

# Farmstock

Farmers' & Cooperatives' Monthly

No 55.

September '74

Price 20k.

Managing Editor : *Abiodun Ojugbele*

Advert Manager : *A. J. Akagha*

Publishers : *IJAMIDO PUBLISHING CO*  
*17, Abeokuta Str.*  
*P. O. Box 79 EB*  
*Tel. 43805*

Subscription : *Annual : N3.00*  
*2yrs : N5.00*

## CONTENTS

## PAGE

Opinion	4
Garden tips from Chike	5
'We can have three harvests annually if ...	6
Plants have many enemies	5
What is a Cooperative?	11
Building happiness	
Nigeria needs a National Agricultural Centre	16
Before the Veterinarian Comes	18
Agric. Notes : Garj will replace corn in layers' ration	21
Letters	22
Poultry manure as Cattle feed	2
Vaccination and Health procedure	27
Laughter	30

## WHAT FATE FOR POULTRY FARMERS?

**M**uch justifiable anxiety has been shown recently about loss of cattle arising from drought. Locusts too have invaded our farms particularly in the North Eastern sector of this country leaving devoured grain fields (portents of hunger) in their wake.

The rains too have been spasmodic and rather late thus causing poor harvests and confusion among farmers who hitherto instinctively plan their farming and harvesting.

But these set-backs have been unchallenged. Anyone reading the newspapers and listening to the news will appreciate what laudable relief steps have been taken by our authorities.

In only one exception has nonchalance been apparent. This is in poultry. At this time now many an erstwhile poultry breeder has folded up. The Nigerian poultry farmer has to contend with a host of problems.

Feed is to livestock as fuel is to engines. Feed producers complain about rising cost of grains, the main ingredient. The ever-increasing shortage of grains worsened by pest invasion makes it difficult to apportion any blame to feed compounders. Labour costs are rising but the number is diminishing. While the breeder wants to cut wages, his staff want increases. This clash of interests makes poultry work unattractive.

Infection is at its peak now. During rains quite a number of viral diseases thrive due to damp. Apart from cold which usually kills young chicks thereby scaring off many breeders from replenishing their stock around now, the high incidence of diseases is another deterrent.

As the cities grow, farmlands are inched away by builders; so breeders have to retreat further into the bush to face transport problems to workers, supplies and products.

Above all, the most nauseating of all these problems is the elusive veterinarian. Accost the big shots on why their chaps are not around and they will confront you with official problems confronting their ministry. So the birds are diminishing.

More and more hatcheries are coming up. We now have Olaogun, Mitchell, Amo, Ladebu, Oke-Afa, Ejinaka and Thornbers and some still behind the scene. Unless the market is there to absorb their products, these hatcheries may fold up leaving the country again at the whims of uninterested workers manning Government hatcheries.

And almost everyone can afford a sizeable chick at least during festivals for a change from the tough unchallenged beef. As the price of a chick rises definitely potential customers

will dwindle to fall on what? No stockfish, and frozen fish filtering into the remotest village is inadequate.

Briefly, the authorities have a task ahead. Huge buildings, wide roads and efficient telephone systems and whatnot will forever be above a class of people, not good food. Raising the standard of living does not mean infrastructural build-up alone; food is the most important.

A bold step should be taken to provide grain en masse and to send veterinarians into the farms.

The hatcheries must be made to supply names of customers to the Vet. Dept which must see to it that such breeders are visited on schedule.

The poultry business employs some labour but it will be foolish to set such employees adrift due to the closure of poultry farms. To counter their looking for other jobs again is to keep them where they are. Yes! according to King Henry V.

Upon the King (Government - Ed.) let us our lives, our souls.

Our debts, our careful wives, our children, and

Our sins lay on the King! (Government - Ed.)

We (the governments of the Federation - Ed.) must bear all.

Yes! the Government should look well into the country's poultry industry and timely too.

## MIX COMPOST WITH SEED AND WATCH VEGETABLES, TOMATOES AND CARROTS GROW

Many have always been reasonably successful in their gardening hobby but a little piece of advice from a friend can add more success to boost production to new heights - from abundance to superabundance, so to say.

"Mix your seed with compost before planting," a friend advised me recently.

He was in fact, merely adapting a long-standing piece of gardening know-how which recommended mixing fine seeds with sand for more even distribution.

His way, I found to my satisfaction, spread the seed and fertilized it all in one operation. Take carrots for instance.

Carrots develop best in light sandy soil with a high humus (decomposed vegetable matter) content. Heavy clay soils need to be lightened by spading in additional fibrous materials or sand.

Fork over the carrot bed to a depth of about eight or nine inches; then make a depression where you wish to sow the seeds to a depth of about half an inch. In this depression place the compost - seed mixture (one packet of seeds to a small bucket full of fine compost).

Germination of carrot seed is generally slow and uneven. By adopting the compost - seed mixture approach, germination will be good and usually one has to thin out the beds



vigorously, since very many will sprout.

The good germination is due to the fact that the fibrous compost does not dry out easily, will not bake hard in the sun, nor does it turn to mud during a wet spell.

One packet of seeds should sow about 30 feet of row; one ounce, 100 feet. Space rows about 10 inches apart. Thin seedlings to between half and one inch apart when they are about 3 inches high. Many people

recommend a second thinning to one and a half apart but this may be unnecessary. As a result every forkful at harvest time yields a mixture of large and small carrots. They all taste good. Many eat them as readily as they do an apple.

In good soil carrots can be harvested in about 65 days (earlier if you like them particularly tender and small). To have a continuous supply around the year plant a new plot every three weeks.

Very well-rotted manure can be dug into the soil before planting, but the application of manure together with some rock phosphate every nine months is the best. A sprinkling of wood ashes can be beneficial, too. Fish meal is another good carrot fertilizer. However, it is best to rely solely on broken-down but still fibrous compost. It works every time.



**DR. NWANKWO UKPA**  
*Dr. Sc Ph. D. (Biology)*  
*Moscow. This picture was*  
*taken by me in my hotel room*  
*at Rossia Hotel, Moscow.*

# 'WE CAN HAVE 3 CROPS A YEAR IF'

*(Crux of a discussion in a hotel room, Rossia Hotel, Moscow between Dr. Nwankwo Ukpa Ph.D. (Biology) and Abiodun Ojugbele, Managing Editor, Farmstock and Beacon magazines who toured parts of the Soviet Union recently)*

'Nigeria is a big country naturally endowed with many types of soils and good weather that can give her population enough to eat and store up against dearth but this feat can only be performed if production is divorced from natural processes'.

*This was the opinion of Dr. Nwankwo Ukpa during our one hour discussion last July.*

Nigeria has mainly two seasons. The rainy season starts in mid May and ends up in mid October, the other months form the dry season.

Thus, the peak period of rains are from June to August.

In other words, all the water we have naturally for our planting pour down in bail-fulls within three months after which scant rains come ending up in totally dryness.

