PROBLEMS AND PROSPECTS OF INTRODUCING LIVESTOCK INSURANCE

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Abstract

Before a livestock insurance scheme is introduced, an account should be made of the health condition of the animals to be insured. This includes the availability of veterinary medicines, the number of veterinary doctors and animal science experts, a well co-ordinated extension services, and the infrastructure to support communication, treatment of animals especially the availability and functioning of dips and acaricides. Other factors of equal importance include animal breed, identification, pasture and range development. Important above all is back up support of the Government. But somehow, all the foregoing factors do not seem to create the ideal situation in Tanzania not because they are not available but probably because the authority is yet to realise the importance of insurance and its role in the development of the livestock industry.

INTRODUCTION

Livestock insurance exist in many countries in the world, but nothing exists in Tanzania although the large number of livestock population in the country suggests that there is potential for insurance business and a possibility to modernising the traditional sub-sector[1]. In those countries where Livestock insurance exists it has helped in the development of the Livestock industry by indemnifying the few unfortunate livestock owners against loss of their animals or against loss of production due to accidental injury or disease.

The stringent conditions on livestock health which insurers normally require before insurance protection is afforded help reduce the incidence of livestock diseases. But the incidence of diseases on livestock in Tanzania is very high due to absence of such a requirement. The success of the livestock Industry also depends on adequate veterinary delivery system, which there is every reason for doubt of its adequacy in Tanzania given the high incidence of animal killer diseases. Inspite of the non existence of livestock insurance in Tanzania and the increase in interest by some Tanzanians to keep commercial livestock in particular, neither the Government nor Livestock owners and the general public have shown concern over the need to introduce Livestock Insurance which not only provides assurance to those engaged in the business, but also the extent to which it aids livestock output and the contribution to foreign exchange earnings.

It is therefore, the aim of this paper to discuss some of the prevailing problems that affect the development of livestock industry and which may be a hindrance to the possibility of establishing livestock insurance in Tanzania. The paper also looks into the prospects for a successful introduction of an insurance scheme.

PROBLEMS ASSOCIATED WITH ANIMAL HUSBANDRY

Prevalence of livestock killer disease

The Livestock diseases are said to be widespread in Tanzania and according to Machangu, 60% of Tanzanian's pastoral land is tsetse fly infested.[2] This is sufficient evidence to caution insurers that the environment not only has a high incidence of animal diseases but also the effects of the disease. It has been established for example that, Dodoma and Mwanza have the worst death rate records of traditional cattle, as approximately 14,000 cattle

die every year by diseases. Other regions surveyed indicate that they have death records of 6 to 40 cattle on average in each of the five years from 1987 through 1991. This high incidence of death records is likely to militate against the proper functioning of a livestock insurance scheme.

According to survey made by Biwi[3] the notable killer diseases which are prevalent throughout Tanzania are:

1. Helminths and Coccidiosis in large ruminants, small ruminants and poultry,
2. Brucellosis in improved animals as well as in local zebu in some isolated pockets,
3. Lumpy skin mostly in cattle throughout the Islands,
4. Skin fungus disease on cattle and a few goats mostly by trichophyton verrucasum and aspergillus higher,
5. East Coast Fever,
6. Foot and Mouth disease,
7. Rinderpest contagious bovine,
8. Pleural Pneumonia,
9. Contagious caprine Pleural Pneumonia,
10. Anaplasmosis, and
11. Babesiosis.

It has also been found out that, the tsetse-fly causes greater cattle death than any other killer disease. The tsetse-fly is found mainly in thick forests including the Miombo woodlands of Tabora and Shinyanga. But the NARCO official said that, the insect can only fly within 100 metre range. If a bush is cleared for more than this range, cattle would graze and live without their attack such measures as the official said, probably truned Mwanza, Shinyanga, Singida and Dodoma into Semi desert regions.

Research has discovered further that, although dipping and spraying of animals are conventional control methods of tick and tick borne disease, most dips in Tanzania are out of order.[4] Out of 2041 dips distributed throughout the country only 35% (375) of them were operational by December, 1991. In Mwanza for example there were 166 dips but only 3 (0.6%) were operational as at June, 1992. The Mwanza Veterinary Officer attributed this to central Government's decision to transfer the management and maintenance of dips etc. to local government authorities who have failed to maintain them for lack of funds.[5] Otherwise the Government effort in developing the Livestock industry was already far ahead. For example, in the area of disease control, large livestock regions had a good number of dips distributed to each. The total number of dips in Mwanza alone were 166 and each of the six districts had dips in the following order:

	DISTRICT	NO. OF DIPS
1.	Kwimba	57
2.	Geita	30
3.	Sengerema	29
4.	Magu	26
5.	Ukerewe	16
6.	Mwanza	8
	Total	166

SOURCE:

Data obtained from the Ministry of Agriculture and Livestock Development, Mwanza Office.

