

TRUCIAL STATES COUNCIL

Development Office

Round-up of News for March 1970

1. General

... The 31st meeting of the Trucial States Council was held from 28th February to 3rd March and a copy of the communique issued at the close of the meeting is attached as Appendix "A". The first meeting of the revised and expanded Executive Committee was due to be held on 31st March, but this has now been postponed to 12th April. The principal item on the Agenda is the reduction of the Capital Works Programme by BE 600,000, which would give the following pattern to the 1970 Budget:-

<u>Expenditure</u>	<u>BD</u>
Recurrent	995,800
Minor Capital	231,000
Loan to Mileiha Agricultural Scheme	135,000
Major Capital - 1970 Programme	1,551,500
1969 allocations	
carried forward	<u>448,200</u>
Total	<u>3,361,500</u>
 <u>Income</u>	
Contributions	2,728,500
Revenue	34,500
Interest	120,000
Repayment of Loans	36,500
	<u>2,919,500</u>
Balance carried forward from 1969	442,000
Total	<u>3,361,500</u>

... The Reports to the Council of Mr. N.B. Hudson on the Economic Survey and of the Agricultural Adviser are attached as Appendices B & C

2. Capital Works Programme

(a) Health

Work continues satisfactorily on the new Maternity Ward for the Al-Maktum Hospital by the Contractor, Dubai Contracting Company. The building is expected to be completed by mid summer and the equipment for it has been ordered.

At Ras al-Khaimah, the new Hospital itself should be ready for occupation by mid-May but the installation of air conditioning for the theatre block is uncertain, as this depends on the arrival of the equipment. The present out-patient facilities will need to remain for a further few months, but a start has been made by Public Works Dept. direct labour on the new O.P.D. which should be ready by mid-June. Work has been proceeding satisfactorily on the staff Housing by the contractor, Darwish Contracting Co.

Following a recent report to the Ruler of Sharjah by the supplier of the Hospital equipment ordered by His Highness the Health authorities and architects are re-examining the present design both of the Hospital itself and the Out Patients Department. The cost of the Hospital is being shared by the Government of Sharjah and the Development Fund.

The Health Centre at Dibba is rapidly nearing completion and good progress is being made on the staff accommodation. A recent start has been made on the Out Patient Department by direct labour so that a senior Officer is available there for coordinating the whole complex including walls, gates, entrance roads and parking.

A start has been made on the Dhaid Clinic, the contract having been placed with Consolidated Contractors Company.

Changes have been made to the plans for the Clinic at Abu Musa so that both School and Clinic are of steel framed construction. It is hoped that these jobs will start in the immediate future.

Following the taking out from the contractor of the new clinic of Kalba this is now in use, and a Lady Doctor is being appointed to assist in running it.

(b) Fisheries

The office, workshop and residential accommodation at Khor Fakkan for the Fisheries Adviser is virtually complete and has been occupied by him. Filling work is proceeding on the slipway there, and the building of the side walls to this should commence shortly, following approval by H.H. the Chairman for the purchase of heavy duty trucks which are needed for the transport of the heavy rocks required.

The other major work remaining at Khor Fakkan is the cold store and refrigeration plant, for which the foundations have been prepared. H.H. the Chairman has agreed that the Director of Public Works and Fisheries Adviser should negotiate a final price for this with Messrs. Brightside, after consideration of five tenders submitted.

(c) Agriculture

Work on the dairy building at Digdaga, being carried out by Public Works Dept. direct labour, is almost complete, as is the cattle compound, though the Agricultural Adviser is requiring additional facilities both here and at Mileiha for calves, which cannot be undertaken immediately. The junior staff housing at Digdaga, together with the two Staff Houses at Kalba have been completed.

Drilling at Hamraniyah continues when the rig is available and not occupied in drilling repayment wells in the neighbourhood. The latest report on Rural Water Development by the Water Section of the Public Works Dept. will be included in the next issue.

(d) Roads

On the East Coast, the construction of earthworks and culverts on the Fujairah-Khor Fakkan roads continue in the vicinity of Khor Fakkan; an additional complication here has been the local decision that where the roadway is thought to run a short way through Muscat territory near Madhah the embanking material used should not be gathered from beside the road but brought in from undisputed Trucial Oman territory.

North of Khor Fakkan the direct track to Bidaya has been bulldozed and work has also been carried out in widening and improving the two passes north and south of the town.

