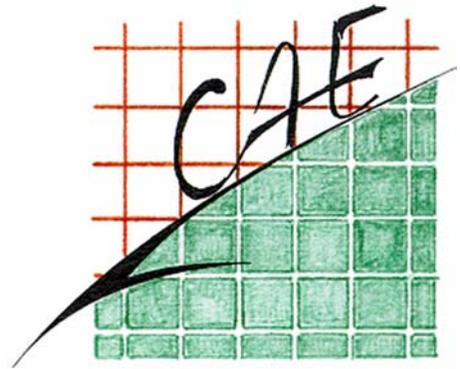
For the Chemonics Center

For the Central Veterinary Laboratory

The Director General

Oumar Diall

CAE



SCOPE OF WORK

Study on the improvement of the distribution channel for Central Veterinary Laboratory (CVL) marketed vaccines

I - Background :

Livestock is a sub-sector which contributes to a great extent to the Gross Domestic Product (GDP) of Mali and which provides great share of export returns.

Veterinary vaccines produced by CVL, by improving the health condition of animals (large and small ruminants) contribute towards increasing national wealth.

The production, distribution and use of vaccines constitute henceforth a concern for both direct stakeholders and authorities in this exchange.

The strategic option adopted by CVL in selling its veterinary vaccine production is the choice of independent distribution channels and that of a marketing strategy which progressively moves towards private sector style.

CVL currently utilizes three channels :

- the government channel (CVL, DNAMR, PARC Project, and RDO) for live vaccines ;
- the national private channel (CVL, Veterinary Pharmacies, Warehouses, RDO, Herders, etc.) for dead vaccines ;
- the export channel (government structures and private foreign wholesalers).

II - Rationale :

CVL is in a transitional stage in its restructuring which will consist in separating the public service activities (Diagnosis and Research) from transferable or private type (vaccine production and commercialization) activities.

With a concern for better preparing its leaders and agents in charge of private character activities, CVL organized with CAE support for the period extending from August 10 through September 1, 1999, a series of training sessions around the four following modules :

- getting to know your business/Business Diagnosis
- getting to know and control your costs in order to improve on the management of your business
- getting to know your market and giving yourself the means to fully use it
- know about your finances.

A sound application of these themes and a well organized distribution channel should make it possible to improve to a considerable extent CVL's performance.

The national private channel used by CVL for the distribution of vaccines comprised the following links :

- wholesalers,
- branches for certain wholesalers,
- warehouses (sale points for certain wholesalers)
- warehouse managers with independent sales points
- mandate holding veterinarians
- traders without any link with the profession
- mobile veterinarians
- herders and herders' groups.

The current situation of privatization of the veterinary profession has not to date promulgated a clear regulation in the field of commercialization of veterinary vaccines. According to the general norms of trade, wholesalers buy wholesale and resell to semi-wholesalers or to retailers. In view of the absence of any administrative control, of the inadequate number of retailer partners who could be trusted and particularly their concern for making their business thrive fully, wholesalers largely participate in retail selling and also make to warehouses, drugstores and other retailers a competition which, as such could be considered as illegal. Pharmacies and other retailers on the other hand get their supplies directly from CVL and thus benefit from wholesale prices.

CVL would have an interest in a sound organization of this channel, which would enable it to have in its own portfolio, as it sells only to wholesalers, a reduced number of clients much easier to manage and to satisfy.

III - Objectives :

- 1) The overall objective of the study is to improve CVL's performances through a cost recovery plan.

2) The specific objectives consist in finding the best conditions for the supply, distribution, and use of veterinary vaccines, which would help all stakeholders (manufacturers, distributors, users and consumers) through a sound implementation of the following activities :

- determine an adequate distribution channel for the two major categories of vaccines (live and dead) which will build on CVL's capacities ;
- define the export conditions of CVL's vaccines by specifying the potential role of national wholesalers.

IV - Expected results :

The study followed by the workshop should make it possible to organize and clarify the distribution channel of veterinary vaccines in order to make CVL generally more client oriented. More specifically, this involves :

- adopting a consensual distribution channel which will be respected by all ;
- enable CVL to sell more and better ;
- clarify the following legislation :
 - Law on veterinary pharmacy ;
 - Law on the order of the veterinary profession ;
 - Law on the practice of the veterinary profession.
- propose elements of a framework regulating the distribution and use of veterinary vaccines and defining the responsibilities of each stakeholder (sanitary mandate) in the sens of the reinforcement of private sector participation in the distribution chain ;
- validate the results of the study by the representatives of the actors involved and the government structures in order to gain adherence by all stakeholders to a new system which is better organized and more profitable to all.

V - Consultant's Profile and Mandate:

The consultant must be a financial analyst, with experience in business management and with knowledge of the livestock sector in Mali. He will have to :

- review the "veterinary vaccines" sector by describing the current situation ;
- identify and categorize the different partners of CVL by direct interview and list all national ;
- private wholesalers and their geographic location ;
- get to know about the expectations of different stakeholders (wholesalers, retailers, clinics, drugstores, private veterinarians holding the sanitary mandate and herders) ;
- prepare a document bringing out :
 - An internal live vaccine distribution channel and its possible evolution in time ;
 - A dead vaccine distribution channel and its evolution ;
 - A vaccine export channel ;

- The impact of the current organization of the veterinary profession on the vaccine distribution system ;
- A proposal of a framework regulating the relationships among the different stakeholders (wholesale, semi-wholesale, and retail margin rates) ;
- A Proposed vaccine marketing strategy closer to private sector style ;
- Recommendations about implementation and monitoring.

