

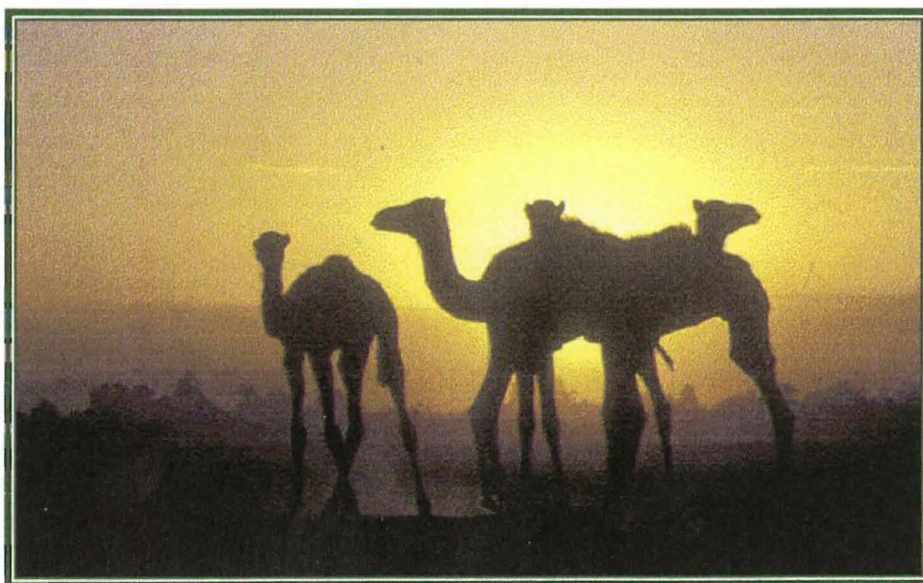
**Republic of Yemen
Directorate General of
Animal Resources
(DGAR)**



**International Development
Association
(IDA)
CIRAD/EMVT**

PRELIMINARY NOTE AND RECOMMENDATIONS

FEASIBILITY STUDY OF PILOTING VETERINARY PRIVATISATION AND CONTRACTING-OUT AT PROVINCIAL LEVEL



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June 2000

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PRELIMINARY NOTE AND RECOMMENDATIONS

**Feasibility study of piloting veterinary privatisation
and contracting-out at Provincial level**

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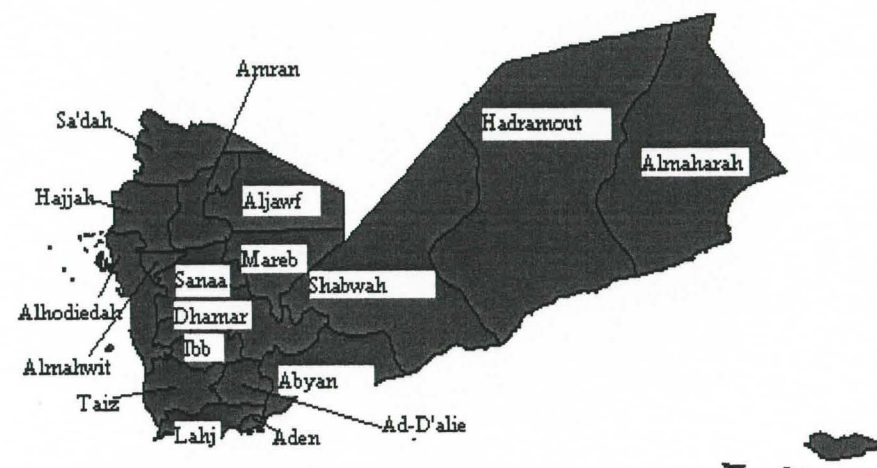
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SUMMARY :

The project's livestock component would include inter alia further rationalisation and reforms of animal health institutions. The development of animal health services in the country is to be achieved through (a) strengthening of the Government capacity to carry out its core functions, i.e. strategic disease control, quality control, epidemiology and planning, and (b) setting up of a conducive environment for veterinary privatisation and deployment of community based livestock workers.

Documents constitute the first stage of this project. The present note redraws briefly general context of the livestock, expose the general conditions for the privatisation of Veterinary Services, then proposes the questionnaires of enquiries with the various actors.

Provinces of Yemen



FOREWORD

The present consultancy is being funded by the International Development Association (IDA) in the context of the preparation of the Agricultural Technology and Productivity Project (Terms of reference are given in Annex 1) being taken into consideration by the Ministry of Agriculture and Irrigation (MAI). The project's livestock component would include inter alia further rationalisation and reforms of animal health institutions. The development of animal health services in the country is to be achieved through (a) strengthening of the Government capacity to carry out its core functions, i.e. strategic disease control, quality control, epidemiology and planning, and (b) setting up of a conducive environment for veterinary privatisation and deployment of community based livestock workers.

This mission took place from June 15th to 24th and included two field visits to the Hoddeidah and Dhamar Governorates (annex 2). It was provided on arrival with a document summarising the characteristics of the Yemen Livestock Sector (Annex 4) and was introduced to the national experts in charge of the preparation of the ATPP's livestock component (Annex 3), namely Dr. Mohamed Ahmed Al Haddad, Director of animal health in the Directorate General of Animal Resources (DGAR) and coordinator of the study, Dr. Najib Al Hammadi, head of the Strategy Unit and Dr. Mansoor Al Padas, head of the Central Veterinary Laboratory (CVL). Field visits were accompanied and guided by two senior veterinary officers, Drs. Abdullah Al Maktary and Fadel Al Ameri. The consultant wishes to thank the Ministry of Agriculture and Irrigation (MAI), the DGAR and the national team involved for their warm welcome and able assistance in the organisation of the mission. The present preliminary note presents the main findings so far and recommendations for further investigations to be carried out during the six weeks period following this first phase mission, meant to provide the detailed complementary information needed for the feasibility study on veterinary privatisation.

1. BACKGROUND

1.1 Livestock populations

The livestock sector of Yemen is mostly constrained by the generally arid conditions of the country, with the exception of a fertile strip to the West, which largely determines the distribution of livestock and the livestock production systems in relation with the very uneven availability of fodder and water supply.