In the northern sector work continues on the construction of retaining walls for two of the passes and on stone laying on two beach sections.

In the Wadi Ham the Callender Hamilton bridge on the first bridge site South East of Bithna, was launched at the end of the month, and work continues by Public Works Dept. labour on the abutments to the second bridge on the Bithna by-pass, on which work has continued by the Royal Engineers on 1st April a combined operation by army and Council plant started. On the Wadi track between Bithna and Masafi and it is expected that a considerable improvement on this will be apparent shortly.

Survey work on the gravel plain for the proposed trunk road to Mileiha is being carried out.

(e) Electricity

The new Power House building in Ajman is going up, and the equipment for it has either been shipped or is awaiting shipment as scheduled. An addition KW 180 generating set has been obtained from Ras Al-Khaimah to tide over the coming period before the new Power Station is operational, since the load on the existing station following the connection of the Ruler's new Palace has become very heavy and load shedding has become inevitable.

In Umm alQaiwain the extension to the Power House building is complete, and the additional switchgear and other equipment is due to arrive within the next two months.

The Dibba Power House is complete and the overhead lines are almost complete.

In Fujairah the 50 KW generating sets have been recently installed and are expected to be running shortly.

(f) Housing

Work continues satisfactorily on the construction by direct labour of 10 low cost houses in Husn Dibba and of 8 of the 10 houses in the Fujairah part of Dibba.

(g) Town & Village Water Supplies

Ajman

Works continues on the expansion of the reticulation system principally in the developing area south-west of the township.

Jezirat Za'ab and South Ras al Khaimah

Work has been in progress on several sectors, within Jezirat Za'ab itself, south of old Ras al-Khaimah, for the new Hospital at Hodeiba and along the main pipe line leading from Bureirat to Jezira. The Ras al-Khaimah water authority is also carrying on extensions to the system on its own account.

Fujairah and Ghurfa

Stand-by pumps have been installed at the two well fields for Fujairah and Ghurfa, though difficulties are being encountered over these.

Dibba & other Fujairah Villages:

At Dibba work on mains laying is in progress and work has begun on the ground level masonry storage tank. Further work on wells for the proposed system at Quraiyyah is in progress.

Khor Fakkan

A stand-by pump has been installed at the well-field and work will shortly begin on the new storage tank.

Kalba

An additional water point has been installed at Khor Kalba, and survey work is in progress for the location of a storage tank there, to improve pressure which is insufficient from the main tank in Kalba.

Southern Ras al Khaimah Villages

Outline designs are being prepared for village water supplies for Khouran, Fahlain, Digdaga and Idhin and a first phase scheme for Idhin to supply the school, mosque and other adjacent buildings has now started.

3. Veterinary

The viterinary Officer, Dr. Ghassub al Assali, reports on his activities and treatment in January, February and March as follows:-

	<u>January</u>	<u>February</u>	<u>March</u>
<u>Dubai</u>			
No. of visits	11	13	3
Hens treated	-	4,975	-
Cows "	-	2	-

<u>Sharjah</u>	<u>January</u>	<u>February</u>	<u>March</u>
No. of visits	22	11	14
Goats treated	648	45	88
Cows "	4	-	-
Camels "	4	-	-
<u>Ajman</u>			
No. of visits	-	2	3
Goats treated	14	18	21
Camels treated	6	-	4
Cows "	-	4	-
<u>Umm al-Qaiwain</u>			
No. of visits	23	5	10
Cows treated	39	54	-
Camels "	24	15	65
Sheep "	6	-	2
Hens "	20	-	-
Goats "	-	-	-
<u>Ras al-Khaimah</u>			71
No. of visits	103	77	84
Goats treated	1,165	881	577
Cattle "	85	11	41
Camels "	16	38	110
Sheep "	4	26	45
Deer "	-	1	300
Hens "	-	-	-

The principal diseases treated have been :-

Goats	Caprine pleuro pneumonia and general debility and mange
Cows	Tick infestation, metritis and stomatitis
Camels	Mange & tick infestation
Sheep	Internal parasites, metritis, Entiritis & cough
Hens	Medication for prevention of coccidia & vaccination against Newcastle disease.