If only 3 out of 166 dips were operational, this shows a big neglect or disregard of the importance of the livestock industry by the Government which signals a warning that disease control in the country will take a long way to come before it is arrested. It threatens insurers too.

Reasons given for most dips in Mwanza not being operational were due to lack of acaricide, the medicine which is mixed into water before cattle are dipped in order to kill tick. Another reason was lack of funds to facilitate maintenance and repairs. This lack of minor as well as major repairs of dips, as Komba reported,[6] has compounded the incidence and therefore mortality rates due to tick borne disease have been on the increase in the past few years.[7]

Shortages of Veterinary drugs, vaccines, chemicals, reagents and equipment etc. lead to poor and ineffective disease control programme. The Kilimanjaro region Veterinary Doctor attributed the shortages to government monopoly saying that the remedy was to privatise the importation of most veterinary drugs which he said was likely to improve the already deteriorating situation.[8] Another veterinary expert in the Ministry who is also, Assistant Commissioner of Veterinary Services emphasised that a programme to revitalise the veterinary

delivery systems has to ensure that the supply of drugs, etc. is done largely by the private sector.[9]

Shortage of Veterinary Personnel.

Livestock health very much depends on prompt treatment and advisory services given by veterinary doctors and extension services personnel. The number of qualified veterinary Doctors and extension services officers in Tanzania is very small, as such effort toward disease control through vaccinations treatment, etc. become difficult. All six veterinary doctors' interviewed in the five regions under study revealed that the number of veterinary personnel in the country was inadequate. By December, 1992 there were 4388 qualified veterinary personnel holding degrees, diplomas, and certificates as depicted below:

The Table below clearly indicates that future demand for veterinary experts is extremely high. Mende quoted Ministerial sources as projecting an additional figure of 3457 Veterinary experts that have to be trained by the year 2000 in order to cope with the present deficiency[10]. Until such time and upon attaining the desirable number of experts, the incidence of disease will continue to loom high.

Lack of knowledge and experience.

Even if veterinary experts become adequate, the problem of livestock health is likely to persist if livestock keepers lack scientific approaches and methods of handling the animals. Livestock, whether traditional or commercial require extreme care in their health in order to obtain reasonable level of production. It requires the keeping of manageable number of herds and adopting modern husbandry management. However, most traditional cattle keepers still use traditional methods of cattle rearing. It was found out for example that de-stocking of cattle was not in favour of the majority of respondents. Out of the 25 traditional livestock keepers interviewed only 2 (8%) said they would be willing to do so if that would result in increased output of milk and meat. The rest simply saw it as jealousy and an attempt by the Government to deprive them of their 'wealth'. Inspite of the poor standard of living as displayed by most of them, many still regarded themselves as being 'well off' by a mere possession of a bigger cattle herd.[11]

Although the traditional cattle are known for the high resistance to diseases and can endure the harsh environmental conditions, yet they are a low quality animals and have low production capacity. Most cattle keepers do not seem to understand this and the government has to step up its campaign towards the realisation of modernity and increased output. The Mwanza's Veterinary expert said, the regional authorities have a programme of inviting livestock keepers to attend seminars on improved methods of livestock keeping which last from 3 days to 2 weeks.[12] The seminars are fully sponsored by the regional authorities but attendance was still very poor. Livestock keepers would greatly benefit through such seminars which would help educate them on the importance of the de-

TABLE III

Qualification	Total No.	Distribution (Job doing)	Percentage
1. Degree holders	562	Extension services	78.3
2. Diploma holders	2141	Research	5.1
3. Certificate holders	1685	IMUS of A.I	3.4
Planning	0.2		
Other	6.9		
			100
Total	4388		

Source: *Msalangi, H.K.M. Livestock Insurance A Study of the Problems and Prospects of introducing a viable scheme in Tanzania (1994)*

stocking and the rearing of improved cattle herds for more output. Although most cattle keepers are relatively in experienced, yet they know that the cattle have to produce enough milk and, or meat in order to make profit. Few individuals such as the Kijenge Animal Products actually make a living out of the livestock production. However, the urban commercial cattle keepers who may never have owned an animal before, also need more information on proper care, husbandry management, nutrition, housing, disease prevention, animal behaviour and other important information on both pets and companion livestock. Lack of such vital knowledge amongst most cattle keepers militates against higher production and would defeat the purpose of commercial scale insurance. Else, insurance protection can only be provided selectively covering those well established individuals and corporate livestock organisations.