According to the Year book for 1999 of the National agricultural statistics recently published, the Yemen livestock population would be as presented in the following table :

Table 1 - Total livestock population

Species	1995 (‘000)	1996 (‘000)	1997 (‘000)	1998 (‘000)	1999 (‘000)
Cattle	1174	1181	1201	1263	1282
Camels	175	179	181	183	185
Sheep	3751	3922	4267	4527	4667
Goats	3328	3558	3881	4089	4204

These figures should however be taken with some precaution since they are increased from one year to the next by a non explained factor which changes every year and for each species with no possibility to understand the rationale behind these herds evolutions.

A graph will be drawn to show the variations of the rates of increase used in the Year Book of statistics for the various species over the last five years.

It is not surprising however that the distribution of the various species appears very uneven according to the huge differences existing between regions regarding the climate and geomorphology conditions.

Pie charts will be presented to show the relative distribution of the various species between Governorates and field regional veterinary officers will be requested to provide detailed information on the main concentrations of livestock in all Governorates (annex in order to design distribution maps for the main livestock species in Yemen.

1.2 Livestock production systems

The main production systems resulting from the diverse geographical morphology and climatic conditions of the country will be described in detail and a map designed to represent their distribution in the country.

1.3 Animal health and nutrition constraints

The main existing constraints to livestock production will be described using available data and complemented through a questionnaire to the regional veterinary officers in an attempt to specify regional characteristics (Annex 5).

1.3 Productivity and production

Despite previous efforts by the livestock authorities, livestock productivity remains low, principally because of feed and water resources and the persistence of animal pathology due to insufficient availability and accessibility of veterinary services at the farmers' level. As the country remains highly dependant on imports of meat and milk for the supply of animal proteins to its population, it is important to protect and develop its domestic animal resources potential. This is meant to be achieved through development of disease surveillance for an efficient prevention of existing and potentially transmissible diseases and through better and more widely available delivery of professional veterinary services and drugs.

Average present productivity of the various species (some 12-14 Kgs per head of cattle, 15-17 Kgs per camel and 3-4 Kgs per sheep or goat) will be presented and comments made regarding the different production systems.

1.5 Resources and uses of livestock products

The existing data on livestock production and imports of livestock produce will be related to human population figures to show the level of coverage by the domestic production of the population consumption of animal proteins.

1.6 Human and technical resources in the sector

These have been specified in the summary document prepared by DGAR staff prior to the mission. **They will be further specified to determine the precise number of veterinary professionals (veterinary graduates, assistants and technicians) actually present in the country and their activities (Annex 6), as well as the numbers of professionals expected to become available following ongoing university training and training programmes being considered.**

1.7 Present availability of veterinary services and drugs to the livestock owners

From the above and further information to be collected will be deducted the level of coverage in veterinary services and drugs availability at the national level. Forecasts will be drawn up as to the human and technical resources that need to be deployed to reasonably cover the demand and potential needs of the producers to address the main development issues of the sector.

2. GOVERNMENT LIVESTOCK SECTOR POLICY AND LEGAL FRAMEWORK

This paragraph will at first present the organisation of Yemeni livestock services as they appear through the DGAR central and Governorate services and the DGAR organisation chart within the Ministry of Agriculture and Irrigation. Other livestock services provided through other Government institutions (Regional Development agencies, Municipalities,

state farms..) will also be described to appreciate the level of coverage by various Government services of the services needed by the livestock farmers..

The Government specific policy for the livestock sector has not been officially released yet. There are however strong indications that the respective roles of the public and private sectors in the provision of animal health services may be soon reconsidered to better respond to the needs for the development of the sector. Two working papers related to the policies and strategies for the livestock sector and to the restructuring of field services have been prepared for circulation within the Government, but their translation in english is not yet available. It is expected that more information will be made available as regards the detailed Government orientations for the rationalisation and future orientations of the sector.

The present veterinary legislation appears largely incomplete. So far, the most detailed regulations concerned import procedures for live animals. A preliminary legal paper on privatisation is said to have been prepared but is not yet translated. It seems that regulations concerning animal health prevention and control as well as those about import, distribution and control of drugs need to be reviewed and completed. **Collection and translation or summary of all legal documents on livestock and livestock products should be undertaken during the interim period between the two phases of this mission.**

Until recent years, veterinary education of Yemeni professionals has been essentially provided by foreign universities. Most Yemeni veterinarians have been trained in Syria, although a small number graduated from other foreign universities in Irak, Cuba, Russia or in some cases England. Specific veterinary courses were initiated 4 years ago at the university of Darham and the first graduation of veterinarians trained in Yemen is scheduled to take place at the end of next year. Intakes have been steadily increasing from one year to the next since the opening of the course from 13 the first year to close to 30 last year. In addition, there are plans to open new veterinary courses in the Universities of Sana'a and Ibb. There is thus some worry on both the quality of the training being offered and the future employment of the new graduates, all the more so since about 30 students are still being trained in Syria and about 20 more in other universities including Irak and Egypt. **More information on graduation forecasts should be collected in the few next weeks.**

Secondary school level veterinary training is being provided in Yemen to produce veterinary assistants. The number of certificate holders having benefitted from this training is not known at present, nor the average yearly intake of this course. **This information should be made available to appreciate the level of service veterinary assistants provide in the field,** particularly since they represent most of DGAR field officers and many of them have opened veterinary pharmacies in the Governorate and provide private veterinary services.

3. GENERAL CONDITIONS FOR VETERINARY SERVICES PRIVATISATION

The need for privatisation of veterinary services derives from either the evidence of a degradation of the services provided by the relevant public services (generally attributed to dwindling budgetary resources), or the incapacity of the public services to face new constraints resulting from more ambitious objectives or unexpected emerging problems, or again both of these reasons. In the case of Yemen, the difficulties experienced to serve the livestock owners in order to meet their basic needs have been clearly identified and described in various documents. In direct terms, the privatisation process can be defined as a process which consists in transferring the financial burden of providing veterinary services from the public service, which cannot ensure or expand them to meet its development objectives, to the private sector and, in particular, the livestock owners themselves.