.... A serious disease among cattle in the Trucial States is Botulism, and a report on this by Dr. Al Asali is attached as Appendix "D"

Of the Veterinary services in general provided by the Council, the Veterinary Adviser to the British Ministry of Overseas Development's Middle East Division, Mr. P. Durran has reported as follows:-

"Starting from nothing Dr. Gha ssu al Assali has in the past two years been successful in gaining the confidence of livestock owners and establishing the foundations of a Veterinary Service. Most of his work is concerned with clinical treatment of large numbers of goats and sheep, mainly the former. The general standard of Trucial States livestock is poor and in countries with more developed livestock production these individual treatments by visits would not be considered economic. In the Trucial States, however, where the animals are in fact the means of livelihood of large masses of the people, their veterinary care is a well warranted Government Service to a large section of the population who receive little else. Even in areas which have so far had little attention, such as the East Coast, it was apparent that veterinary services would be readily accepted and sought".

The 1970 Budget provides for a second Veterinary officer and two Veterinary Stockman, and with this establishment it is hoped to build on the facilities already provided in Digdaga by opening further centres at Sharjah, Dhaid or Falaj al M'oailla, and on the East Coast.

A further report has recently been received on Livestock Development in Trucial Oman by Dr. D.E. Fulkner, North Eastern Regional Animal Production and Health Officer to the Food and Agriculture Organization of the United Nations. His survey on animal husbandry, production and health is attached as Appendix "E", and his findings are summarised as follows:-

.....

"An expansion of veterinary services seems desirable and economically justified, since production activities are bound to develop as the economy expands and the demand for fresh livestock produce develops. An intensive livestock production industry will provide a valuable market for alfalfa and any other animal foodstuffs produced. The expansion of animal production and health activities and service need, therefore, to be undertaken in the following directions:-

- (i) The establishment of a small diagnostic and disease investigation centre at Dubai serving the Trucial States;
- (ii) the expansion and training of field staff in order to give greater assistance to Bedouin stock owners;
- (iii) the addition of a poultry specialist to the Agricultural Services Staff (a veterinarian with intensive poultry production experience would probably be best) and the encouragement of poultry development;
- (iv) the encouragement of intensive dairy and poultry production around Dubai - it would seem desirable for the services of the Trucial States Development Office to be responsible for this and not the health authorities of the Municipality.
- (v) the organisation of marketing cooperatives and improvement of agricultural supply and credit facilities now necessary and envisaged will, of course, benefit the livestock producers as they will the crop producers;
- (vi) the encouragement of alfalfa in the crop rotation of the developing irrigation schemes, and ways and means of handling this crop mechanically;
- (vii) the formulation of regulations and the provision of facilities in connection with the control over imports of slaughter stock and of their quarantine on arrival.

4. Finance

The receipt of approximately BD half million as a first instalment of the BD 2½ promised as the 1970 contribution by H.H. the Ruler of Abu Dhabi has been received and has cleared the first net overdraft required by the Development Fund. The balance of funds at 2.4.1970 was QDRs. 213,836.35 or £18,705. Further contributions are expected in April.

COMMUNIQUEISSUED BY THE TRUCIAL STATES COUNCIL

The Trucial States Council held its 31st Ordinary Meeting during the period 28th February and 3rd March, 1970 in the Council Chamber in Dubai. All Their Highnesses were present, together with the delegations who accompanied them. H.B.M. Political Agent, Dubai, the Secretary General and the Directors of the Council Departments also attended.

The Chairman, H.H. Sheikh Khalid bin Mohamed Al-Qassimi, Ruler of Sharjah, opened the meeting with an address in which he greeted his Brother Rulers and thanked in the name of the Council H.H. Sheikh Zaid bin Sultan, the Ruler of Abu Dhabi for his valuable contribution to the Development Fund, financially and socially, and he expressed his appreciation to the efforts of the Executive Committee supervising the execution of projects and for the efforts spent by the Staff in carrying out their duties.

The Council then approved the Minutes of the previous Meeting held on 13th and 14th October, 1969 and dealt with the items of the agenda which included the following:

Report of T.O.S.

The Council listened to the report of the Commander of the T.O.S. and approved the introduction of a Long Service Medal to eligible members of the T.O.S. and also approved the expenditure of funds accumulated from bank interest on the contributions of the Rulers to the salaries of the members of the T.O.S., to cover the cost of making the medals and to spend the balance for the welfare of the force.

Annual Reports of the Departments of the Council

The Council heard the report of the Adviser on Technical Education on the Trade and Technical Schools in Dubai, Sharjah and Ras al Khaimah, and also to the reports of the Departments of Agricultural and Veterinary Services, Health, Fisheries and Public Works, and made such decisions as were necessary relating to their administration.

