

# **URBAN LIVESTOCK FARMING IN TANZANIA: CAUSES, EFFECTS AND FUTURE PROSPECTS.**

*May, P. S. and Pereka, A. E.* Department of Physiology, Biochemistry, Pharmacology & Toxicology P. O. Box 3017, Morogoro, Tanzania.

## **SUMMARY**

Urban livestock farming in Tanzania has seen a tremendous rise since the late seventies. Several factors acting singly or concurrently led to the trend we are observing today. The major driving forces are social-economic, cultural and to some degree political in nature. It is commonly agreed that there are some positive and negative effects of urban livestock farming. This paper is intended to give a fair discussion and analysis of the issues behind the rapid growth of urban livestock farming (ULF) with emphasis on dairy as the most practised type of ULF. As matters stand now, urban livestock farming will continue to play a major role in the provision of the greatly needed animal products by the ever-increasing urban population. It will be self-cheating to think that we can abolish ULF by the present laws and bylaws that are hard if not impossible to implement. Therefore, there is a need of a change in attitude by the responsible authorities to recognise ULF as a fact of life and find ways of minimising the negative effects through positive engagement with all stake-holders.

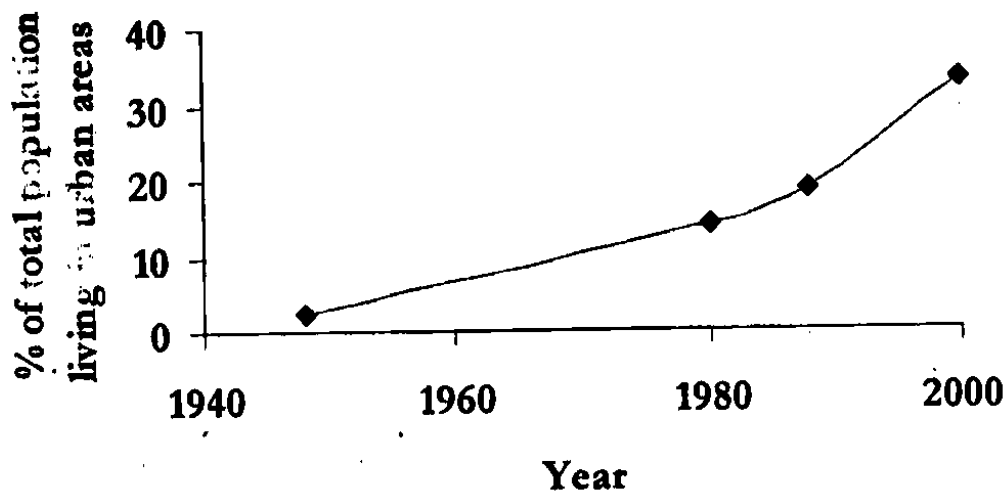
## **INTRODUCTION:**

Tanzania is located in the equatorial zone of East Africa at Latitude 1° S and 12° S and longitudes 30° E and 39° E with a total area of 945,000 Km<sup>2</sup>. The population was estimated to be 30 million people 85% of which live in the rural areas, the remainder living in urban areas. (Anonymous, 1994). Urban settlements are very

much widespread from the division headquarters, stopover stations along the major highways and railways, district headquarters, regional headquarters and the capital.

Tanzania has one of the highest urban population growth rates in the world (Figure 1). From a mere 2.5% of total population living in urban areas in 1948, it reached 13.8% in 1980, 18.5% in 1988 and

was projected to be 33% in the year 2000 (Kulaba, 1984).



**Figure 1. The urban human population growth trends in Tanzania from 1948 to 2000.**

The development of urban centres in Tanzania like most of other countries is historically associated with colonial administration. The colonialists established towns as administrative centres. Such centres were to become magnets for rural urban migration due to their superior facilities relative to the rural area. Modern social services like electricity, running water, recreation facilities, houses, hospitals, banks, merchant shops to mention but a few, were all concentrated in the town centres. The big rise in people living in the urban was partly due to high birth and child survival rates but the biggest factor was the rural migration of people especially youth in search

of 'better life' in towns. This poses a big challenge on resources that are necessary to sustain the urbanites (Swai et al., 1992; Wilson, 1993).