Problem of pastures and Rangeland Development

Tanzania has a vast grazeland resource which supports the vast majority of domestic ruminant population of about 13 million cattle, 6 million goats, and 3 million sheep (Livestock census 1984). But the grazeland and its grass and herbage is naturally grown and during dry times of the year it provides poor feed to cattle and other livestock population. In their joint paper, Kusekwa, et al (mimeo, Sua 1992:151) reported that natural pastures and fodder form the back borne of animal feed. They are the cheapest and main source of feed for ruminant livestock, although natural pastures are of low herbage production and of low quality for most of the year.

This has resulted into low production of livestock foraging on these pastures, thus entailing the development and utilisation of improved pastures and fodder crops.[13] No doubt the small size and little weight which is characteristic of the Tanzania's short horn zebu (TSZ) is a result of the poor feed among other reasons.

Scientific and modern methods of pasture production and range development have been found to result into higher livestock production and increased productivity due to increased nutritional value.[14] Rangeland development can however, only be done if individuals have the right to a secure land tenure, which in Tanzania is yet to be done. It also required substantial investments in order to develop rangelands but the credit is hard to obtain as lending banks are hesistant to provide loans without reliable collateral security.

Rangelands development are, however, carried out at different eco-climatic conditions including SUA-Morogoro, Tengeru-Arusha, Mpwapwa-Dodoma, and Uyole-Mbeya, all by the Government and the result as seen during the research exercise has been the availability of grass and fodder of high protein content said a Tengeru Tutor.

But to feed animals using cultivated pastures and fodder crops requires a reduced and manageable number of the cattle herd otherwise the quality objective may not be achieved. The experience obtained from the aforesaid government experimented farms together with that of corporate organisations such as DAFCO and NARCO can be transferred to both traditional and commercial cattle keepers for their benefit and that of society at large.

LIVESTOCK (CATTLE) PRODUCTION SYSTEMS AND PROBLEM INVOLVED

According to Komba, there are four main livestock production systems, namely: 1. Commercial livestock systems, 2. Semi-Commercial livestock farming system, 3. Communal grazing livestock production system and 4. Pastoralist livestock grazing system. However, for purposes of this research, the four production systems are regrouped into: 1. Traditional production and 2. Commercial production systems.

The traditional production system which accounts for 97% to 98% of the total cattle population (Komba, 1992:59) comprising mostly zebu cattle is characterised by slow growth rate reaching maturity between 32-36 months, small body size weighing between 250 kg and 350 kg. live weight, and produce very little milk of up to 3 litres per cow per day. Such a small level of production can hardly sustain the cost of insuring cattle.

Other problems concern the long distance travel in search of pasture and water which the traditional cattle have to endure and this makes them sweat more causing reduction in their productivity. The long travel duel also exposes livestock to attacks by the killer tsetse fly, snakes, and predators of the cat family - lion, leopard or tiger, etc. Large number of cattle herds owned by some individuals especially in Arusha, Mwanza and Shinyanga makes the whole attempt of disease control to be less effective due to the high cost of most veterinary and other medicines, including clinical charges.

The commercial livestock production system accounts from 2% to 3% of the total national herd and has mixed operations. It is mostly undertaken by well to do private individuals, co-operatives, parastatal organisations, and the Government. This sub-sector benefits from higher output in terms of both milk yield which can be as much as 20 litres per cow per day, and meat which the cacass weight can reach as high as 600 kg per animal.

Proper animal handling and care including husbandry management are well practiced by all those involved in the trade. According to findings it was discovered that every person who engages himself in the trade, first learns from colleagues who are already established in the business on how to manage it. Secondly, authorities who sell heifers give instructions to their customers as part and parcel of the deal such as DAFCO and NARCO.

There are also problems in the commercial cattle rearing but they are of minor significance. First there is the problem associated with the total number of the improved herd together with the exotic which by September, 1992 were found not to exceed 300,000 for the whole nation (MALDC Task Force 1992). Such a small number of animals if insured cannot satisfy the insurance condition relating to the law of large numbers. Secondly there is the problem of less resistance to diseases a factor that makes it difficult for this type of animals to be reared by village people who live in remote rural areas where the incidence of disease is still very high. The rural people who should need high nutritional food obtained from milk and meat are deprived of the opportunity as the higher production animals are mostly kept in urban or semi-urban centres and their suburbs where the incidence of disease is negligible due to availability of veterinary medicines. Thirdly, is the problem of having own veterinary experts which most individuals cannot afford, instead they benefit from Consultancy services at a premium, and services are readily in urban and semi-urban centres.

PROSPECTS AHEAD

The aim of the Government as contained in the livestock policy of 1983 is to stimulate rapid development of the livestock industry in order to increase National income, raise per capital income of rural people, attain self sufficiency in food production, and increase net foreign exchange earnings (Livestock Policy 1983:1)

To fulfil the policy aims, a number of measures have started to be implemented. These include the government's deliberate efforts to educate livestock keepers, expansion of training programmes for veterinary experts, cattle improvement programme etc. together with the liberalisation of the veterinary delivery system. Other measures include the rectification of the land tenure system, the findings and recommendations of the Presidential Commission under the Chairmanship of Professor Issa Shivji of University of Dar es Salaam is already out.