The practical objective of the privatisation of veterinary services is thus clearly to **mobilise private competences and financial resources to complement and expand the veterinary services provided to the livestock owners by the public services.**

The general objective can be formulated as follows : **provide improved animal health care services (in quality and quantity) accessible to livestock owners in order to enhance their income through better productivity resulting from better and sustained herds health.**

The general conditions to allow for the smooth implementation of such a privatisation programme are related to a number of factors linked with the nature of private business and the environment in which it is undertaken (legal and regulatory, physical, economical, financial, political, social, etc.). These factors should be evaluated in relation with the level of constraint they represent in the particular environment of the country and the possibilities to alleviate each of these constraints. They can be classified as follows :

3.1 The economic environment

To be efficient and sustained, private sector services have to be **profitable**, which indeed means that services or goods of any kind have to be sold and paid at a price exceeding their cost price by a minimum margin allowing for a motivating regular revenue. The complementarity between public and private services in the same field **is not compatible with any persistent policy of subsidy on similar services** that may be undertaken by or delegated to private operators. It is not compatible either with full cost recovery as this does not allow for any profit in normal private practice conditions. The related constraints to the economic environment factor in Yemen seem to be related in particular to :

- The current state of the cost recovery policy by the Government veterinary services and the planned policy which envisages to start privatisation of veterinary services either in two regions only or in the whole country at once.

- The level of prices charged by the Government in areas where no private practice is temporarily possible.
- The livestock owners capacity or willingness to pay the real value of the services provided which in turn depends on their understanding of the value of the services and of their own capacity to get fair and safe market prices for their produce.

It is thus clear that **privatisation of veterinary services is not to be confounded with the mere cost recovery of these services**. Since the general economic conditions have indeed an influence on the viability of private services, the **complete liberalisation of the services is a sine qua non condition of privatisation**. On the other hand, **no real sustainable liberalisation of private veterinary services can take place without the existence of a rationale and strong public veterinary service with the ability and authority to enforce veterinary related laws and regulations**. The present situation in Yemen is demonstrative of a liberalisation without control situation where privatisation of veterinary services have developed in a wilde manner, primarily at the initiative of civil servants, therefore creating serious conflicts of interest.

3.2 Legal and regulatory environment

The installment of a trained professional to provide veterinary services on a commercial basis requires personal as well as financial investment and, as any investment, implies a non negligible element of risk. An important element of any business investment risk in the animal health sector in Yemen is the absence of proper regulations to adequately define the role, rights and responsibilities of private veterinary practitioners and of regulations dealing with their main or subsidiary activities which altogether constitute the regulatory environment of the profession. Such legal framework must be developed before privatisation is implemented and must include but not necessarily be limited to :

- **A Law or specific set of regulations on private veterinary practice** defining inter alia :
(a) the conditions of agreement and registration of veterinary professionals with a clear delineation of the rights and responsibilities of the diverse categories of professionals who may be authorised to open a private veterinary practice, (b) the conditions of installation of a private veterinary practice (agreement, registration, licensing..), (c) the protection measures and recourse that may be called upon in case of conflict, illegal practice or unfair competition by the public services, between the professionals themselves or with other professionals, or again in case of conflict between veterinary professionals and their clients, (d) the nature of their relations with the public services in terms of compulsory declarations and reporting as well as in terms of contractual delegation of activities attached to public functions, (e) the role of the professional associations, etc..
- **A Law or specific set of regulations on animal diseases and sanitation control** providing for (a) the definition and classification of animal diseases with special emphasis on notifiable and zoonotic iseases, (b) the definition and description of specific measures and procedures to be undertaken in case of outbreaks of specific diseases, (c) the role and the

respective responsibilities of the private and public services in the surveillance and control of epizootic or zoonotic diseases and the conditions under which certain functions of the latter may be contracted or delegated to the former (sanitary mandate), etc..

- **A law or set of regulations on the veterinary pharmacy, biological and toxic products** concerning the restoration of the health of animals and the trade of drugs, biological and toxic materials and defining: (a) the conditions of agreement and registration of diverse categories of professionals to import and/or wholesale, detain, distribute and/or administer veterinary drugs, biological and toxic products, (b) the conditions of agreement and market authorisation of each of the products to be used in the country, (c) the measures decided and ways of implementation for the control of quality, purity and effectiveness of veterinary drugs and biological and toxic products and the measures to be applied for the detection of unauthorised, fake or adulterated products, (d) the institutions agreed for the control of these products, (e) the disciplinary measures forecasted in case of delinquency, etc..

Other complementary regulations may be of importance for the practice of private veterinary services as they may be the subject of additional direct or contracted activities for the practitioners. As examples are the regulations aiming to regulate the sanitation control of meat and products of animal origin, those for the prevention of cruelty to animals, the protection and exploitation of wildlife, etc..

Existing regulations in Yemen provide for conditions for importing livestock and for importing drugs and vaccines, but necessary regulations for the prevention and control of animal diseases still have to be refined while those for the regulation of veterinary practice and auxiliaries are still under preparation.

3.3 Animal health educational programmes

The development, viability and sustainability of a private veterinary practice require a number of skills which are usually not included or insufficiently developed in animal health educational programmes. It is thus important that additional specific courses be included in the curriculum of both the veterinary faculty and the veterinary technicians training institutions, in particular :

- **Business management courses** to prepare students to the creation and operation of a private veterinary practice and provide them with the adequate management know how that they will need. Such courses should include capital investment and business planning, revenue and income forecasting, operation planning, sales day-to-day and periodic book keeping, clients registering, stocks and cash management, accounting and auditing, taxation, import-export practices.
- **Communication and extension courses** to provide future private practitioners the basic skills needed to deal with their clients, design and deliver relevant extension messages on disease prevention and curative techniques and related vaccination, animal husbandry and

treatments to be applied, animal production and nutrition, breeding, etc.. and the services that they are habilitated to provide.

- **Specific technical courses** on animal health care preventive and curative techniques and animal handling techniques at the familial and commercial levels and on the economic profitability of alternative services or treatments.

It is important for the future development of privatisation that animal health educational programmes give a fair account of private practice advantages and inconvenience in order that students may consider it as a possible viable career alternative to public employment, purely commercial businesses or employment in other sectors.