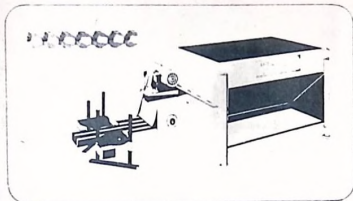
The early rains in early May and up to mid June



**ABIODUN OJUGBELE**  
*Managing Editor of FARMSTOCK sight-seeing behind*  
*Kremlin walls in background Moscow, U.S.S.R*

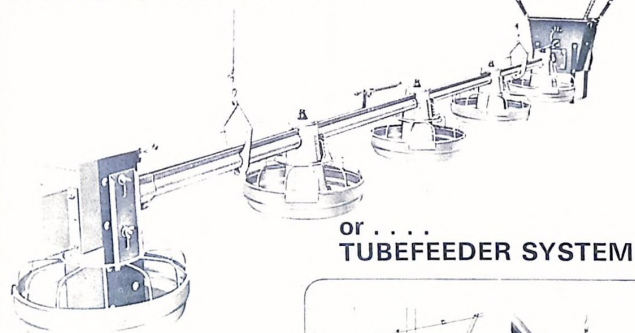
*Continue on page 27*

**LACO** more than 20 years of experience  
in the design and manufacture of poultry-equipment.



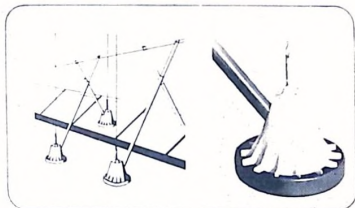
Whether it is for  
**CHAINFEEDER  
INSTALLATIONS . . .**

or the . . .  
**SPIRAL CONVEYOR . . . . .**



or . . . .  
**TUBEFEEDER SYSTEMS**

**LACO is the  
SPECIALIST**



Watering  
Feeding  
Heating  
Ventilation  
Laying Cages  
Rearing Cages  
Broiler Cages  
Manure Disposal

**LACO range of equipment for poultry**

Round drinkers, height adjustable and automatic water troughs  
Chain-feeder systems, overhead tube feeding, bulk storage bins and  
special dispensers for multi-tier batteries  
Space heaters and brooders burning natural gas, propane,  
oil or petrol  
Fans with speed controllers  
Stepped, flat-deck or multi-tier batteries with scraper-cleaned  
glass bases or plastic belt manure removal  
Flat-deck with troughs or overhead tube feeding installations  
Two tiers high with plastic belt manure removal  
Reciprocal-action cross-conveyor for removing manure  
from the cage house

**LACO**

ASK FOR LEADING  
LANDWERK PRODUCTS

**LANDWERK N.V.**  
VEGHTEL, HOLLAND  
TEL. (4130) 4 42 92  
TELEX 611421

# PLANTS HAVE MANY ENEMIES

by Bryan Platt

*Writer and broadcaster on British agriculture*

It has been estimated that two thirds of the world's crops are lost every year through pests, disease and competition from weeds. Control through cultivation and other husbandry techniques can sometimes be achieved but, with the intensive systems of growing now being introduced, natural methods of protection are becoming progressively less effective.

*Selective herbicides fall into three groups. Contact chemicals kill those plant tissues on which they are sprayed and are used mainly for controlling annual weeds. Then there are what are known as translocated herbicides; these chemicals after entering the plant move within it and poison it far from the point of contact.*

*Because this type of weed killer is so much more potent it can kill perennial as well as annual weeds - one drop on one leaf often proving fatal.*

The third group consists of residual herbicides applied to the soil before or immediately after the crop is sown. They are most effective against weed seeds as they germinate but, because they are selective in action, they leave delicate crop seedlings unharmed.

## Minimising Disturbance

In areas that are subject to soil erosion it is usually an advantage to kill off weeds and crop residues rather than plough them into the soil - to minimise disturbance. In plantations and forest nurseries the solution to weed control may more easily be found through the application of sprays that kill scrub, bush and unwanted vegetation.

unique. This is paraquat and it is inactivated as soon as it touches the soil. It is effective against all green plants, acts quickly and can be safely used in climatic conditions as variable as those in all parts of Bolivia.

Non-selective herbicides such as sodium chlorate or sulphuric acid are available but they tend to poison the soil and it may not be possible to plant again for at least six months.

Fortunately, ten years ago British scientists discovered a compound which remains

The influence of paraquat on world food production has been immense. In dilute form it is used as a selective weedkiller on grassland and at full strength to kill pasture to enable another crop to be drilled without prior cultivation. On steeply sloping land it enables weeds to be cleared so that planting can take place by hand.



*'Cigling' apoints on chemically treated tobacco plants to prevent their escape.*

## Insects - Beneficial & Otherwise

Most of the thousands of insects that inhabit the earth are harmless to plants. Some are essential to crop development, others are needed food for other species that are beneficial. But many do have a devastating effect on food crops.

Some, such as locusts, launch mass attacks, often damage leaves and so reduce the plant's effectiveness. Some bore holes in plants above or below ground to lay eggs. Others create toxic substances which can kill plants or, although harmless themselves, are the vectors of plant virus or bacteria.

Many harmful insects can be killed by touching or eating certain chemicals. It is obvious that insecticides can only be used if they are harmless to the pest's plant host or do not affect other insects which might be beneficial. In overcoming this problem scientists and chemists have combined to study the behaviour of beetles, aphids, flies, mites and nematodes and to investigate the effects of the insect and possible insecticides on plant life.

The thorny armour weevil is typical of the biting insect. It tends to feed on the chlorophyll in all foliage and so causes stripes and spots on the leaves. Beetles, such as the elephant varieties that attack palm, also bore holes in which fungi, viruses and bacteria can thrive.

## The Best Known

Aphids are tiny sucking insects that cause leaf roll and discoloration. The pineapple mealy bug causes a spot formation that is found in oil palm, banana, groundnuts and cocoa. Flies also create havoc in growing as well as stored crops: the fruit fly, for example, destroys the tissue of citrus and causes a rapid rotting of the fruit.

DDT, the most known and the most widely used of all insecticides, acts quickly through direct contact or as a stomach poison. Insects, however, do gradually develop a natural resistance to the compound and because residues tend to build up in the soil and on waterways its use has been subject to strong criticism in certain parts of the world.

Nematodes or eelworms are minute invertebrates of the soil that are found in vast numbers in every area of the world. Those that are harmful to plants possess a mouth thorn with which they pierce plants at the root, in the stem or in the leaf. Also, with some nematode species the females are transformed into cysts enveloping the eggs and later the larvae, thus enabling the progeny to survive in the soil for many years.

Once having gained a footing nematodes can cause great damage. In particular, cereals, potatoes, tobacco, coffee, cucumbers, tomatoes, citrus, cotton and bananas seem vulnerable. Nematode infected plants wilt, the leaves fall off and the death of the plant may follow.

Good progress has been made during the last few years in the development of nematocides which are used primarily for controlling root, stem and leaf eelworms.

### Highly Toxic

The most important of the nematocides is chloropicrin which is effective against many root knot eelworms that live in the open. To some extent this chemical can also be used as a fungicide and herbicide but it is highly toxic and has to be treated with caution. This applies to vauva too. It has a broad range of action and is sprayed on to the soil which is then covered for a week while the vapours given off set to work. For safer use, particularly in the

tropics, nemagor can be injected into the soil or broadcast in granular form. It is recommended in the cultivation of bananas.

Mites are a good deal larger than nematodes and can cause great devastation in fruit orchards and plantations. Spider mites are common in all fruits but also attack cultivated plants including cotton, coffee, tea, vine, hops and vegetables. Control has to be carried out either with dormant sprays containing DNOC preparations and yellow oil or with one of the organophosphorus compounds.

Plants, like humans, are subject to illness and most plants disease stem from similar causes: fungi, viruses and bacteria. Fungi are themselves plants but they differ from flowering plants in that they contain no chlorophyll. This means that they are incapable of creating their own carbohydrates and they depend, instead, on food from living and dead tissue.

There are thousands of different varieties of fungi and they reproduce by creating minute spores which attach themselves to the seeds of plants, thus transferring disease from one year's crop to the next. They can also be carried by insects, birds or the winds.