The Council expressed its appreciation for the services of the Technical & Trade Schools for providing the country with local technical men to take part in the development and building of the country. The Council also directed the Agricultural Adviser to arrange for the production of seeds and seedlings locally as can be afforded for sale to the local farmers at reduced rates and to increase the efforts in the way of field assistance. The Council having realized that the operating costs of the agricultural tractors were ODR. 21/- per hour decided to continue giving out those tractors for hire at the rate of ODR. 5/- to help the farmers and encourage the cultivation of land.

His Highness Sheikh Zaid invited the Council's Agricultural Department to take part in the annual agricultural show which takes place at Al-Ain.

The Council also approved the recommendations of the W.H.O. that Malaria Control Unit for the Trucial States should be formed and based in Dubai and should cooperate with the Health Department of Abu Dhabi over Malaria Control in that Area.

Illegal Immigration

The Council discussed the report submitted by experts about illegal immigration to the Oman Coast and approved all the recommendations of the report but reserved the right of each of the Rulers to suggest amendment of any recommendations for the control of illegal immigration.

Economic Survey

The Council heard an introduction given by Mr. Hudson of the Middle East Development Division in Beirut of the British Ministry of Overseas Development, in which he submitted to the Council officially the Economic Survey for the six northern Trucial States which has been undertaken by the Division. Mr. Hudson explained the aim of the Survey and after discussing the report, the Council approved the executive Committee's recommendation in respect of that part which relates to projects under the Development Office and that future budget estimates for the next five years be prepared in the light of its recommendations, taking into consideration the availability of funds.

Membership of U.N. Agencies

The Council decided to apply for membership of W.H.O., F.A.O., UNESCO, and Save the Children Fund.

Co-ordination of Co-operation between Kuwait State Office and Development Office

The Council welcomed Kuwait's wish to co-ordinate cooperation between its office in Dubai and the Development Office to prevent duplication of effort.

Land Boundaries between States

The Council noted the Note prepared on this subject and decided that it should be studied by each Ruler separately and that each would take appropriate decisions.

Development Fund Estimates for 1970

The Council noted the Certificate of the Auditors, Saba & Co., on the Development Fund accounts for 1968 and heard the report on the financial position by the Secretary-General. The Council then reviewed the draft estimates of the Development Fund for 1970; the estimated revenue to the Fund for the said year amounted to BD 2,716,795 which included BD 2.5 million as the contribution of H.H. Sheikh Zaid for 1970. The expenditure estimate was shown as BD 3,547,688 of which BD 2,149,500 was allocated for Capital Expenditure.

The Political Agent announced that H.B.M. Government would consider its contribution to the Fund this year in the light of the decision of the Council towards the draft estimates.

After discussion the Council decided to commission the Executive Committee to supervise the execution of the Estimates and to reduce it to the estimated revenue figure of this year.

/ H.H. Sheikh Zaid

H.H. Sheikh Zaid assured his willingness to continue to bear the deficit due to difference of reduced prices of electricity to the people of Ajman, Umm al Qaiwain and Fujairah, also the deficit resulting from the reduced rate of water in Ajman.

Executive Committee

The Council decided that Members of the Executive Committee should be locals and that the number of representatives should be four from each State.

Election of the Chairman

The Council renewed the election of H.H. Sheikh Khalid bin Mohamed Al-Qasimi, Ruler of Sharjah, Chairman of the Council for this year.

At 9.00 p.m. this day, 3rd March, 1970 the Council completed discussion of all its agenda items and closed the meeting.

As the Council issues this Communique it prays to God to lead them to success in building up this part of the Arab home-land and to work for a better life for its people.

The Economic Survey

Your Highnesses will recall that at the last meeting of the Council in autumn 1968, a resolution was passed calling for an Economic Survey of the six northern Trucial States to be undertaken. Accordingly the British Ministry of Overseas Development, in close conjunction with the Trucial States Development Office, began work on the Survey in January 1969. It was completed in July of last year and produced and distributed in two volumes. I have great pleasure in now presenting it officially to Your Highnesses.

It may be useful briefly to outline what the Survey attempts to do. There are two main aims. The first is to provide quite literally a survey, a documenting of the facts, of the way in which the economy of the country has developed up to and including the present day. It covers all the major sectors - oil, trade, agriculture, fishing, water supplies, electricity and so on. This in itself we feel is useful because these facts have never before been assembled in one publication, and the report will thus remain a work of reference for the future for anyone concerned with economic development here.