#### **URBAN FARMING IN TANZANIA**

Urban agriculture is on the rise in many developing countries (Moshia, 1991; Maxwell and Zziwa, 1993; Mbiba, 1995). Urban agriculture is very diverse and varies from town to town within as given country and even between countries such that it is difficult to give one comprehensive definition. However, it encompasses all farming practices involving crops, animals and fish either for subsistence or commercial purposes in designated urban

areas under the Laws of a given country. In Tanzania, it is the Town and Urban Planning Ordinance CAP.378 of 1956 that was reviewed in 1991. This law bans all farming activities in designated urban areas.

### **DRIVING FORCES IN URBAN LIVESTOCK FARMING**

The major driving forces in ULF have historic links to the macro-economic developments and national policies in Tanzania before and after independence. In some instances, it was found that individual decision to engage in urban livestock farming was highly influenced by cultural backgrounds as well (Mlozi, 1996) with the majority coming from livestock keeping background in the rural areas.

### **THE EFFECT OF POOR PERFORMANCE OF THE NATIONAL ECONOMY**

#### **(a) Historical perspectives**

During the seventies and early eighties, Tanzania was faced with some serious economic crises. The break-up of East African Community in 1977 saw Tanzania being forced to seek ways of filling the gap of the infrastructure and trade that were previously shared in the common market. The war with Iddi Amin of Uganda and the doubling of oil (petroleum), both occurring in 1978-79 were other factors that negatively affected the national economy. As if these

were not enough, there was a big threat of famine in the seventies and early eighties due to prolonged draught. To cap it all, most of the industries and parastatals that were established by the Government after independence and those nationalised following the Arusha Declaration was performing very badly mainly due to poor management. All these factors weakened economic base thereby causing a drastic fall in GNP. The weakening of the national economy had the following repercussions:

(I) The Governments failed to pay living wages to its employees, thereby forcing people to find means of supplementing the low salaries. These people had to resort to side projects in the informal sector so as to supplement their meagre incomes (Ndalichako, 1998). (II) The Government devised some strategies to encourage people to be self-sufficient in food by engaging in agriculture wherever they are (both in towns as well as in villages). During this time, there were various campaigns like *Kilimo cha Umwagiliaji* (Irrigation Agriculture) of 1972 and '*Kilimo cha Kufa na Kupona*' (Agriculture as a Matter of Life and Death) launched between 1974 and 1975. These were followed by broader National Economic Policies such as the National Economic Survival plan (1981-2), National Food strategy

and National Agricultural policy (1982) and the Structural Adjustment Programmes started in 1983 and its culmination to National Economic Recovery Programme started in 1986. All these macro-economic policies had a strong impact on urban agriculture. They were taken as a big encouragement to urban dwellers (as individuals) to engage in agriculture including livestock farming.

(III) The poor performance of the National economy also affected the rural people as well. It is a common experience that Governments of the day tends to appease the urban population (most are elite and have pressure groups to fight for their rights) by providing the basic social services and even food at a subsidised prices at the expense of the rural people. Comparatively, people in the formal employment and those engaged in business in towns were far better off economically compared to those in the rural areas. This fuelled the rural-urban exodus of people especially the youth. The impact of this was twofold: First, the migration of vital manpower to towns meant that mainly old and kids were left in villages. This led to drastic fall in agricultural production both for domestic consumption and for export due to lack of manpower to till the land. Secondly, the social services in towns could not keep pace with the massive

migration of people and were stretched to the limits. Some studies (Mlozi, 1996; Mlay, 2001) have shown that the average number of people per household range between 6-10 in Dar-es-Salaam and Morogoro. The many unemployed or underemployed people in urban households had to deploy their labour in income generating activities and livestock keeping was the rational choice.

#### **(b) Current trends**

The economy of Tanzania is still very poor though there are some signs of growth. Faced with a big foreign debt that still need servicing, fall in industrial production and very dismal performance in agriculture the Government still find it very difficult to pay living wages to the civil service employees as well as provision of the basic social services to majority of its people. Most of the previously Government owned production and service firms are either being sold off to private operator or run on joint venture schemes with private investors. The National Economic Recovery Programme entails the privatisation the loss making parastatals and also reduction of the workforce in the civil service. A target of 50,000 civil service staff was to be laid off (Gibbons, 1995). These people are entitled to retrenchment benefits and it is most obvious most of these people together with members of their extended

families will continue to stay in towns and join the informal sector.

