CAHWS IN SENEGAL: Problem and prospects for action

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Summary:
The system of CAHWS was from its origins the subject of very strong criticism from pastoral production technicians. Despite the gains in animal health, it continues to be the target of criticism, particularly since the forms of the system are very diversified. Taking the example of Senegal, this paper retraces the history, possible developments and failures of the system. Recommendations have been made with a view to regulating and improving the system by focussing on the private economic motivations of the CAHWS and channelling them through the involvement of professional organisations, support structures for pastoral production and above all by involving private veterinarians. The experience of PACE-Senegal is described since through it the CAHWS are involved in the setting up of an epidemi-surge network. Mastery of the system necessitates institutional innovations that integrate CAHWS into the ongoing privatisation.

1. Introduction
As in most African countries, the pastoral production sector in Senegal constitutes an essential link in the national economy. However, the productivity of the systems remains weak for several reasons, among them constraints in animal health and the rigidity of pastoral production systems. Hence, with a view to improving the production systems, many state institutions and Non-Governmental Organisations have invested in and are involved in basic animal health through the training and supervision of pastoral producers, on the one hand, and in the provision of veterinary products and inputs on the other. These interventions have undergone particular development in the context of the withdrawal of state funding, and have particularly involved the development of a system of CAHWS that has become imperative to evaluate in order to take appropriate measures.

Recourse to this alternative system by public authorities and their development partners is aimed at improving animal health in Senegal. In this regard, pastoral production CAHWS are sometimes considered as an extremely promising lever for broadening the accessibility of animal health services in the rural areas.

Until towards the seventies, the CAHWS were unanimously referred to as “vaccinators”. Today, several terms are used by projects and NGOs to describe them. Under the term “pastoral production CAHWS” are included stockbreeders trained to only play a role in animal health. Among them are found Animal Health CAHWS (ASAs), Animal Health Assistants (DSAs), Veterinary CAHWS (AVs), Barefoot Veterinarians (VPNss) and Para veterinarians. The pastoral production CAHWS themselves are stockbreeders who, in addition to animal health, are trained to play a role in animal husbandry/nutrition, rangeland monitoring and management and in animal economics. They include Pastoral Production Promoters (PEs), Pastoral Production (AEs) and Technical Intermediaries (RTs).

All these terms reveal the different and even divergent approaches and conceptions that generate criticism and controversy with regard to para-veterinary personnel, particularly since the privatisation of veterinary services became a clear option for public officials. The system of CAHWS was from its origins the subject of strong criticism from animal husbandry technicians. In spite of experience, it continues to be the target of quite justified criticism, particularly from grassroots technicians.

It is therefore apt to be able to address the issue of CAHWS in order to come up with more precise approaches that are indispensable for the preparation of a legal and regulatory framework for the general interest.

2. History
During the last twenty years, the sector has undergone different reforms, the most recent of which was aimed at overall sectorial adjustment. Hence Senegal committed itself to a major programme of sectorial adjustment that

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involved the restriction of animal husbandry services and the transfer of certain functions to other actors. Since the early eighties, the environment with regard to veterinary services has undergone fundamental structural changes. These changes were ushered in by economic reform and structural adjustment policies implemented by the majority of African countries at the urging of international financial institutions. After practically a decade of experimentation and implementation, the privatisation processes solidified little by little and were considered as irreversible. In 1986, the Senegalese State took measures for the liberalisation of the national economy. In the field of pastoral production, this liberalisation affected several areas. The veterinary market, focusing essentially on needs in physical products (medicines, vaccines) became the theatre for many actors, who shared curative, preventative and sometimes promotional functions (Ly and Domenec, 1999). They were essentially providers of public or private services, pastoral producers in stockbreeders’ groupings, Non-Governmental Organisations and what was referred to as the system of CAHWS.