### Specific Chemicals

This knowledge has enabled scientists to produce specific chemicals to control some plant infection. Fungicides can be applied to the seed or soil before planting or to the growing plant and they are made as dusts, sprays or even gases. Numerous copper based products are still used and are unsurpassed as antidotes to mildew fungi, such as blight in coffee and potatoes, yellow spot in sugar cane and brown rot in cocoa.

Other metallic compounds containing zinc, manganese and iron are also widely used to control fungal diseases such as blue mould of tobacco and red fire disease of vines. One of the more remarkable discoveries in recent years has been that of captan. This not only controls a number of diseases such as leaf curl in peaches but also appears to have a stimulating effect on the plant and the fruit eventually bears.

Less is known about bacteria and viruses and the conditions which predispose crops to attack but both cultural and chemical methods of control are being advocated. Inoculation against mosaic virus in tobacco, tomatoes and some ornamental flowers, for example, is now a practical proposition.

The protection of plants against pests is an immense and complicated subject. It is evident that many controls have been perfected but they depend on a correct diagnosis of crop problems or anticipation of attack that may occur. The correct remedy or prophylactic has to be used in the right way at the right time and this is advice that can only be given by experts with knowledge of local conditions. Given that, much of the world's lost and much needed food could be saved.

## ANTS HELP TO DETECT WATER

Entomologists were greatly surprised when they established that ants living in the sun-scorched deserts of Kazakhstan, a republic in the south eastern part of the U.S.S.R. eat only wheat, goat seed and wheat grass seeds. Specialists well know that the insects soak the seeds in water before eating. But when they dig up the water in the desert?

It has turned out that the reaper ants inhabit only the parts of the desert where underground sources of water are available, to which they dig up passages up to 30 metres deep.

This feature of their life is now being used by man for practical purposes: colonies of ants serve as reliable indicators in a search for underground sources of fresh water for the needs of livestock raising on distant pastures.

But it has also turned out that the six-legged vegetarians have another secret: the seeds kept in the humid "storerooms" of the ants, set up in direct vicinity of the ground waters do not germinate. The same seeds delivered to a laboratory, gave shoots within a couple of days. The scientists assume that the ants treat their "harvest" with special substances which prevent them from germinating.



# FARMSTOCK

AGRIC MONTHLY

## ORDER FORM

Gentlemen:

Please enrol me/us, as a subscriber to Farmstock  
1 year ₦3.00; 2 years ₦5.30 postage included in  
each case please. Airmail rate, on application.

Signed: \_\_\_\_\_

Occupation: \_\_\_\_\_

Position: \_\_\_\_\_

Name: \_\_\_\_\_

Address to which Journal should be sent;

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Number of subscriptions required: \_\_\_\_\_

I enclose money/postal order No: \_\_\_\_\_

for the total amount of ₦ \_\_\_\_\_

Return this form with your subscription to:-  
FARMSTOCK MAGAZINE, Ijamido Publishing Co.  
17, Abeokuta St., P. O. Box 79, EB. Tel. 43805, Nigeria

All money or postal orders make payable  
to IJAMIDO PUBLISHING COMPANY

to meet the needs of the people who form them rather than to provide a high return on investment, the profits are limited and all net savings are distributed among the patrons.

Also, cooperatives operate democratically; each member owner has one vote and only one in mutual decision-making, regardless of how many shares he may own.

Following is a description of the work of cooperatives in advanced societies explaining how a basically simple concept has become a progressive economic force.

Today cooperatively owned enterprises in which families have pooled their needs for a specific service or type of goods can be found in almost every community.

# What Is A Cooperative?

by A Special Correspondent

Any time people voluntarily join together to pool their resources and mutually reap the benefits this is a cooperative effort. In this modern age a cooperative is usually an economic enterprise formed by a group of people faced with a common need, who decide that the best or only way to fill that need is by organizing to supply it directly to themselves.

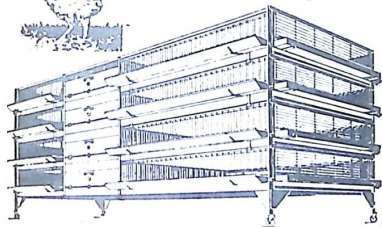
*The members of a cooperative are shareholders who own, control, and patronize their own enterprise. The more people who participate in ownership and patronage, the better off all of them are.*

Therefore membership is open to all who require the specific services.

Because cooperatives exist

*Continue on page 12*

## EVERYTHING FOR POULTRY & FARMING



Day Old Layers, Broilers and Turkeys  
Metal Cages, Feeders, Brooders, Incubators,  
Egg Graders, Feedstations and Silos. Tractors,  
Trailers, Agricultural Machinery, Sprayers,  
Irrigation Equipment, Seeds and Chemicals.

# DIZENGOFF

28, Greek Road. Tel 42080, 42089, Apapa  
Ibadan: 9 Magazine Road. PMB 5184,  
Enugu 35 Zik Avenue P.O. Box 139.  
Benin: 2 Ibiwe St. P.O.B. 206  
Kano: 10a Palmer Road.

KADUNA PORTHARCOURT CALABAR.



Continue from page 11

# What Is A Cooperative?

## Worldwide organisation

In fact, many use co-operatives in a greater variety of ways than any other form of association. Cooperatives are important in the economy of some states, i.e. Western Europe and Scandinavia.

Let's look at a family which is putting the co-operative idea to work.

The family's garden apartment is located in a co-operatively owned housing development. They moved in a year ago and have found that their monthly payments are some 15 percent lower than the amount they would have had to pay for rent - if they could have found a comparable apartment for rent.

The rooms are large enough for their present needs and if they want a larger apartment they'll be able to move to one in the same co-op. If they want to leave, they can retrieve their investment.

The head of the family financed the initial investment in the apartment through his employee credit union, a co-operative in which he deposits money every payday. The credit

union also financed his car at a lower rate of interest than the family would have had to pay at most financial institutions.

They buy their groceries, drugs, and home equipment - and the co-op buys its fuel oil and lawn supplies - through a co-operative the farmers of that area organized years ago to meet their own needs. By now many farmers have left the region, but suburbanites like this family are helping to maintain this mutually owned business.

Recently, they bought a refrigerator through the co-op. The wife was delighted to learn, at the end of the year, that the family's patronage refund on the year's purchases at the co-op, equaled a week's free shopping there!

## Health

The factory at which her husband works helped to finance a group health centre through contributions to a health and welfare fund, so they receive regular check-ups and free medical bills are prepaid through his monthly dues.

When their son developed a serious chest illness, the health centre doctors had the boy's medical record on

file - and the bill was already paid.

They also bought eyeglasses at the health centre for about half the amount they would have had to pay elsewhere. And when grandpa died, what might have been a serious financial setback was averted by the husband's membership in a local 'E su su' society through which the family had prearranged for funeral services.

By pooling their needs with others, people protect themselves against some of life's economic hazards. At the same time, they build their own community institutions in which they have a voice and vote equal to those of other members.

Most of the millions of families in foreign countries who own shares in one or more cooperatives can report benefits similar to at least some of those described here, but not many families can duplicate them exactly.

Cooperatives are scattered, and few families put the co-operative idea to work in many ways as those who live in this example of a housing co-op.

But not even this family and their 'big' brothers have exhausted the possibilities. Since their co-op community is relatively new, they have barely tapped the many ways in which they can save money and make life more fun. They have already built a small library in their community club room. They could organize a baby-sitter exchange. Today young parents often form a group to "rot" for each other. They keep a record of how many hours each family sits and build up "credit" in the hours bank.