### **AVAILABILITY OF READY MARKET OF INPUTS, PRODUCTS AND EXTENSION SERVICES AND CREDIT FACILITIES**

Being located within or very near the market, urban livestock industry enjoys the use of the relatively better infrastructure for easy communication, input and output movements, animal health care services, credit facilities, greater market opportunities and in some instances, subsidised inputs. Feed and crop residues for livestock is readily available from market places, hotels and restaurants, abattoirs, breweries, millings and granaries which dispose food that is no longer suitable for human consumption.

### **THE ROLE OF WOMEN IN INCOME GENERATION**

Another important issue is the change in the intra-household dynamics and gender relations. House wives who were previously referred to as 'goal keepers' (100% dependent on the husband as breadwinner) no longer accept that status. Women (married and single mothers) are assuming more and more prominence in the contribution and control of household income. No wonder

most of the sideline projects are owned and run by women (Mlay et al., 2001a). The presence of credits facilities and the assistance from non-governmental organisation (NGO) (local and international) in support of women liberation has increased tremendously the scope for women to acquire capital (Moshia, 1991).

### **ADVANTAGES OF URBAN LIVESTOCK FARMING**

It is undeniable fact that the high demand for animal protein in the urban areas is to some extent met by the supply from the urban livestock ventures without which things could have been much worse. Given the poor performance of most land-based systems, the urban sources of supply will continue to play a significant role in filling the gap. The collapse of most of the National dairy farms and Dairy processing plants created a big vacuum in the supply of dairy products to most urban centres. Initially, imported dairy products from Europe and neighbouring countries like Kenya were a common place. However, with years, smallholder dairy producers mostly towns are now able to meet more than half the requirement of raw milk in towns. In fact, sometimes the milk produced by smallholder far outstrips the demand hence the need to establish small scale dairy processing so as to increase

the value, variety and shelf life of dairy products (Kurwijila et al. 1992).

Livestock industry creates employment opportunity not only to those directly involved at farm level, but also to the people involved in the chain until the final product reach the consumer. From sellers of feeds including roadside fodder, suppliers of fresh stock (e.g. day old chicks) owners of means of transport, people involved in animal health care (pharmacists veterinarians, agricultural extension staff), small and big retail traders in animal products benefit in one way or another from this industry. Without an alternative, most of this work force may easily be channelled to crime related activities.

At the household level, there is increased household income and this means a greater purchasing power. Mlozi, (1996) reported that in 1993, a smallholder dairy farmer in Dar-es-Salaam keeping 4 milk cows earned an estimated profit of 876,000 Tsh (USD 825) which was twelve times the average annual salary of low-income earner and four times that of high income earner. Mlay et al. (2001b) reported that dairy farmers in Morogoro town who were willing to feed their dairy animals properly (through supplementation with sources of nitrogen and energy) were able to generate a big profit from increased milk yields. This extra

source of income has enabled some people to build family houses, buy cars, TV sets and other luxurious goods they had never dreamt of before.

It is thought that urban agriculture offers an opportunity in some way, of more efficient land use by generating an income for land that is either unsuitable for development or that is not yet developed (Bayer, 1995). Of equally important is the benefits of wastes recycling such that given the limited resources of waste disposal in towns, the part consumed by animals help in alleviation of this problem. Where livestock keeping is linked with gardening or crop farming where space allows, there is an added advantage that animal manure is used as a fertiliser to boost productivity thereby enhancing nutrient re-cycling. Some farmers have been able to combine dairy livestock keeping with bio-gas production which has enabled them to cut down the energy bill (electricity) tremendously (Lekule, 1998 Personal communication).