2.1. National institutions
Until towards the 1970s, the CAHWS were universally referred to as “vaccinators” (Ndiaye, 1996). The Eastern Senegal Stock Production Development Project (PDESO) was the first institution to train CAHWS in Senegal. After PDESO, other national or local action institutions followed. Today, institutions intervening at the national level in the promotion of the system of CAHWS are assets stripped from the Senegalese State and are essentially set up by the Directorate of Pastoral Production and development associations. Through the National Agricultural Development Programme (PNVA), the Pastoral Production Support Project (PAPEL) and the Pan African Rinderpest Control Programme (PARC) the Senegal Directorate of Pastoral Production has distinguished itself, particularly in the training and supervision of CAHWS. PNVA, intervening in the silvopastoral zone, officially trained 35 CAHWS in the Linguere district between 1989 and 1995 (Ndiaye, 1996). As for PAPEL, it was interested in the supervision of CAHWS already trained by PNVA in that district. The project also took place in the Arachidier Basin. Finally PARC, whose involvement in the system of CAHWS manifested itself in the definition of training programmes, did not train any CAHWS.

There were many development associations directly intervening in the training of CAHWS. However, the societies involved in the system, and whose action radius is very important, are the Textile Development Company (SODEFITEX) and the Senegal River Valley and Faleme Delta Management and Development Company (SAED). In Kolda, SODEFITEX has trained 227 technical shift workers. Another development structure involved in the system of CAHWS is the National Professional Training Office (ONFP). ONFP does not train CAHWS, but prepares training and skill development programmes for the CAHWS then finances, on a contractual basis, the structures for target training. In 1994, ONFP financed the training and upgrading of 98 CAHWS (Ndiaye, 1996).

2.2. Locally involved institutions
The training of CAHWS is an activity programmed by certain institutions right from their conception. That is why most trained CAHWS across the country were trained by these institutions. Among these institutions can be cited the Association for the Development of Namarel and its Surroundings (ADENA), which between 1991 and 1994 trained 22 CAHWS in the agri-pastoral zone: Veterinarians Without Borders (VSF), an NGO particularly present in Kolda, trained 72 CAHWS there between 1992 and 1995 (Ndiaye, 1996). Currently, many organisations are involved in animal health through intervention structures set up by or with the support of local collectives. Very often, these structures do not systematically have the explicit objective of improving the efficiency of the animal health system and the monitoring of their own training programmes. They often have urgent involvement characterised by a request from the population following a need felt by itself or by the institutions. In this context, the Podor Integrated Programme (PIP) in 1992 trained 34 CAHWS who were members of the Dental Bamtaare Toro Association, under financing by CIMANE, a French NGO.

The Senegal Lutheran Evangelic Church (EELS) in this way trained 40 CAHWS between 1983 and 1994, and in 2001 continued to work with more than 80 CAHWS. Currently, EELS has recruited a veterinary doctor in order to understand the system better and to succeed in its involvement. The same situation was observed with regard to CISV (an Italian NGO), which trained 22 CAHWS in the Linguere District, particularly in the Rural Community of Mboula.

3. Possible developments of the system
The work of the auxiliary involves mobilisation for a relatively long time, since the animals are far from the village, care can take a long time, there is a lot of demand for services, etc. This mobilisation must also
generally take place during periods when there is a lot of work, for instance during the rainy season, while the earnings it fetches are insignificant.

The progressive creation of an “auxiliary profession” seems to have been established, and the CAHWS have a varied understanding of their role with regard to the stockbreeders and the professionals. In competition are to be found the roles of the assistant to the professionals, the community agent, the pastoral producer’s adviser and an informal role in the veterinary medicine distribution circuit. The many actions of CAHWS within the veterinary inputs distribution circuit make the latter difficult to control and, consequently, to improve (Figure 1).
Figure 1 – Distribution circuit for veterinary inputs in the Linguere district.
At the onset, the programmes that support the introduction of CAHWS presuppose that the latter, because they are pastoral producers and are appointed by a grouping, primarily work for the collective interest and their grouping of reference, despite difficult conditions. It is therefore legitimate to wonder if in certain cases the CAHWS do not accept this function rather in the context of a strictly individual or private strategy that only grasps the economic opportunity offered by a job with collective goals. Real hijacking of objectives is thus noted, driven by the personal interests of the auxiliary.