Out of such arrangements cooperative nursery schools often develop. Parents hire a teacher and learn much about child rearing from sharing some of the teaching and programming responsibilities and maintaining equipment of the school.

# COOP

## FARMSTOCK

congratulates the

### COOPERATIVES

all over the Federation, on their various achievements and welcomes each group, society and union to its pages.

*Managing Editor*

**PRESERVATION !  
IMPREGNATION !!  
TREATMENT !!!**

All means same to us and it is our interest to give your Sawn-timber for building, bridges etc. Vacuum-Pressure treatment with good penetration to make it last long.

Fencing poles for agricultural purposes are also available in large quantities for your requirements.

**CONTACT US AT :-**

**NIGERIAN WOOD PRESERVATION INDUSTRIES LIMITED**

*FACTORY :-*

OREGUN ROAD,  
OLUSHOSUN VILLAGE, OJOTA,  
IKEJA. TELEPHONE No 49813.

*POSTAL ADDRESS :*

P. O. BOX 2459,  
LAGOS.  
TELEPHONE No 32760 & 32761

# BUILDING HAPPINESS

## A Special Article for FARMSTOCK by APN

This is what old people say: God All-Mighty forgot to allocate land for Letts. Then, when he created the world, he turned out his pockets and threw some sand, stones and clay to them.

*Rain came and glued it all together and the Latvian land was ready. Then God gave a spade to Lett and told him: "It's not a bad place, is it? You'll have to do some finishing touches here". And Lett has been doing it for thousands of years since then.*

Their land had always been like a wicked step-mother for the people of the Baltic. Only recently, when they threw away the spade and started using machinery it became their loving mother.

It happened after the establishment of Soviet power. Then, following the example of their neighbours - Russian and Byelorussian peasants - they began to join the collective farms on the voluntary basis.

The Latvian peasants, formerly oppressed and downtrodden, started building the happy life they live today at their collective farms. Now their life is full-blooded and prosperous. Edgar Kaulins, chairman of the Lacplesis collective farm, Hero of Socialist Labour, is telling how it all happened.

I keep a protocol of the meeting of our peasants who decided to organise a collective farm in 1948. Then Andrei Purgails, the best educated of the local peasants, wrote the following into the protocol: "Fifteen peasant families united into a cooperative. They have 10 horses, 20 cows, one Lanz-Bulldog diesel tractor, with a thrasher, and 20 horse-driven ploughs.

Now, when people ask me what the Soviet power gave the peasants, I always tell them what changes have taken place at our collective farm that bears the name of Lacplesis, the hero of Latvian epos, and what it is like today.

Our collective farm has almost 60 tractors, thirty trucks, and nine harvester combines, about which the local

peasants only heard before. Electricity has become an indispensable assistant of the tiller of the land. As many as 434 electric motors with the total capacity of 1,214 kilowatts are serving the farmers. The collective farm consumes 337,000 kilowatts of electricity a year.

When the Latvian peasants became the full masters of their lands, when they equipped themselves with machines with the help of the Soviet Government, they managed to make their poor land fertile.

In the past peasants of Latvia made several attempts to cultivate the marsh-riden lands unsuitable for sowing. They even organised a land reclamation society. But there was only lot of talk and no action.

The society could not come to an agreement where to build a drain. Besides, it got no assistance from the government.

Now the collective farm has a team of 25 land reclamation specialists. The team has at its disposal three excavators, a stubbing-machine and a bulldozer. They conduct their work on a scientific basis, under the supervision of a specially-trained technician. In a single decade they drained almost 2,000 hectares of lands.

The collective farm has the total of 3,300 hectares under crops. Their land is no longer a wicked step-mother, it has become generous to them. In 1971, for example, the members of the Lacplesis collective farm gathered 402 centners of grain, 300 centners of potatoes and 500 centners of turnips per hectare.

But, as the peasants say, the land feeds us, but it also asks to be fed. In the past the Latvian peasants, did not even know that the plough-land needed mineral fertilizers, and they gathered six to seven centners of grain per hectare. Now each hectare

gets 10 tons of organic fertilizers and two centners of mineral fertilizers. In short the village has been industrialised.

Each contemporary Latvian collective farm is a big and versatile agricultural enterprise. Lacplesis is not an exception. Structures that look like modern industrial enterprises from a distance have become a part of its landscapes. These are big cattle-breeding farms, vegetable- and fruit-processing shops, and hothouses. The collective farm production has an industrial basis.

That is why it is intensive and economically efficient. The peasant's work differs less from that of the contemporary industrial worker's in its nature and remuneration. And not only work, for that matter, I must say that the collective farm's annual monetary income exceeds two million roubles. Guaranteed payment for work has long been introduced at the collective farm.

Wide use is made of bonus fund made up of the 30 per cent deduction from the net profit gained by the artel. The average annual wages of the collective farmers are growing from year to year. We pay the average of six roubles a day to field workers, seven- to milkmaids, and even more to our agricultural machinery operators. Anna Dreiere who work in the field, for example, got almost 3,000 roubles last year together with extra pay, while the earnings of Vilija Struce constituted 3,176 roubles.

A modern village grew up on the banks of the Daugava. There are more than a hundred cottages and multi-storeyed residential houses, and asphalted streets and roads.

Practically each family has a motorcycle or a car, modern furniture, refrigerators, radio and TV sets.



A general view at an agricultural show

# Nigeria needs Agricultural

Two momentous occasions have just come off recently in Nigeria. The two occasions separately and jointly have put Nigeria conspicuously on world map.

*It is likely anyone was still at sea about the location of Nigeria, these two occasions have done a prominent correction.*

*The first informative occasion was the All Africa Games*

*While it was not an in some and extent, visitors, sports enthusiasts and tourists flocked in. They all have returned to their homes and their impressions and tall stories could for long be educating their nationals about Nigeria*

*was the other and more recent occasion was the All Nigeria Sports Festival. These two festivals have come and gone. Others are coming.*

*A big Trade Fair and An All Nigeria Arts Festival are also coming. On these happy occasions, kitchen staff, all those who see to the comfort of everybody are usually left out in the cold. They will listened to "Vote of thanks"*

*Such negligence still happens in all walks of life. This brings to our attention the success of the All Nigeria Trade Fair.*



# a National Centre

*suggests Abiodun Ojugele*

*Managing Editor — FARMSTOCK*

gathering — or what have you? — depends on agriculture. Victuals, refreshment, and most prizes come from agriculture.

## STADIA, EXHIBITION CENTRES

Sports and Trade are so well organised and have stadia and Exhibition centres with a view to promoting internal cohesion and co-operation from overseas, how much more is the means of sustaining life itself?

entis set up for Agricultural Shows, Fairs and similar activities is now a national need more than anything else. Why? Because the whole nation has to feed, and production has to be organised.

While any other aspect of life can be neglected for sometime without any bad consequences, feeding cannot therefore become imperative to effect ways and means of continuously improving such a consequential factor in life.

In all foreign countries Agricultural Shows are very important annual events attracting attention from district to national and even international levels. How is it done, what is the usual size of the permanent site and what not?

English standards readily offer useful guide as they have done on other problems. I will therefore add a recent account and history of the English National Agriculture Centre which reads thus:



## BEFORE THE VETERINATION COMES

**L**ivestock producers often don't get their money's worth from their veterinarians' services, and veterinarians are the first to admit it. However, the fault usually lies with the producer - there are many ways pig breeders can help get more value from each call if they know when to call the veterinarian and what to do before he comes.