### **PROBLEMS ASSOCIATED WITH URBAN LIVESTOCK FARMING**

Because the system is highly intensive, there is high demand for purchased meals made from cereals and or cereal by-products. Since up to now agricultural production in Tanzania depends on rainfall, the supply of inputs to the livestock industry may not be assured all

the year round. For example, price of maize bran that is the major concentrate used by most urban livestock farmers (dairy, piggery and poultry) and others like cotton seed cake, sunflower cake and molasses has been on the rise due to high demand and low supply. Even acquisition of fodder for ruminant animals is becoming increasingly difficult especially during the dry season since many plots that were previously undeveloped have now been turned to building blocks. Mlay et al.(2001a) found that some farmers were going as far as 35 km in search of fodder to feed their animals. Under such condition, farmers fail to feed their animals properly thereby leading to low productivity and high susceptibility to diseases.

Another problem faced by farmers especially those keeping dairy cattle is the availability of reliable breeding services. During a survey carried in urban and peri-urban areas of Morogoro by Mlay (2001), very few farmers were using artificial insemination (AI). The majority of the farmers was using either hired bulls or on farm reared bulls. The majority of bulls were of inferior quality. Lack of reliable breeding services resulted into many cows being left open for a long time thereby causing long calving intervals and low productivity.

Adequate quality control both on inputs as well as on the outputs (products) is a big problem

affecting ULF. Substandard feeds, replacement stocks (e.g. day old chicks) and consumer products (adulterated and sometimes contaminated milk and meat) find their way in the ready market. For example, Loth et al. (1998) reported a high level of sale of sub-standard milk in Morogoro and Dar-es-Salaam.

Due to limitations of space, manure, litter and sewage disposal is difficult. If left unchecked, the livestock industry in urban areas will be big source environmental pollution through soil nutrient loading, water pollution (nitrate) and air pollution through offensive smell of ammonia emanating from pile-ups of animal excreta. The pile-ups of manure and run-off sewage also offer good breeding ground for insect vectors (e.g. domestic flies and mosquitoes), animal pests like and poisonous snakes that can cause health problems to the urban community.

The other strong point against livestock in towns is the high risks of zoonoses, which can be a big problem in the highly congested urban centres (Mulangila et al., 1998).

Incidences of damage to properties, risks of road accidents and even attacks on people by stray animals that occur from time to time cannot be ignored.

## **IS URBAN LIVESTOCK KEEPING DESIRABLE?**

As long as the land-based livestock production systems are unable to meet the demand of animal products in the urban centres, urban planners will have to allow some flexibility so that the sub-sector remains (Mlozi et al., 1992; Mlozi, 1996; Mlay 2001). There is a need for the Government, Policy makers, Urban/Urban Authorities and all others stakeholders to devise ways of minimising the negative effects associated with ULF so that this sector can continue to play its vital role(s). For example, there is a need of taking a serious stock of all bylaws concerning with livestock keeping in towns so as to repeal those parts that are almost impossible to implement and also introducing new ones that are more flexible and easy to enforce. Taking Morogoro town as an example, the local government (Urban Authorities) act 1982, Morogoro Urban Council by-laws of 1999 section 3, states that animals are to be kept in 'specified areas' and not in residential areas. But the so-called "specified" area was some 30km away from the residential areas such the targeted people never bothered to transfer their animals to such areas. Why? Owners of livestock want to be close to where their animals are mainly for security reasons and also close to the markets of the inputs and

products. They would rather go long distances in search of feeds and other inputs rather than keeping the animals in far places where the security and day to day monitoring of the activities would be difficult.

As a start, interested livestock keepers can be allocated bigger plots in a certain area (not necessarily very far way from the town) that will be specifically for people with common interest of keeping animals. This will spare those others not interested in keeping animals from the bother they get from their neighbours who keep animals. Then, we can set the maximum number of animals allowed and strict follow-ups made for defaulters. There is also a need to do more research in ULF, to encourage communication and information sharing among all stakeholders and to seek means of ensuring quality control and marketing of the products.

## **CONCLUSION**

In Tanzania, urban livestock farming has become part and parcel of urban life. As such, it is very hard if not impossible to abolish it. What is most required now is recognition of its existence and the roles it plays and devising mechanisms of reducing the negative effects. Urban livestock farmers need assistance in many areas like quality

control, marketing of products, small scale processing plants, efficient ways of recycling of sewage and organic wastes for and from animals. Equally important is the need to do more research on ULF and to increase the communication and information sharing among all the stakeholders.

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