There are therefore, according to Mestre (1995), two developments: abandoning the work of the auxiliary so as not to endanger other activities or the profitability of the work by becoming the seller of services and medicine. This second development is today enhanced by the more and more increasing installation of private veterinary doctors. In fact, the presence in an intervention zone of a private veterinary doctor translates into the existence of an extra cost for medicines, which permits the creation of a profit margin in comparison with the pastoral production cost.

The reality on the ground today shows that the cohabitation between the private practitioners and the CAHWS is becoming more clear, and the relationships between these different actors appear to be rather strictly commercial ones: the first one is active in the training of the second one so as to make him not an agent of local development, but rather a real commercial partner who helps him in selling his products. In the definition of the resulting working contracts, misappropriation is noted, resulting from the reticence of certain professionals in the training of CAHWS or from certain criticism aimed at the system.

- **Failures of the system**

  From its beginnings, the system of CAHWS has been the object of strong criticism from pastoral production technicians. These criticisms found a favourable echo at the April 1993 Pastoral Production Seminar in Sally. In fact, the stoppage of the training of pastoral production CAHWS was recommended there (Sar, 1993). However this recommendation was not implemented on the ground, and the criticisms continue. The last ones up to date, which produced more saliva than ink, were in relation to the conception and implementation of the system (Ndiaye, 1996).

  Criticism on the conception of the system is still the work of pastoral production technicians. According to the latter, the practice of veterinary medicine must be founded on a legal basis and respond to ethics. The lack of harmonisation for training programmes for CAHWS does not facilitate the monitoring of the competences of the CAHWS. The system is also accused of overshadowing the intermediary cadres, who are Technical Pastoral Production Agents (ATEs) and the Pastoral Production Works Engineers (ITEs). According to Ndiaye (1996), the criticisms concern the intervention modalities for the training structures, attitude, behaviour and the interventions of the CAHWS. The training structures are numerous and do not coordinate their programmes. Such a system necessarily results in differences in competences and poses a problem of monitoring their activities. Certain CAHWS overstep their prerogatives, for example by working outside their zones or by implementing banned actions such as the use of antibiotics as a means of prevention. On the ground, the ATEs report that the CAHWS were substituting veterinary products by putting non-medical products into empty containers. For example, they will put glycerine into an Ivomec® bottle and water and white chalk into a bottle of Anabot®. Moreover, the CAHWS, in complicity with stockbreeders, posed the problem of official statistics on the livestock and veterinary interventions, since they do not state all their interventions.

5. **Recommendations**

In order to avoid the deadlocks observed and the lack of a clear policy on the issue of CAHWS, it is necessary for organised exchanges between the different professional bodies. Discussions must set the basis of the intervention of the State, which from the onset must take into account the principle of opening up the animal care practice to bodies other than veterinarians. Today, the use of pastoral production CAHWS has become an economic obligation for private operators, but support actions must be undertaken urgently.

5.1. **Regulation and supervision**

The CAHWS are mostly from diverse origins and training. Their regulation firstly goes through the political will of the State and collaboration with other actors so as to put in place a legal and regulatory framework, combined with a financial situation favourable for veterinary medicine and animal care.

Given the liberalisation of the veterinary market, the supervision of the system of CAHWS necessarily involves the creation of a partnership between the CAHWS and private veterinarians capable of playing a greater role in
their monitoring. For the perpetuation of such a relationship the creation of a law clarifying the status of all the operators and the establishment of conditionalities regulating their interventions, the training contents and modalities appears indispensable.

It is necessary to:

- Define a legal link between the CAHWS and the private veterinarians settled in their localities;
- Give responsibility, as “order givers” in a hierarchy, to private veterinary operators using the CAHWS so that they have the obligation to establish transparent contractual relationships, participate in continuing training and above all to take legal and moral responsibility for their auxiliary employees;
- Strengthen the capacities for monitoring, training and information;
- Undertake a national census of all the trained CAHWS, with the support of the training organisations and their private collaborators;
- Coordinate training activities by harmonising the training programmes for CAHWS and by adapting them to comprehensive principles aimed at by each training structure;
- Put in place, with the supervision structures (NGOs, projects) control and monitoring mechanisms and clarify their relationships with the other actors.

Table 1 represents a prototype of the training programme for animal husbandry CAHWS.