### Be Prepared

Replies to some questions answered by some veterinarians show in most cases they are called too late - when only a "near miracle" would save the sick animal. They recommend isolating suspected animals at first sign of disease, then calling a veterinarian immediately.

Before your veterinarian comes, compile as much history as you can, including temperature, breathing, appetite and other reasons why illness is suspected. Also be prepared to answer all his questions.

Describe all previous treatment and be prepared to move or handle sick animals if needed. After the veterinarian leaves, follow his instructions carefully.

### Disaster Calls Are Costly

Treatment made when the sick animal is almost dead or an infection has already spread throughout the herd are costly. If the animal dies, you lose three ways. If the service is paid for you lose that fee which has to be paid, you also lose cost of medicine, and the animal.

Management aimed at preventing diseases is the best solution to disease problems. Since veterinarians are trained in causes and the nature of diseases, they not only cure sick animals, but can help you prevent diseases from eating up profits.

Many top pig producer are adopting "cradle to grave" disease prevention programs to stop diseases. If no planned programmes are available in your community, your local veterinarian can still provide valuable counsel regularly.

### Don't Buy Trouble

Many pig diseases are purchased, says a notable veterinarian. Pig health experts agree it may pay to have your veterinarian observe the herd from which you are buying. Buy breeding stock from a few herds as possible (one is best), and insist upon

evidence of freedom from disease, such as general disease certification programmes, brucellosis, validation or SPF certification. Purchase breeding stock at least 30 days before breeding time and if possible, isolate 6 weeks in clean, disinfected quarters. High level antibiotic treatment before mixing with other breeding animals may save some headaches.

Feeder pigs should be isolated at first 4 weeks. Consult your veterinarian for medication to be used in feed or water for the first few days to help overcome stress of shipment. Also having a veterinarian observe pigs during the first 2 weeks helps catch disease problems when they can be treated successfully. Avoid contact between feeder pigs and breeding stock.

### Cut Off Disease Sources

Keeping diseases out reduces veterinary bills, animal losses, and boosts feed efficiency and weight gains. Since diseases can be imported to your farm in many different ways, it pays to know how to cut off those disease sources.

● Disinfect instruments before use and between animals. Dirty instruments used for castration and vaccination may introduce disease such as malignant oedema and tetanus.

Equipment like syring needles, teeth nippers, markers, feeders and creepers used on or near infected animals may carry diseases.

● Don't let your farm service females from other herds or let outside sires service your females. Sexually used may infect female.

● Keep your dog at home at all times. Dogs may eat home parts of carcasses infected with diseases like transmissible gastroenteritis.

● Dispose of dead animals by licensed, properly equipped scavenger trucks or by deep burial - at least 6 feet with carcass spread with lime before covering - or by complete burning.

● Keep trucks and carts out of your barnyard. Trucks may drop parts of carcasses that died of contagious diseases.

● Keep visitors out of your buildings or ask them to wear disinfectant solution and plastic boots before entering. Visitors can carry disease germs. Quarantine the farming house free unnecessary traffic. Take care to clean and disinfect shoes, clothing and truck tires. sales barns, markets and other possible sources of contamination.

● Clean floors completely twice weekly during wintering of manure and bedding. Clean and disinfect build-

and equipment thoroughly after each period of use allowing buildings to remain idle 7 days to 3 weeks according to specific needs and how well cleaning and disinfecting are carried out. Sunlight and fresh air help kill germs.

● Establish a chore pattern to avoid tracking disease organisms from one lot of pigs to another. Work in farrowing-nursing houses first each day, then growing-finishing units.

### Don't Forget Management

Veterinarians say they frequently find poor nutrition under poor management conditions. Use a complete well-balanced ration - a combination of feed - to furnish needed individual nutrients under varying conditions. Provide free access to clean, fresh water with adequate salt and minerals.

During cold weather provide pigs with dry, well-bedded, draft-free quarters. Keep small pigs off cold, damp floors. During hot weather provide adequate shade. Install a spray on concrete or wooden floors, or wet ground under dirt shelter daily.

Keep pigs out of filth such as stagnant pools or old wallows used year after year. Avoid dusty quarters for all pigs, especially little pigs. Farrowing houses should be comfortable at all times, well ventilated and draft-free.

Routine house and mouse control pays off. Don't wait until pigs are heavily infested before treating. Spray or dip (young pigs) in effective chemicals used according to the manufacturer's label instructions.

Good management, sanitation and wise use of a veterinarian's services tied together in a disease-control programme can add more aura to a producer's pocket book than they cost. Sound immunization, nutrition and management practices improve efficiency and reduce incidence of diseases. Calling the veterinarian early helps check the spread of disease.



## NEW FARROWING CRATE CUTS MORTALITY

*A British company Beacon Trailers, England, specialising in the manufacture of farm buildings has designed this new tethered farrowing crate which is claimed to reduce drastically the mortality rate among new born piglets.*

*The crate, which is a simple tubular frame attached to the walls of the farrowing box and tethered to the sow, replaces the more complicated farrowing unit that completely boxes in the sow. With the new farrowing crate, the sow has much more freedom, but the harness, which slips over her head and tethers her, prevents her from turning round or sitting down.*

*"The idea of the crate is, of course, to protect the piglets when born and during the six weeks suckling period," said Mr. R. N. Mackey, managing director of the company. "We have tested during the past year and our results show an amazing improvement in litters averages."*

*"The national average in Britain for reared litters is approximately 7.5 but we are maintaining an average of 10.4 in each reared litter. Very few of the piglets are crushed with the new system," he added. For further details contact FARMSTOCK (New Products) please.*

# Agric.

## GARI WILL REPLACE CORN IN LAYERS RATION

**U**p to 60 per cent cassava root meal can be incorporated in a layer's ration, according to trials at the Gleadthorpe experimental husbandry farm in Nottinghamshire, England.

In trials with 720 white-egg pullets fed on one of four rations containing 0, 20, 40, and 60 per cent cassava root meal, there was no significant difference between egg production, feed consumption, average egg weight, shell quality or mortality.

One snag of the ration containing 60 per cent cassava was that it contained no maize and therefore yolk colour was poor.

A n artificial colouring agent could be used to remedy this deficiency although this would naturally increase the cost of the ration.

Another possible drawback is that cassava can contain high levels of prussic acid which can be toxic to poultry.

Fortunately, the sample used in the experiment contained only 0.9 parts per million prussic acid which proved to be an acceptable level.

Other trials at Gleadthorpe have shown that up to 78 per cent of wheat can be included in a layer's ration without any significant effect on egg production or egg weight. But if wheat is to be the sole cereal ingredient in a ration, it is essential that it is a good quality product.

### Good Hay Vital For Sheep

**T**he importance of good hay as feed for sheep has been underlined in trials carried out at the Edinburgh School of Agriculture which suggest that no amount of extra concentrate can make up for poor hay.

The experiments were carried out at the School farm by senior lecturer

Dr. Murray Black and Mr. John Ferguson.

Over 500 ewe pregnancies were involved, the idea being to determine the feed value of different types of hay quality and to see if it was possible to decide how much concentrate was required for each of the different types.

The four types of hay tested were graded 1 (excellent), 2 (above average), 3 (below average) and 4 (very poor). It analyzed out as:-

	( ENERGY ) (starch equivalent)
Hay	( in dry matter )
1	60
2	45
3	30
4	20

Crude protein (%)	Digestibility
14.8	65
8.6	60
8.5	57
7.7	48

The Scotch Half-bred ewes which weighed on average 165 lb and were in good

condition averaged 2 lambs in two years of trials, and their voluntary intake during the latter stages of pregnancy showed that the ewes on the two poor-quality hays were not able to sustain their needs.