3.4 Organisation, role and activities of the Government veterinary services

As the development of private practices is intended to complement Government services provided to the livestock farmers and to provide incremental services that cannot be ensured by public services, it is natural and vital that the latter actively support and provide the necessary conducive environment for the smooth development, viability and sustainability of the privatisation process, in particular through **a rational organisation of and clear directives to the field services** aiming at the complementation rather than any kind of competition between public and private services. Such organisation and directives should mainly focus on the defined Government core functions and related activities, i.e. livestock and livestock production monitoring, animal health surveillance and design of appropriate control measures, farmers education through livestock development promotion and livestock production and health extension, and control of animal inputs and services delivered to farmers. **Complete withdrawal of public services from any clinical and inputs distribution wherever private practitioners are present is of primary importance to the success of privatisation** and should thus be clearly regulated through specific administrative instructions and accordingly disciplined.

3.5 Government budgetary allocations

A National sector policy is only valid if it is supported by adequate financial resources to allow for its implementation and related operations. It can be viable and sustainable only if it is the expression of a clear political will translated into regular and thoroughly justified sufficient budget allocations. This means that it is as important to have the policy of one's means than to have the means of one's policy. Under the present conditions characterised by limited financial resources, it is thus essential that the policies to be adopted for the livestock sector are tailored according to the possible resources that may be made available, taking into account the economic importance of the sector and its expected potential growth. External financial resources being punctual and limited in time, can only be used to boost selected development activities and initiate policy development through institutional support, but they cannot by essence be the basis of long term policy development.

On the one hand, having the policy of one's means requires that a careful selection is made of the policies : (a) which are considered as first rank priorities to the development and security of the sector's activities and productions and (b) which implementation cost is affordable within the limits of the country's budgetary allocations for the sector. On the other hand, having the means of one's policy implies that, when priorities have been defined and their implementation cost evaluated, there should be a clear Government commitment to allocate the related resources on a long term basis.

3.6 Veterinary professionals attitude and capacities

Privatisation of veterinary services is indeed much dependent on the availability and willingness of relevant professionals to install a practice in rural areas where their services are needed on a regular basis. The motivation of trained professionals to do so is itself dependent on a number of professional and personal factors including their knowledge of the area and their potential insertion in the local social environment, the level of revenues they may expect from their activities and the existence of a conducive environment ensuring a sufficient level of security for their activities and their personal life. Such a motivation is to be compared with alternative activities offered to professional either when they graduate or in the course of their professional career. In the case of animal health professionals, alternatives may include urban practice, commercial activities, civil service positions and/or any other activity related or not to their acquired technical skills.

Rural veterinary practice is a professional activity which, in most cases requires hard work, mobility and disponibility. It also implies living in often difficult conditions due to distances from possible supplies, poor communication networks, availability of schools and medical infrastructure, etc.. Taking these conditions into account rural practice can only be attractive if it provides regular revenues above and over those that can be obtained from alternative professional activities sufficient to compensate for the inconvenience. It is thus important that professionals contemplating the creation of private practices are let free to design their businesses and to associate as they wish subsidiary activities which may satisfy their revenues and personal requirements.

3.7 Livestock owners' demand and attitude

The consumers of services provided by animal health professionals are mainly livestock farmers-owners and to some extent pet owners. The product needs of these potential consumers include drugs and vaccines, feed and feed additives and clinical veterinary services. Most of them being also agricultural producers, they also consume seeds and chemicals as well as small equipment. With the liberalisation process, there are additional opportunities for other services which were provided by the Government which has now to face the necessity to gradually withdraw from these services in favour of the private sector. They include in particular the vaccination campaigns, meat inspection, drugs and livestock input products and technical assistance and could be soon

expanded to participation in livestock diseases epidemiosurveillance (collection and transmission of biological samples).

The capacity and willingness of the livestock owners to pay for services is the subject of justified controversy as it significantly varies from one region to the next according to the family and village main production and revenues and the existence of a market for the farm produce, and from one season to the next. They also vary with the Government policy on the price of the services and its capacity to deliver. However, as a general statement, it can be said that, in the absence of available subsidised services and inputs, farmers are always willing to pay for a fair price those services and products that have been proven to be effective and profitable for their livestock and farming activities. Livestock and agricultural production in the rural areas and farmers' cash revenues are the basis for a potential market for services and inputs while extension and professional advice are the ways to access this market.

3.8 Installation capital investment financing

The creation of a private veterinary practice requires in most cases substantial initial capital investment to provide for the practice set up (new construction or rented premises) and furnishing (shelves, professional furniture, office furniture and equipment), professional and transport equipment, stocks of drugs and chemicals and operating capital. Most trained professionals and particularly the fresh graduates, do not dispose of sufficient own financial capital to provide for complete self financing of these needs.

On the other hand, commercial banks are generally reluctant to provide medium or long term loans to the livestock industry and are further cold in providing lending opportunities to emerging professions related to the sector, particularly when they are depending on revenues that have to be obtained in part from the familial sector. To compensate for their perceived risk of such investment, commercial banks therefore tend to demand significant levels of collaterals and other financial guarantees, and to charge constraining interest rates and loan management fees. In the conditions of Yemen, as was experienced in a number of other countries, adapted mechanisms will have to be designed and financially supported to ensure that the initial capital investment necessary for private practice development are made accessible to veterinary professionals.

4. PRACTICAL MODALITIES TO IMPLEMENT THE PRIVATISATION PROCESS

Practical steps to implement privatisation of veterinary services involve decisions and mechanisms that have to be adapted to the country physical and financial conditions and supported by adequate sustained budget allocations and punctual external assistance. The main measures to be undertaken consist in :

4.1 Complete and quick implementation of the agreed policies

As suggested before, cost recovery is not privatisation and there is no sound development of private activities if the same services are provided by the public sector under different professional and personal motivations. On the other hand, privatisation is a significant shift in policy which has to be made known and understood by the main actors of the sector, mainly the producers and the professionals, existing or potential services providers. Policy enforcement and technical information of these actors is typically a core function of the Government services who can carry it out on a permanent basis through their field staff. To reach the producers and develop their understanding of the reasons and advantages of the new policy, it may be necessary however to develop for a significant period of time extension network aiming at informing and training the farmers on the needed prevention and curative techniques that will be made available through the private sector.