Livestock Education

The government has an education programme to benefit livestock keepers, and varies in duration depending on; need, time of the year, and other necessary factors. Seminars are usually of short duration and hardly go beyond six days; but short courses, as Mr. Ngowi said, lasts from two to three weeks, and both the seminars as well as short courses are conducted at least twice in a year at the government's established centres of Ukerewe (Mwanza), Tengeru (Arusha), Mpwapwa (Dodoma), and Uyole (Mbeya).[15] The official said, both the seminars and short courses are voluntary and this means that attendance cannot be guaranteed. From past records, it was found out that attendance was encouraging. Education gives enlightenment on the part of cattle keepers whereby there is improvement in animal health care, handling, and husbandry management

which in turn reduces the potential risks and increases the scope for insurance coverage.

Training of Veterinary Professionals

The importance of the livestock industry to the national economy cannot be overemphasised. To underpin it importance, the government launched the Veterinary Degree Training programme in 1970 at the Sokoine University of Agriculture whose curriculum has been tailored to meet the country's expectations. Apart from degree training which produces Veterinary professionals, there are several Veterinary Training Institutes include Tengeru, Mpwapwa, Ukerewe, and Uyole, Institutes. According to the Principal Secretary's speech (Ministry of Agriculture and Livestock Development), the Government's long term goal is to be able to post at least a veterinarian and one animal science graduate to each region and district (opening speech February 25-27, 1992). If this becomes a reality, then the incidence of livestock diseases is likely to be arrested and once the disease control situation is attained, livestock insurance may operate on commercial scale covering both the traditional and commercial stock units.

Income Supplement

The country's poor-economy bites hard especially wage earners some of whom have resorted to keeping commercial dairy cattle in order to supplement their meagre salary incomes. The practice has started to attract many who can afford to keep one or more dairy cattle and there are signs that people can make a living keeping cattle. Productivity is assured given that the practice is mostly undertaken by urban dwellers in and around urban centres where the incidence of disease is negligible due to absence of killer agents flies and the availability of veterinary system.

Cattle improvement

The commercial sub-sector is composed of: Improve, 2. Pure, 3. Cross breeds. The pure breed is imported and due to problems of foreign exchange cross breeding is undertaken in many centres in the country by making use of artificial insemination and natural breeding. The whole idea as Dr. Sunguya said, is to improve stock and increase production for the benefit of livestock keepers and society at large.[16] Cattle improvement and cross-breeding is also undertaken by parastatal organisations such as DAFCO and NARCO who also sell heifers from pure and improved, breeds to individuals and organisations such as: Schools, the Army, the National Services, Prisons, etc.

Unemployment

Youth unemployment in particular is becoming a concern of everyone in the country as employment opportunities shrinking. The government is exploiting other avenues which would offer the youth employment and help make them productive. Probably the livestock industry is likely to be among such avenues which will offer employment as it is possible to make a living from keeping dairy cattle in particular. As many people enter the livestock industry, the population of improved breed is likely to increase and this will fulfil the requirement of the law of large numbers which the insurer requires in order to keep down premium levels which at present are likely to be too exorbitant to afford. The increase of improved breed which has potential to produce more means also that society will benefit from nutritional food, and the government will also benefit from livestock export earnings.

CONCLUSION

A lot remains to be done in order to improve the animal health in Tanzania. The incidence of diseases still looms high while the veterinary delivery system is inadequate due to limited number of veterinary experts and shortage of veterinary medicines. The killer flies such as tsetse fly, tick, etc. are yet to be eliminated and drugs and medicines are only readily available in the urban or near urban centres, while in the rural areas, where most of the livestock are found, are rarely available. As most of the dips are not operating due to lack of major as well as minor repairs, and lack of acaricide, tick borne diseases will continue to threaten the animal health. Even their availability and service will cause problems due to the high cost of such medicines when perhaps, as most veterinary doctors said, the panacea would be to liberalise the delivery system of the veterinary medicines. That alone may not

solve the problem until the number of professionals in veterinary science also increase.

The total number of commercial livestock (cattle) of about 300,000 is far inadequate not only for insurance purposes but also in terms of food supply, and for the economy. With many more people joining the trade, however, animal output is likely to increase and consequently widen the scope for insurance protection. But in order to increase chances for a national wide livestock insurance scheme, government support would be necessary, especially in requiring lending banks to insist on livestock insurance policy as collateral security whenever a loan on livestock development is sought.

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