The results showed, said Mr. Ferguson, that ewes like dairy cows, eat more of the good quality roughage and less of poor quality.

And while the enormous weight loss of ewes fed on the poor hay without concentrates indicated the ewes' potential to draw on body reserves, such losses meant that the ewes were unable to meet their lambing requirement at peak lactation.

Body reserves at that time two to three weeks after lambing, were essential.

Mr. Ferguson added: "These trials also show that ewes fed on poor-quality roughage will not have sufficient body reserves to

# Notes

er low concentrate is  
as supplement."

Nor would any amount of  
extra concentrate which was  
fed subsequent to lambing  
allow the mother to pro-  
duce the maximum possible  
milk yield.

In fact the lambs from  
ewes fed good quality hay  
only, surpassed those on  
poor hay with high concen-  
trate levels.

## Animal Air Transport Code

International guide-lines  
are expected to be  
announced soon for the  
transportation of livestock  
by air.

This follows the first in-  
ternational veterinary con-  
ference on the transport of  
animals by air held earlier  
this month at Copthorne  
Sussex, and at Gatwick and  
London (Heathrow) airports.

At Gatwick the visiting  
experts saw what is claimed  
to be the most sophisticated  
equipment available for  
airying livestock by jet.

## 1.75 Million Tonnes Of Chicken

High protein poultry  
meat totalling 1.75m  
tonnes will be produced  
throughout the world this  
year from a strain of broiler  
chickens developed by a  
Norwich firm.

The strain is the Ross 1,  
of which about 1,000 mil-  
lion broiler chickens will be  
produced for human con-  
sumption this year, at an  
average individual dressed  
weight of 1.75 kg.

Of the 325 million broiler  
chickens produced annually  
in the UK, more than 70  
per cent is the progeny of  
Ross 1 breeding stock.

The Ross 1, developed  
by Ross Poultry Limited, of  
Imperial House, Norwich,  
was introduced in the mid-  
1960s and is used in about  
40 countries, many of which  
have their own breeding  
establishments.

## Methane Hitches

A warning that the process  
of converting methane gas  
produced from poultry

manure into a useful source  
of farm energy is not as  
simple as sometimes thought  
has been issued by Britain's  
Agriculture, Development  
and Advisory Service.

Mr. Denis Willows, a  
regional mechanisation  
adviser, has told farmers that  
the organisms which break  
down organic waste to  
produce methane, carbon  
dioxide plus various other  
volatile products, require a  
temperature of around 35  
degrees Centigrade to operate  
at their optimum level.

Unfortunately, little heat  
was produced during the  
fermentation process and so  
supplementary heat and  
insulation of the containers  
holding the mixture was  
deemed to maintain the  
right conditions.

Unfortunately, said Mr  
Willows, if the surplus  
methane was to be used for  
space heating of livestock  
houses, heat was needed  
most when ambient  
temperatures were lowest.

## More Birds Fewer Eggs

Egg production falls when  
the stocking density of  
birds in cages is raised or  
when colony size is increas-  
ed, according to research  
in England.

In trials over four years  
at the Gleadthorpe experi-  
mental husbandry farm,  
Mansfield, Nottinghamshire,  
birds of two different strains  
were kept in cages of six  
different sizes, ranging from  
16 by 18 inches to 32 by 72.

Each of the cages was  
given two different stocking  
densities - 24 and 36 birds  
in the 32 by 72 inch cages,  
for instance - one usually  
being 50 per cent higher than  
the other.

Increasing the stocking  
density reduced feed con-  
sumption by about 2 per cent  
and had an even greater  
influence on egg production.  
Egg numbers were cut by  
3.3 per cent in the case of  
lightweight birds and as much  
as 5.4 per cent with birds of  
the heavier strains.

At both stocking rates,  
production declined prog-  
ressively as group size in-  
creased, with birds in the  
smallest groups of three and  
four birds per cage laying  
10 per cent more eggs than  
those in the two largest  
groups of 24 and 36 birds  
per cage.

Egg cracks were 25 per cent  
higher in the larger cages  
with little difference between  
the stocking rates. Group  
size did not affect mortality  
at the moderate stocking  
density; but at the high  
stocking density, mortality  
was 7.5 per cent in the  
smaller groups and 12.2 per  
cent in the larger groups.

## LETTERS

# Allow Foreign Grain in, please

Dear Sir,

For some time now much noise has been made about grain shortage in this country that one feels by now the noise ought to have died down due to an overflow of grain but the noise persists.

One is therefore moved to offering suggestions perhaps such have been lacking. The easiest approach to this problem will be to allow foreign grain to flow in. Now we import flour for bread among a variety of other necessary commodities. Since grain has shot up to become a very important commodity, it too must come under priority list.

Paying for grain should present no problem in view of our oil.

Nevertheless, a vigorous effort must be made to produce grain (particularly maize) in great quantities, this will be a long term project since production takes some time, but once started the pace must be kept to ensure a reserve that can be fallen on in time of need.

As my car sped past the van in the opposite direction, I consoled myself that

I would get all necessary information through your medium - FARMSTOCK

Will you please let me know what the Authority busies itself with?

Ibadan O. P. S. Kallio

## CAMPAIGN ON FARMING NEEDED

Dear Sir,

Let me point it out to our authorities that if they will spend some time and money on campaign for more to take to farming, the response and yield will be astonishing.

Not a few are on the crossroads on what to do to keep body and soul together. It is good planning to set up the National Manpower Board or so to theorise on what to do with who and who. But without drilling people into certain jobs, free choice should be encouraged as a

## GOOD-BYE CHICKEN!

Dear Sir,

About a year ago many could boast of having taken a feat at least within the last one month. The hope of many was rising that good food would soon be at the reach of everybody.

Unfortunately something happened and at first just a few farmers folded up but gradually a trickle changed to a daily occurrence. A chicken meal is becoming a rare event all because the price of a chicken has gone up. Who is to blame?

Definitely not the farmer who is in business to make money. If a venture proves unprofitable he is right to blame for charging products.

And so, as an ordinary worker, I bid the ever tasty chicken goodbye from mine and other fellow countrymen's tables.

Odeda

A Village Teacher

## TOMATOES

Sometime ago, about three years precisely, your esteemed paper, Farmstock, announced to everyone's pleasure that a huge tomato industry was about to start in the Ora area of Mid West.

Among others, I jumped for joy that a job was coming to my doorsteps, that I would benefit even remotely from the scheme.

But unfortunately since then nothing has been heard. I scouted round and asked people if anyone had heard anything about the enterprise and the progress made so far. Unfortunately no one has heard anything.

Shall we take it then that the 'shouting' was out to catch headlines?

Bom—Bom

Agbor

D. Sinaa Agbor

N. N. Iweona

*Editors Note:* Some business collapse halfway to being launched may be the one is like that or some thing is still forth coming.

## Nigeria Meat Authority! What is it?

Dear Sir

Recently I saw a van with an inscription not unlike Nigerian Meat Authority. Before I could read proper-

result of serious propaganda on each aspect of our economy.