It is the consultant's opinion and advise to the Yemeni livestock authorities that **the privatisation policy should be implemented in a way that does not allow for different rules for the various actors of the sector** (commercial versus familial sectors) **and different rules for the various activities carried out** (compulsory vaccinations versus other vaccinations and curative treatments) nor different rules for different regions of the country..

As a principle, it is recommended that a firm decision be taken that by a given date to be decided upon, all drug and livestock inputs trade will be left to the registered private operators.

As far as the delegation of a number of activities previously handled by Government services is concerned (compulsory vaccinations, disease surveillance or even import of breeding animals, etc..) mechanisms should be designed to test the process during a pilot period as an incitation for the professionals to settle in rural areas and to open private practices. Experiences from other countries have shown that in the absence of already installed professionals, **such delegations are better allocated following an open tender allowing a fair selection among the bidders** on the basis of their understanding of the area's problems, their dedication to the success of the activities concerned and their financial expectations. The financial implications of such tenders will have to be lowered during the test period using donor assistance, but should be in the near future entirely covered by commercial payment of the services. The only exception to this rule may include

disease surveillance and compulsory vaccination in case of an outbreak of epizootic disease threatening the national herd.

4.2 Rapid enactment of a conducive regulatory environment

The design and enactment of a livestock legislation has already been scheduled in the short term programme of DGAR. It is the recommendation of the consultant that such legislation be made as pragmatic as possible, be rapidly enacted and enforced to serve as a sound environment to the privatisation process and allow for effective implementation of the disease control policy.

One of the important factors to be taken into consideration in the elaboration of the livestock legislation is the necessary compatibility of the regulations enacted in Yemen with those existing or being developed in all neighbouring countries and at the regional level, particularly with what concerns the surveillance and control of transboundary diseases for which close co-ordination is required between countries with bilaterral or multilateral livestock movements and trade of animal products. The legislation must also be coherent with the country's international commitments to apply surveillance and control measures recommended by the International Epizootics Organisation (OIE) which has been given the responsibility of defining the normative conditions of livestock and livestock products trade by the World Trade Organisation (WTO)

4.3 Development of financial mechanisms to provide the investment capital needed

Financial mechanisms to support the physical installment of veterinary practices in the field should be considered as the needed steps to incite the banking sector to provide normal commercial financing facilities to the veterinary profession as they normally do for other industries or services. Such mechanisms have been developed for the same purpose in other countries and have generally been successful in providing access to credit to veterinary professionals. The most satisfactory schemes are those which have been conceived to be as close as possible to the usual commercial credit practices and have put in place the mechanisms to provide accompanying services to the profession in a sustainable manner. As schemes aiming at supporting the private sector, they are generally managed by the most prominent professional association, generally the National Veterinary association. These imply in particular :

- **A Guarantee Fund** which provides a general financial guarantee for the commercial bank involved. The GF is kept by the bank as a fixed deposit long term account and generates interests at rates negotiated with the bank generally linked to the local Central Bank indicative lending rate. Interest generated are accruing in the GF account until they are needed to fund specific training or monitoring services to the benefit of the participating veterinarians.
- **Loan processing procedures** entailing shortlisting of candidates and credit appraisal and approval before presentation to the bank.

- **A steering Committee**, composed of representatives of the association, the bank, the public services and private operators of the sector, to plan, supervise and monitor the funds utilisation and to agree on accompanying supporting activities.

- **Training, monitoring and follow-up services** that may either be carried out by a specific scheme management office under the control of the Steering Committee or be contracted out to specialised management training institutions. These activities are meant to ensure :

- (a) the promotion of the scheme to reach and inform veterinarians potentially interested in setting or expanding veterinary practices in the rural areas on the facilities offered through the scheme. This function can be undertaken through various means like preparation and distribution of information "flyers", publicity lectures or workshops to perceived target groups, linkages with organisations, distribution of guidelines for preparing a business plan, etc..

- (b) training and assistance in the preparation of business plans for presentation to the bank.

- (c) pre-loan training to assist applicants to develop financial management skills to properly operate their future practice.

- (d) follow-up and monitoring training assistance to ensure that newly installed veterinarians are working on a sound economic basis and provide advice as required.

It is the responsibility of the steering committee to manage the funds generated by the Guarantee Fund Account to ensure that acceptable cost ratios are maintained between the costs of the accompanying services and the results obtained in terms of levels of loans and investments generated through the scheme.

Indeed, such a scheme can be put in place only if a sufficient amount of money can be deposited to serve as the Guarantee Fund for the scheme and if the amount of the Guarantee Fund is sufficient to ensure sufficient financial revenue for the financing of operations from the accrued interests generated from the fund. Justification of the amount needed for the GFA should take due consideration of the expected number of applicants to benefit from the account and of the ceiling cost ratios to be admitted for the services provided. Such Guarantee Funds have been put in place in a number of countries for the promotion of private sector development with the assistance of a number of donors.

It is clear that the success of such a scheme is closely linked with the application of commercial lending conditions. However, the existence of a negotiated agreement between the scheme and the intermediary bank allows for lending conditions (in terms of security, grace period and lending rates) which should be more favorable than in the case of a direct negotiation between the applicant and the bank. Moreover, if generated resources are sufficient and well managed, part of

them may be utilised to pay bonuses on interest rates to loonees who have satisfactorily complied with loan repayment conditions.

4.4 Development of producers and professional education

Among the factors which are important for the success of the privatisation process are the good understanding by both the producers and the services and input providers of the process and its justifications. The producers information and education on the interest of private veterinary services and its expected returns can best be carried out by adapted extension services and to a certain level by the private professionals themselves. Training and education of the professionals should however be initiated at the level of the training institutions (i.e. the Veterinary Faculty) and for those who already graduated, through specific specialised schemes, management training and professional business advice.

5. RECOMMENDATIONS FOR THE IMPLEMENTATION OF THE PRIVATISATION OF VETERINARY SERVICES IN YEMEN

The following consultant's recommendations are based on the above analysis of the mechanisms needed for the implementation of the privatisation of veterinary services in Yemen, in response to the clear will expressed by the Yemeni livestock authorities.