Table 1. Proposal for a training programme for animal husbandry CAHWS

<table>
<thead>
<tr>
<th>THEMES Training structures</th>
<th>Pathologies studied</th>
<th>Technical action</th>
<th>Knowledge of medicines</th>
<th>Treatments</th>
<th>Feeding and treatment</th>
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<tbody>
<tr>
<td>Pastoral production service (official programme) *</td>
<td>Parasitical Diseases Nutritional Diseases (pathologies) Recognition of diseases legally declared contagious (MDLC) *</td>
<td>Injections (S.C., I.M.) Vaccinations Non-bloody castration</td>
<td>Anti-parasites Waiting period</td>
<td>Parasitosis Wounds and first aid</td>
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<tr>
<td>Support structures for pastoral Production (Projects, NGO’s)</td>
<td>Parasital diseases Nutritional diseases (pathologies) Recognition of diseases legally declared contagious (MDLC)*</td>
<td>Injections (S.C., I.M.) Vaccinations Non-bloody castration</td>
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<tr>
<td>Private veterinarians</td>
<td>Parasites and parasitic diseases Pathologies Other diseases**</td>
<td>Injections(S.C., I.M.) Vaccinations Non-bloody castration</td>
<td>Anti-parasites Antibiotics Vaccines New Specialities Appearing In the market</td>
<td>Parasitosis Wounds Other diseases**</td>
<td></td>
</tr>
</tbody>
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NB: * Knowledge facilitating the monitoring of these diseases by public authorities by announcing them.

** All the other diseases (parasitic, infectious, etc.) whose treatment by CAHWS the veterinary professional feels is without risk and for which he undertakes to take civil responsibility.

For better monitoring and good channelling of the CAHWS, the provision of private veterinarians with logistic means (vehicles adapted to difficult access zones) through the facilitation of access to credit or other financial institutions is important. And that for several reasons:

- The CAHWS are based in difficult access zones and their supervision calls for travelling;
The supervision of the CAHWS during vaccination campaigns in which they are highly involved also calls for means; the fact of from time to time visiting stockbreeders accompanied by the CAHWS increases among them the confidence accorded for the service rendered; temporal trips made to the stockbreeders will enable the private veterinarians to consolidate their rapport with the stockbreeders through the advice given, which in the long term ends up establishing a potential clientele.

5.2. Involvement of professional organisations
Professional structures (such as veterinary doctors’ and engineers’ associations) must not limit themselves only to defending their professional interests, since they have to try and propagate, among their members, superior norms for the provision of services. In this way, these institutions can give credibility to their professions and make them respected by any other bodies wishing to integrate into the veterinary profession, among them the animal husbandry CAHWS. Such an approach permits participation in the orientation of animal husbandry policies, which must not be at the sole discretion of political decision makers. Ly and Domenech (1999) thus affirm that the great danger faced by a professional veterinary association only defending its professional interests is a corporate orientation seeking administrative protection. The mobilisation of market forces must be put to use to encourage a tendency favouring superior norms for the provision of services.

5.2. Involvement of support structures for pastoral production (NGOs, Projects)
The activities of projects in the field of animal health are numerous and diversified. Problems arise in the case of CAHWS trained then abandoned to their fate, sometimes during the project itself or at the end of the project. The lapses noted result in the CAHWS, to the extent that their activities become purely private and commercial and is not really in the service or under the control of their group or that of the other operators, could certainly integrate into the black market networks.

To avoid these situations, it is necessary to adopt an approach involving:

- Coming out of a “project” context that imposes in programming that is often pre-defined without the actors, the implementation of action and the awaiting of results that are quantified in a rigid manner within a fixed period, without always providing for the channelling of the structures put in place;
- Involve private veterinarians in the management of CAHWS, as well as in the preparation of training programmes;
- Have federation themes that can lead to and are adopted to the socio-economic development of the zone, and which can be monitored and controlled by the private practitioners of the locality;
- Harmonise the activities between the different contributors in the zone so as to encourage their cooperation.