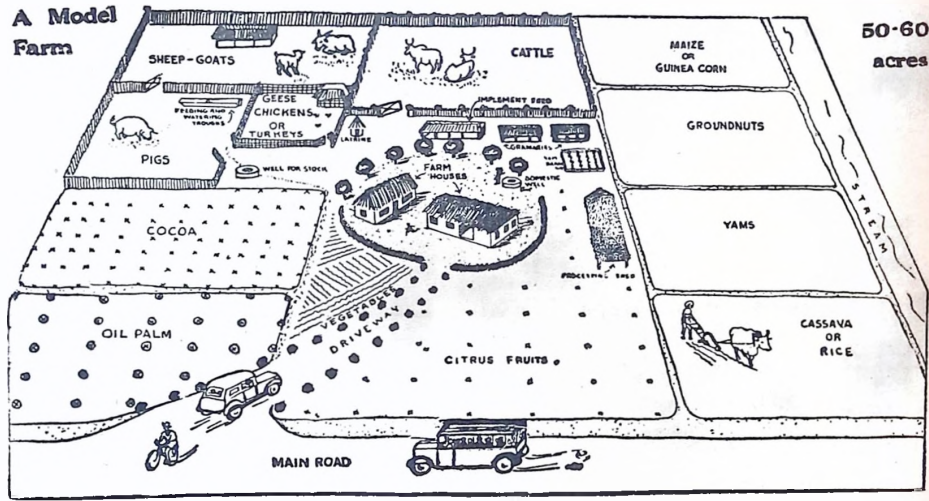
Farming is a case in point. Chalk off a big portion of the open countryside and allot to interested farmers. Provide money to till and farm, urbanise the farms to attract educated youths to farm. Initially encourage later. The earlier the various governments do something about farming the better.

Joe

Hassan Bawa  
FARMSTOCK

# A Model Farm

50-60 acres



# POULTRY MANURE AS CATTLE FEED

by Laurie Tester  
*A British agricultural journalist*

Ten thousand layers in cages produce something like 500 tons of manure in a year and while it should be a valuable by-product, contributing to the profit of any flock, too often it is an embarrassment which merely adds to the workload without adding anything to the financial return.

*But one solution to the problem which more and more United Kingdom egg producers are adopting is to dry the manure mechanically and sell the output to compounders for incorporation in rations for livestock feeding.*

Although the practice receives little publicity because of the risk that it might attract criticisms on aesthetic grounds, a significant number of compounders are already incorporating poultry manure in their rations

There are no accurate or official statistics to show just how much poultry manure is utilised in this way but one authority, Dr Robert Blair of the Food Research Centre in Edinburgh, Scotland, estimated in early 1974 it could possibly be as much as 7% of national production. Moreover, he believed the level was rising quickly because of the very high cost of protein feedstuff.

## Recycling Justifiable

Recycling manure through animals can be justified on two important counts - it is a useful source of nutrients and it alleviates the problem of pollution. Any farm manure can be recycled but dried poultry manure has the highest content of both nitrogen and minerals and, there-

fore, appears to be the most suitable for feeding purposes.

## Analysis of sample of dried

poultry manure shows that crude protein content can vary from 15% to as high as 37% with an average of 27%. Although two-thirds of the nitrogen is present as non-protein nitrogen, which is of no value to poultry, it is a useful feed for ruminants.

For instance, in trials in

Lancashire, north west England, by Britain's Agricultural Development and Advisory Service no difference in either the quality or flavour of milk or the bodyweight of the

animals resulted from feeding dairy cattle a ration in which dried poultry manure was the sole source of supplementary protein.

And though the yield of milk was 7% below that of similar cattle on a control ration, it was estimated that this was largely, if not entirely, offset by

savings in cost resulting from substituting the dried poultry manure for soyabean and groundnut meal.

## Cutting Production Costs

Further trials incorporating lower levels of dried poultry manure indicated that an inclusion rate between 10% and 20% of a conventional 4-pound gallon (400g/l) dairy ration was unlikely to lower either the yield or quality of milk - and would almost certainly reduce the production cost.

Dried poultry manure has even more potential value in fattening rations, for beef cattle and sheep rations require the high quality proteins included in such rations. But one limitation of dried poultry manure is its low energy value and consequently, care must be taken not to incorporate too much in a beef ration.

For instance, in trials at both the Boxworth and Drayton experimental husbandry farms in Cambridgeshire (eastern England) and Warwickshire (English midlands) respectively, beef cattle fed barley rations containing soyabean and fish meals as additional protein constituents achieved a daily liveweight gain of 0.5 pounds (225g) more than did similar cattle fed a ration in which the protein was supplied by dried poultry manure.

However, the explanation for the disappointing results was soon apparent. The dried poultry manure used had a crude protein content of only 24% and consequently had to constitute more than a quarter of the ration.



make to achieve the required crude protein content of 14.5% for the entire ration. This meant that less barley was fed, depressing the energy level of the ration to below the required for economic weight gain.

### Significant profit margin

In a subsequent trial, dried poultry manure with a crude protein content as high as 32% was used. This allowed the inclusion rate of barley to be boosted to more than 80% and, although their daily liveweight gain and feed conversion were both inferior, the animals fed this experimental ration made significantly more profit than did the steers on the conventional ration.

A big advantage of dried poultry manure is its high mineral content. Further supplementation of the rations is rarely necessary and the one possible exception of sodium can easily be rectified by providing a salt lick.

Other trials in England have demonstrated the value of dried poultry manure as an ingredient in sheep rations. At the Lancashire School of Agriculture for example, although lambs fed a ration containing 25% dried poultry manure achieved a carcass weight of only 30 pounds (13.6 kg), compared with 32 pounds (14.5 kg) on a normal commercial ration, they consumed only 104 pounds (47 kg) instead of 168 pounds (76 kg) of feed and, consequently, achieved not only a better feed conversion but also made three times as much profit.

Despite its value as a nutrient source, it is important that dried poultry manure is fed with care. For instance, Dr. C. B. Fairbairn, a Ministry of Agriculture nutrition chemist, has warned British farmers against feeding it to cattle under three months old. Calves do not become full ruminants until they are seven or eight

weeks old and in any case there could be a risk of transferring salmonellae organisms to cattle as young as this. It is also important that the manure does not come from poultry fed arsenicals.

### Waste Litter

Waste litter from deep litter houses can also be an economical feed for ruminants. Although the daily liveweight gain or autumn-born steers in one trial fell from 1.16 kg to 1.09 kg when they were fed a ration in which half the normal protein supplement replaced by waste litter, the ration proved to be more profitable because it cost 12% less.

But Dr. Fairbairn says it is important that the litter should not be fed to lambs if it has come from houses where broilers have been given high levels of copper.

Provided a few simple safeguards such as this are followed most authorities in Britain believe dried poultry manure has a considerable promise for ruminant feeding. Although it is not such a useful feed for non-ruminants, trials at the Harper Adams Agricultural College in England indicate that 5% can be included in pig rations without influencing growth rate, feed conversion or carcass quality.

And though waste litter from deep litter houses depressed both growth rate and feed conversion when fed to pigs at the Aberdeen School of Agriculture in Scotland it was calculated that its inclusion in rations could be justified economically provided its cost was less than 30% of the cost of conventional ingredients.

### £200 Million Savings

Many experiments have also indicated that dried poultry manure can be successfully incorporated in poultry rations. However this can be wasteful because, although the conventional

ingredients of a poultry ration are low in fibre and at least 75% digestible, the digestibility of dried poultry manure is only around 3%.

It is believed that the annual out put of poultry waste in Britain is about two million tons and it has been calculated that if this were all processed for feeding to ruminants the saving to the country in terms of imports of proteins could exceed N400 million a year.

Obviously a very important limitation to the use of dried poultry manure could be the risk of taint. Fortunately, tests at Strathclyde University in Scotland have been unable to detect any objectionable flavours in either the meat of lambs or the milk of cow fed rations containing 25% dried poultry manure. And elsewhere in Britain it was found impossible to detect any flavour differences in beef from animals fed similar rations.