- As the complete liberalisation of veterinary services and drugs distribution is a sine qua non condition to the implementation of the veterinary services in the country, **the Directorate of animal resources in the Ministry of Agriculture and Irrigation should have the decision taken for a firm time deadline for the launching of the privatisation policy.** By such date, DGAR should have ceased to interfere in veterinary drugs and livestock inputs trade and distribution and should have issued clear instructions to field services stating they should withdraw from clinical services and drugs distribution to the livestock owners in the areas where private veterinarians are installed. Such move is indeed dependant on the preliminary rationalisation of the diverse veterinary and livestock institutions operating in the field and on the finalisation of adapted laws and regulations for the sector.
- **DGAR field services should begin information and explanations on the policy change towards privatisation as soon as possible and extend such information and explanations wherever necessary.**
- **Preparation and updating of a legal and regulatory framework conducive to privatisation should be pursued to allow for enactment and enforcement of the relevant laws and regulations before the decided deadline for the launching of privatisation of veterinary services.** Such legal framework should include in particular (a) a set of regulations on the conditions of private veterinary practice in the country, (b) updating of the existing

regulations on veterinary drugs imports, distribution and quality control and, (c) complementation and updating of regulations on animal diseases sanitary measures, coherent with those of the neighbouring countries and the recommendations of the OIE.

- **DGAR and the Yemeni Veterinary Association should prepare in close co-ordination a financial scheme involving a local commercial bank for the promotion of the development of private veterinary practices with a view to negotiate with potential donors the financing of a Guarantee Fund to support the scheme and provide financial resources for supporting accompanying measures.**
- **DGAR should design and enforce as soon as possible ways and means to delegate to private veterinarians, through direct contracts or tendering procedures, activities previously carried out by the public veterinary services, in particular vaccination campaigns, meat inspection, etc.. as well as to deliver sanitary mandates to private veterinarians for the execution of such duties. As some of the functions that may be delegated are the responsibility of different administrations, it is important that rationalisation of livestock services be undertaken as a first and indispensable step.**
- **DGAR should urgently design ways and means of supporting the installation on a pilot basis of veterinarians in the relevant areas along procedures which are coherent with the long term policies envisaged.**
- **In all regions where conditions do not appear favorable for installation of veterinarians, preliminary contacts and discussions should be held with livestock raising communities to identify areas where demand for services is acute enough to envisage the possibility of deploying community-based livestock workers under close supervision of veterinary professionals.**

ANNEX 1

VETERINARY PROFESSIONALS

Inventory of human resources

The present enquiry is being carried out in the context of the preparation of the Agricultural Technology and Productivity project (ATPP) being considered by the Government of Yemen for presentation to the World Bank for financing. The ATPP's livestock component was jointly identified last year by the Ministry of Agriculture and Irrigation and World Bank experts. It will include : (a) the strengthening of the Government capacity to carry out its core functions, i.e. strategic disease prevention and control, epidemiology and planning, quality control etc., and (b) the setting up of a conducive environment for veterinary services privatisation and deployment of community-based livestock workers where necessary.

To present a clear picture of the existing situation and better justify the investments and operational improvements to be financed under the project, detailed information is required on livestock resources and practices in each of the governorates as well as on human and equipment resources available to provide animal health services and veterinary drugs to livestock producers. The Directorate General of Animal Resources has the responsibility to carry out the necessary investigations to fulfil the project preparation requirements. The veterinarians in charge of the Governorates veterinary centres are therefore being instructed to participate in the investigations undertaken with the assistance of their staff. They are also required to organise a field survey aiming at determining the livestock producers perceived needs and level of satisfaction regarding availability of veterinary services and drugs and their attitude vis a vis different options to improve these services.

The present questionnaire is to be filled by all veterinary professionals, veterinary doctors and veterinary assistants, working in the public service, employed in the private sector, self employed or unemployed. It is meant to be anonymous so that any individual may feel free to express his views and comments on the various questions raised. It is aiming at reviewing the human resources available in the country to provide veterinary services and the level of services actually offered to livestock producers in Yemen by both the public and private sectors. It will also be used to determine the professionals' views and attitude vis a vis the privatisation process to be implemented. Answered questionnaires will be exploited by a team composed of several selected DGAR staff and an external consultant and the conclusions used to determine the pace and conditions of the privatisation process concerning the veterinary profession. It is thus recommended that the questionnaires be filled out with the utmost rigor and accuracy. Comments on the process as a whole or related to specific questions are welcome and will serve to make up recommendations that will be given to the Government decision makers on the matter.

1. Individual environment

- Level of professional education.....
- University or professional school attended
- Length of professional training.....
- Additional relevant professional training
- Level of professional qualification (certificate, diploma, undergraduate, masters, doctorate....).....
- Year of graduation
- Age in year 2000

- Number of years of professional activity
- Positions held in the course of your career :
 - 1 -
 - 2.-
 - 3.-

- Present main professional activity
- Veterinary services ☐
- Drugs and additives purchases and sales ☐
- Animal production ☐
- Research ☐
- Teaching ☐
- Other activities (specify) ☐

- Principal motivation (s) for keeping main professional activity.....
-
- Reasons for carrying out other activities.....
-

- Other economic activities : please detail.....
-

2. What do you think about privatisation ?

In your opinion :

- Is the Government administration providing sufficient veterinary services to the livestock producers ? Yes ☐ No ☐

- Please justify your opinion.....
-
-

If answer to above question is no :

- Why is Government administration not able to satisfy the demand for veterinary services ?

- Can privatisation of veterinary services improve level of services in Yemen ?

-How?

- Interest and inconvenience of privatisation of veterinary services

3. Conditions for the success of veterinary privatisation

- **Legal environment :**

- Does the existing laws and regulations provide sufficient incentive and security for private veterinary practice ?

For the veterinary practitioner ? Yes ☐ No ☐

Explain why.....

For the livestock owner ? Yes ☐ No ☐

Explain why.....

- What laws and regulations do you think are necessary to secure the interests of both the practitioners and their clients ?

Clear definition of the roles of the public and private sectors ?

Yes ☐ No ☐

Why ?

Laws and regulations on private veterinary practice ?

Yes ☐ No ☐

Why ?

Laws and regulations on veterinary drugs import and distribution ?