5.4. Giving responsibilities to private veterinarians
Although the provision and privatisation of veterinary services are relatively evident in the regions with high or medium potential the major challenge to be faced by private veterinarians is that of the provision of services in the most remote regions. For this to happen, recourse to animal husbandry CAHWS seems like the best approach in order to improve advice and support for stockbreeders. One cannot wait for CAHWS having the experience and competencies of highly qualified veterinarians, and it is important to recognise the limitations of their training. Those in charge of animal husbandry services should try to see to it that not too many CAHWS are trained. Moreover, during their training, the dangers of an under dosage of medicines must be stressed, and attempts made to involve veterinarians in monitoring by linking them to the activities through an office. Such a place is beneficial both for the veterinarians and for the CAHWS. The CAHWS are particularly well placed to create an indispensable enabling environment so that the veterinarians can expand their practices and be expected to also work in the currently less attractive regions.

That is why, in their relationship with the private practitioners, which seems to be the only alternative capable of developing their competencies, permanent supervision by the latter must be provided for, and also training aimed at strengthening their motivations and aptitudes.

6. Ongoing experimentation within the PACE context for liaison between veterinary practitioners and the CAHWS
Within the context of the epidemiological surveillance of animal diseases, the PACE programme is developing a new approach aimed at the involvement of stockbreeders and their associations in disease control. This ultimate scale that the stockbreeders constitute finalises the establishment of a coherent chain for the better setting up of
an epidemiological surveillance system. It has the ambition of identifying and training the already existing assistants for the collection of data on herds and the spreading of useful health information to stockbreeders. The intervention will focus on the necessary activities capable of improving their capacities for the identification and monitoring of the major animal diseases, with a view to making them a useful and effective link in the overall epidemiological surveillance system.

Earlier programmes such as the National Agriculture Popularisation Programme (PNVA), the Short Cycle Species Development Project (PRODEC) and the Pastoral Production Support Project (PAPEL), as well as NGOs, have assisted in the training of these assistants, known as “pastoral production CAHWS”. A good number of them have been able to be integrated by private veterinarians in their offices. They render services to the latter during mass interventions such as vaccination campaigns, and are sometimes even responsible for managing a pharmacy depot set up by the private practitioner in villages situated far from his location. To this end they will have to play a more active role in the programme, in their capacity as the basic elements for epidemi-surveillance.

The objective aimed at in this programme is to improve the epidemiological knowledge among stockbreeders of the main animal diseases so as to involve them more in epidemiological surveillance of the main animal diseases.

In this programme, it is not a matter of once again training the technical assistants among the stockbreeders, but of organising a series of sensitisation meetings with those already operational and attached to private veterinary offices so as to prepare them for effective involvement in epidemiological surveillance. For this to happen, the private veterinarians will be made to contribute in the identification and selection of these CAHWS. Since most of them are utilised during vaccination campaigns for the sensitisation of stockbreeders, the vaccination of animals and also for routine activities such as the distribution of veterinary medicines.

Only the CAHWS who officiate under the responsibility of a private veterinarian will therefore be invited to these meetings, since for purposes of monitoring the intrigues of the latter and to be able to later measure the results and the impact of the involvement of these CAHWS, it is imperative to have information from private veterinarians. These landmark or indicative measures shall be, among others, the number of homes pointed out to the private veterinarians by the CAHWS. For better effectiveness of the instructions given during these meetings, and for the efficient implementation of the programme and the use of teaching aids, it is preferable that the latter be literate, trained in the context of structural intervention programmes (projects, NGOs) or by the private veterinarians who use them, and that they come from a grouping of stockbreeders.

The number of CAHWS to be trained having been 300 across the whole country, an average sharing of 6 per private veterinarian will be adopted for this first experience. Forty-six private veterinarians are targeted.

The sensitisation meetings will be organised at the region level. These meetings will last a whole day and will bring together the private veterinarians of the locality to whom the CAHWS to be invited are attached, the representatives of the stockbreeders and the Regional Veterinary Service Inspectorates.

7. Conclusion
The CAHWS, in their role of assistants to professionals and of community agents for the implementation of the services offered to stockbreeders have become important local development actors. Today, the tendency is veering towards collaboration with the private veterinarians settled in the zone. Such a development constitutes a new and strategic dimension that must be the subject of support measures so that the animal health systems can perform better.

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