In our next issue of

## FARMSTOCK

October '74 Edition

we shall start a series on:

1. Electricity in the service of the farmer.

2. An interesting article on how electricity can influence harvest.

MANAGING EDITOR

# NATIONAL AGRIC CENTRE

only about three originated outside the British Isles.

"Viewing days" are arranged at the centre at regular intervals so that farmers and others may have opportunities to see the permanent demonstrations throughout the year and not just at show time.

## THE "NATIONAL" AGRICULTURAL SOCIETIES

Over the centuries, British agricultural discoveries and methods have had a considerable impact on the development of farming techniques throughout the world.

British stock-breeders and geneticists for instance, have long been at the forefront in the breeding of pedigree animals - it is claimed that of the 20 main breeds of food-producing livestock throughout the world today.

Similarly, Britain is one of the world's largest exporters of agricultural machinery and tractors.

Among the organisations which have stimulated the application of science to farming and spread modern agricultural knowledge in Britain and overseas are the four "national" agricultural societies covering England, Wales, Scotland and Northern Ireland, each of which is incorporated by Royal Charter.

Of these, the Royal Agricultural Society of England, founded in 1838, and the older but smaller Royal Highland and Agricultural Society of Scotland, founded in 1784, are the most influential.

Both are the examining bodies for the National Diploma in Agriculture. Their learned journals, published since their foundation are widely read at home and abroad.

The Royal Show, organized annually by the Royal Agricultural Society of England (of which six successive British monarchs have at times been president), has achieved a very high international reputation.

Until 1963 impact was limited, however, by its having been staged at different centres each year. In 1958, the society's council began seriously to question the society's role in present-day Agriculture and to reconsider its influence in Britain and in the main farming centres overseas.

## THE ROYAL SHOW

The first permanent Royal Show at Stoneleigh was held in 1963. Since then the show has become increasingly international.

The show's administrative, business and social focal point is the main concourse, situated just behind the grandstand and grand ring. The concourse includes shops, a bar and restaurant and other facilities.

It also accommodates pavilions for official, exhibitors and others, and includes one - the International Pavilion - which provides facilities for the reception of overseas visitors and trade missions.

The society's council appoints export stewards to advise overseas visitors at the Royal Show and travel extensively abroad throughout the year, making contact with embassies, high commissions and other British diplomatic posts, as well as with persons or organisations wishing to consult them.

The society believes that these personal contacts have a two-fold effect: overseas buyers are kept in contact with latest farming developments in Britain, while the export stewards themselves benefit from observing improved techniques developed abroad, and so are able to gauge more precisely those needs which British industry can best supply.

The foregoing article on the English National Agricultural Centre is descriptive in tone. Nigeria in her position in African affairs will be adding another proud claim to her string of achievements and leadership if she sets up such a centre in double quick time. She has the men and resources.

If sports competitions and Trade Fairs have their psychological benefits, those arising as a result of Agricultural Shows are usually ostensible proofs - better crops better livestock, scientific processing and preservation of produce culminating in lowering of prices.

Nigeria needs a National Agricultural Centre. The Centre can be anywhere in the country on a site that will satisfy many questions.



## Dependable distributors wanted to sell fast moving magazines

1. **FARMSTOCK** — AGRICULTURE AND  
COOPERATIVES' MONTHLY
2. **BEACON** — BUSINESS MONTHLY

*FOR FURTHER PARTICULARS APPLY TO*

The Circulation Manager  
IJAMIDO PUBLISHING COMPANY  
17, Abeokuta Street, EB.  
P. O. Box 79, EB,  
Nigeria.

# Laugh!

## Three

## Crops

**O**n one of the glass panes of the main door into a large store, I encountered a small yellow sticker which read: "By the time you have finished reading this, you will have made an idiot of yourself going round and round and round and round in this revolving door."

X X X

**T**he fortune-teller, after demanding \$10, told her patron that he was entitled to ask two questions. "But isn't that a great deal of money for just two questions?" the man asked. "Yes," acknowledged the fortune teller. Second question, please.

X X X

**M**iddle age is the time of life when a man can get exhausted simply by wrestling with his conscience.

X X X

**M**oney doesn't make a fool out of a man nearly as often as a girl makes money out of a fool.

X X X

**W**hen a woman asks to see something more expensive she's shopping when she asks to see something cheaper, she's buying.

X X X

**A** gang of clever robbers was busy counting piles of banknotes hurriedly from a successful bank raid when one of the counters gasping for breath muttered, "Stop counting, let's ring up the bank and ask how much is missing."

**T**he Mura had just stopped at one of those dances where each partner twists around continuously as he tries to do a step and fall off the floor. He said to the young man who had invited him for the dance, "I wasn't dancing with you, the young man hastily replied, I was trying to get past you to the bar."

X X X

**A** married man is a bachelor who didn't notice when a girl closed the escape hatch.

X X X

**O**ne man used to spin a long wind tale about his invention of a marvellous life-like scare crow. It was made at tin, he said, and not only waved its arms at regular intervals but emitted a loud yell every few minutes. "Did it scare the crows?" he was asked. "Faster the crows!" he cried. "I should say I did. Why, gentlemen, that contraption skinned the crows so bad that some of 'ms fetched back corn they had stolen two years before!"

X X X

**W**hile he was finding accommodation near his new office in Bombay, a general's two daughters stayed temporarily at Delhi's well-known and some what expensive Maidens Hotel. The general's communication staff were delighted when their commanding officer received a signal reading, "SEND FUNDS URGENTLY OR CAN NO LONGER STAY MAIDENS"

At our present stage of farming only some of our educated farmers, and they can be counted straight away, bother to send soil samples to either our Cocoa Research Institute or its counterpart to ascertain the most economic crop they can plant. Many do not know of this facility.

Overseas, the practice now is to have soil classification man almost to the square mile. In effect, the land is tapped to its fullest productivity.

During my tour of Baku, capital of Azerbaijan Republic, U.S.S.R. Professor Gamza R. Ibragimov, D.Sc. Vice-Minister of Agriculture of the State showed me a soil classification map of the whole of Azerbaijan Republic.

The Republic was the first in the whole world to make such a map. The rewards are manifold. I may at one time disclose that Azerbaijan Republic produces the best cotton yarn now on earth. The much-vaunted Egyptian yarn or the Mississippi yarn is inferior to this Soviet strand — white, long and strong.

### Planned Agricultural Economy

Dr. Ukpa would like a planned agricultural system. Such a scheme would involve the Federal and State Governments in establishing pilot farms from where everyone who intend to till the soil must graduate. The days of the rule of the thumb or aloofness to

social and economy demands are over.

The country, having been mapped out according to soil will then be divided into zones and sectors where certain crops are to be raised. Much of the rainfall in the rainy season will be collected in embankments which will feed through canals.

We shall then have production of particular crops all the year round. Soil scarcity due to erosion by traders and much production giving way to speculation and export trade will come in. A lot of ancillary services — distributive, assistance of capital equipment and financial services will be stepped up thus reducing unemployment. It is anybody's guess that the untold possibilities attendant to a planned agricultural system as envisaged by Dr. Nwankwo Ukpa Ph.D. (Biology) Moscow.

At the time of going to press, Dr. Ukpa had already returned to Nigeria like a fly visit, stay and tour of the Soviet Union was arranged. APN, Nigeria, I appreciate all that was done to make the whole exercise educative and comfortable.