Yes ☐ No ☐

Why ?

Laws and regulations on animal disease prevention and control ?

Yes ☐ No ☐

Why ?

- **Investment conditions**

- Are financial resources a constraint for the creation of a private veterinary practice ?

Yes ☐ No ☐

To what extent ? Explain

- How could such constraint be alleviated ?
-

- **Relations with public services**

- Should the public service better monitor private veterinary activities ?

Why ?

- Should public veterinary services encourage and promote private veterinary practice?

Why ?

How ?

- Should public veterinary services delegate some of its core functions to private veterinary services?

Why ?

How ?

- **Technical ability of Yemen veterinarians and veterinary assistants**

- Are existing veterinary personnel resources sufficiently prepared to manage private practicing ?

- What are the main topics for which they may require additional training ?

- How can such additional training be organised if needed ?

- **Technical ability and responsibility**

- Can all categories of veterinary-trained personnel be authorised to open and carry out private veterinary practice ?
 Why ?

- What kind of relationship should be established between the different categories of veterinary trained personnel ?

- Can undergraduate personnel be authorised to carry out veterinary practice ?

- In which specific conditions ?
- Under which kind of control ?
- Do you think that community-based livestock workers have role to play in the delivery of veterinary services and drugs in Yemen ? Yes ☐ No ☐
 If yes which role ?.....
 Under which conditions ?
 What should be the limits of their activities ?

4. Comments on veterinary privatisation

Please make any comment you feel appropriate on veterinary privatisation and its feasibility in the conditions of Yemen.

[illegible]

ANNEX 2

GOVERNORATES VETERINARY OFFICERS

Inventory of present resources

The present enquiry is being carried out in the context of the preparation of the Agricultural Technology and Productivity project (ATPP) being considered by the Government of Yemen for presentation to the World Bank for financing. The ATPP's livestock component was jointly identified last year by the Ministry of Agriculture and Irrigation and World Bank experts. It will include : (a) the strengthening of the Government capacity to carry out its core functions, i.e. strategic disease prevention and control, epidemiology and planning, quality control etc., and (b) the setting up of a conducive environment for veterinary services privatisation and deployment of community-based livestock workers where necessary.

To present a clear picture of the existing situation and better justify the investments and operational improvements to be financed under the project, detailed information is required on livestock resources and practices in each governorates as well as on human and equipment resources available to provide animal health services and veterinary drugs to livestock producers. The Directorate General of Animal Resources has the responsibility to carry out the necessary investigations to fulfil the project preparation requirements. The veterinarians in charge of the Governorates veterinary centres are therefore instructed to participate in the investigations undertaken by filling this questionnaire with the assistance of their staff. They are also required to organise a field survey aiming at determining the livestock producers perceived needs and level of satisfaction regarding availability of veterinary services and drugs and their attitude vis a vis different options to improve these services.

The present questionnaire is to be filled with the utmost rigor and accuracy. It should be completed as required by sketch maps of the governorates showing the geographical location of different resources or specific zones. Sufficient space is left at the end of the questionnaire for comments regarding the different questions to be answered.

!. Livestock situation in the governorates

Give the estimated number of heads of livestock belonging to the governorates :

Cattle :	.....
Camels :	.....
Sheep :	.....
Goats :	.....
Modern Poultry :	.....
Family Poultry :	.....

Specify the main production systems existing in the region :

- Commercial production systems :

- Give the list of the main dairy farms, the numbers of animals they possess and their annual production of milk.

Name of the farm	Number of heads	Annual production
..... litters
..... litters
..... litters
..... litters
..... litters
..... litters

* Specify the dairy farms, which belong to the Government and the Ministry they depend on.

.....

.....

.....

.....

Give the number and estimated annual production of beef and small ruminants fattening units in the governorates :

	Beef	Small ruminants
Number of beef fattening units
Number of heads fattened per year

- Give the number and estimated annual production of layers and broilers commercial poultry units of different capacities in the governorates :

Categories of enterprises	Layers		Broilers	
	Number	Annual prod. (eggs)	Number	Annual prod. (heads)
100 to 500 birds capacity
500 to 2000 birds capacity
2000 to 10000 birds capacity
10000 to 50000 birds cap.
More than 50000 birds cap.
Total estimated production

- Mix-farming systems :

Give the estimated number of families and livestock concerned by agriculture dominant and livestock dominant mixed farms in the governorates :

	Families	Cattle	Sheep	Goats	Camels	Donkeys	Poultry
	(Number)	(heads)	(heads)	(heads)	(heads)	(heads)	(heads)
Agriculture dominant
Livestock dominant

- Nomadic systems :

Give the estimated number of families and livestock concerned by nomadic systems in the governorates :

Number of households	.....
Cattle	.....
Camels	.....
Sheep	.....
Goats	.....

2. Human resources

The intention is to undertake the complete census, as far as it can be done, of all trained veterinary personnel present in the region, working for the public service (DGAR or other administrative services), the private service (as employees or self-employed) or unemployed.

• Public service

◀ **DGAR staff** - Give the precise list of each category of staff, their function and the location of their assignment :

Names	Function	Location
Veterinary doctors :		
.....
.....
.....

Veterinary assistants :

.....
.....
.....
.....
.....
.....

Veterinary technicians :

.....
.....
.....
.....
.....
.....
.....
.....
.....

◀ **Other public services staff** (specify to which service they belong : Municipalities, Government farms, other administrations.....)

Names

Function
(Specify administrative attachment)

Location

Veterinary doctors :

.....
.....
.....

Veterinary assistants :

.....
.....
.....
.....
.....
.....

Veterinary technicians :

.....
.....
.....
.....
.....
.....
.....

- **Private professionals**

Please give the numbers of each category of veterinary-trained personnel present in the governorates, making the distinction between employed persons, self-employed professionals and unemployed veterinary-trained persons by level of training :

◀ **Salaried professionals**

Veterinary doctors (minimum 5 years in a recognised University)

Numbers	Employers	Functions
.....
.....
.....
.....

Veterinary assistants

Numbers	Employers	Functions
.....
.....
.....
.....

Veterinary technicians

Numbers	Employers	Functions
.....
.....
.....
.....

◀ **Self employed veterinary professionals :**

Veterinary doctors

Numbers	Employers	Functions
.....
.....
.....
.....

Veterinary assistants

Numbers	Employers	Functions
.....
.....
.....
.....

- **Unemployed trained veterinary personnel :**

Category	Numbers
Veterinary doctors
Veterinary assistants
Technicians

3. Existing facilities and equipment

This aims at listing the existing facilities and their capacity as well as the main equipment available in each governorates. A sketch map of the governorates should be attached to locate the main facilities.

- **DGAR facilities**

Type of facility (field offices, clinics, quarantines ...)	Size	Location
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

- **Other administrative facilities :**

[illegible]

4. Comments

Please comment as you may feel necessary on the prevailing conditions for veterinary services and drugs supply to the livestock producers in the governorates, the main existing constraints presently faced and your views on how to improve these services.

[illegible]

ANNEX 3

GOVERNORATES VETERINARY OFFICERS

Survey of selected livestock producer's communities

The present survey is being carried out in the context of the preparation of the Agricultural Technology and Productivity project (ATPP) being considered by the Government of Yemen for presentation to the World Bank for financing. The ATPP's livestock component was jointly identified last year by the Ministry of Agriculture and Irrigation and World Bank experts. It will include : (a) the strengthening of the Government capacity to carry out its core functions, i.e. strategic disease prevention and control, epidemiology and planning, quality control etc., and (b) the setting up of a conducive environment for veterinary services privatisation and deployment of community-based livestock workers where necessary.

The survey to be undertaken aims at inquiring among the livestock producers : (a) their level of satisfaction regarding accessibility and quality of veterinary services and drugs available at present in the areas where they live and raise their livestock and (b) Their views and attitude vis a vis different options that may be developed to improve these services in terms of quality, accessibility and cost efficiency to improve the productivity of their stocks and hence their revenues. The Directorate General of Animal Resources has the responsibility to carry out the necessary investigations to fulfil the project preparation requirements. The veterinarians in charge of the Governorates veterinary centres are therefore instructed to participate in the livestock producers' survey by organising and carrying it out in each of the Governorates with the assistance of their staff.

The present questionnaire is to be filled with the utmost rigor and accuracy by the veterinary officers of each of the Governorates on the occasion of semi-directive discussions to be organised and held with selected livestock raising communities representative of the most common livestock production systems existing in each of the Governorates. The communities to be selected should be located in all the main livestock areas of the Governorates and cover the different production systems existing in these areas. It is expected that a minimum of 10 and a maximum of 20 questionnaires will be filled out for each production system in each Governorate in a period of maximum 4 weeks after reception of the questionnaire forms. Proper selection of the communities to be consulted is essential to get a representative picture of the situation in each of the Governorates. A similar number of communities with easy access or difficult access to existing services should be selected and a sketch map of the governorates should be drawn to show the geographical location of the different communities surveyed according to the main production systems' zones. Sufficient space is left at the end of the questionnaire for comments regarding the different questions to be answered and the conditions of the discussion with the community concerned.

Date of the survey :

Name and function of the surveyor

.....

1. Information on the nature, importance and location of the community

- Name of the community or village surveyed :
- Total number of families in the community/village :
- Number of families raising livestock :

- Is the community more active in livestock or agriculture activities ?

- What are the other economic activities of the communities ?

- agriculture Yes ☐ No ☐

If yes, what are the main crops ?

.....

- Others (specify)

2. Importance of livestock

- How many animals belong to the village/community ?

- Cattle

- Sheep

- Goats

- Camels

- Donkeys

- Poultry

- What are the animals mainly used for ?

Cattle Sheep Goats Camels Donkeys Poultry

Meat production

For family consumption

For sale

Milk production

For family consumption

For sale

Drought power

.....

Transport

.....

3. Main livestock constraints

- **3.1 Feeding** : Is it ? - Lack of pasture
(explain).....

.....
- Insufficient fodder production(explain).....
.....

What are the solutions or compensations applied ?

- **3.2 Animal health problems** :

- What are the most frequent diseases for each species ? list the main diseases by order of importance and/or prevalence for each species :

Cattle:.....
Sheep :.....
Goats :.....
Donkeys :.....
Camels :.....
Poultry :

- Do they use preventive vaccinations or treatments ?.....
If yes, which ones ?.....
Occasionally or regularly ?
Which period of the year ?.....

- **3.3 Other constraints** (marketing, space, ...)......
.....

4. accessibility and quality of animal health services and drugs

- What do they do in case of disease or accident ?
.....
- How far is the closest Government clinic ?
the closest veterinarian or assistant (specify) ?
the closest pharmacy ?
- Given the distances and costs involved :
do they bring their animals for treatment to the nearer possible
professional assistance ?.....
do they go to the nearest pharmacy to buy drugs and manage to treat
their animals themselves ?

is there somebody in the vicinity with special knowledge for curing animal diseases ?

- Are they satisfied with the present situation ?

In terms of accessibility ? Yes ☐ No ☐

In terms of quality ? Yes ☐ No ☐

- Is the usage of drugs and services generally profitable in terms of gains when compared to the burden and costs of getting them ?

Why ?

5. Possible ways to improve availability and quality of veterinary services and drugs

To discuss this part of the questionnaire with a community/village, it must be kept in mind that :

- the Government is in the process of reorganising the livestock services and intends to abandon clinical services to the benefit of private professionals and that
- there is no more sufficient funding to provide any service free of charge.

The purpose of the following questions is to determine whether the members of the community may be willing to organise themselves to improve the prevailing conditions.

If a veterinarian installed a practice nearby :

Would you bring their sick animals to his place ?

Would you call him in case of emergency ?

Would you call him for periodic preventive treatments or other veterinary services ?

Would you be ready to pay for these services and for transport ?

If no veterinarian had installed a practice at a reasonable distance :

Would you be satisfied with the service provided by a veterinary assistant under the supervision of a veterinarian ?

Would they prefer to nominate one man in the community to insure certain services for which he would receive relevant training ?

Under which conditions ?

6. **Comments**

Please write any comment you may think important regarding the reaction of the community/village members, their understanding of the problems and your own view of the possible solutions to the problem in the case of the interested community/village.

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