The second aim relates to the future. On the basis of the information brought to light, and taking into account schemes which are already in the pipeline, a programme has been outlined of the way in which the economy of the northern Trucial States should or could develop over the next five years, given a reasonable but not unlimited volume of finance.

This forward-look treats the northern Trucial States as a whole in economic terms and covers developments in some detail. It of course embraces Dubai where most of the future development will be financed from the State's own revenues, and also those sectors, such as education and health, where the bulk of the finance has to date been made available through the generosity of the State of Kuwait.

Of the greatest practical interest now is that part of the programme that we feel might reasonably come within the orbit of the Trucial States Development Office. This covers schemes of an interstate character, such as highways, which are most appropriately implemented by a central body. It also covers a variety of other schemes some of which concern only individual States and some of which are an extension of projects already being carried out by the Council. It does not cover schemes that will, or might, be financed from individual States' own resources or from the private sector. Because there are obvious financial constraints an attempt has been made to make basic economic development a major priority but some room has been made for some projects of a more social nature, in the fields of health and housing.

The basic objective throughout is the efficient development of a large area of the northern Trucial States through the medium of the Development Office in order to bring the optimum benefits within reach of the population as a whole.

With this in mind three main principles have been formulated. They are, briefly:

- (a) To plan on the basis of 5 years rather than one year in order to take a longer term view of economic problems and devise more effective solutions to them. One year is far too short a period for effective programming.

- (b) to plan, as far as is practicable and taking account of individual developments already in hand, on the basis of a region integrated in economic terms rather than on the basis of individual States. The reason is simply that there are considerable economies in providing services on a regional rather than a State basis.
- (c) to ensure that the financial resources available are used in the most effective way. The levels of expenditure forecast are higher than those currently attained but even if all the money can be found and the schemes implemented there will still be a long way to go before the economy is fully developed. Money is likely to be scarce and it will therefore have to be used wisely, with priorities and principles strictly adhered to. In particular, schemes that are revenue earning in principle should accomplish that aim - to earn sufficient revenue to cover costs.

In sum the intention of the Survey is to try and point the way to means by which future development would be programmed on a rational basis, so that benefits can be maximised and spread widely both to the different areas and to the people in them.

APPENDIX C

REPORT OF THE AGRICULTURAL ADVISER 1969

TRUCIAL STATES COUNCIL

GENERAL

In a non-manufacturing society the promotion of primary industries is the aim of all concerned with the welfare of the populace in order that the production of fresh and nourishing food ensures a reasonable diet for all, provides employment and training in skills for many, and generally helps the economy of the country. Of the primary industries agriculture, given encouragement, is one that produces many of the basic needs of man. Therefore the policy of the Office of the Agricultural Adviser, during 1969 as in other years, has been to advise and encourage local farmers to increase and improve their production of crops; to introduce, as necessary, new ideas and techniques with seed varieties, farm machinery, fertilizers, and insecticides, and thus improve the quality of crops reaching the markets; to improve livestock strains; to provide a comprehensive veterinary service; to educate boys in agricultural science for future work and development in the field; to attempt a beginning at afforestation to stabilize the land and prevent wind erosion; and to extend and develop our existing nurseries and gardens as a basis from which others may benefit.

To these ends our efforts have been concentrated throughout the year, and by December some tangible results were with us - namely, the fleet of tractors imported to help farmers make economic use of their land with mechanical implements; the sight of good crop stands on the farms and good harvests of crops being transported to the markets; the arrival of the new dairy herd of Friesian cattle, the increasing herd of Damascus goats, and the start of fairly large-scale poultry breeding; the completion of new irrigation installations at Mileiha and Digidagga, along with the introduction of 'Mains' electricity to Digidagga which makes many of the foregoing improvements possible; and the increasing production of citrus, fruit and other seedlings at Kelba and Falag al Mo'alla.

As a result of the growing interest in agriculture which has been fostered through the years by this Office, we have been able to increase our sales and services to farmers along with the sale of our produce and show a trading surplus of QDR 134,499,72 during the year, although this has been done with minimal charges to cover costs and in some cases by providing subsidized services as with the hire of tractors to farmers. The gross revenue for the year was QDR 236,379.69.

1969 was a favourable year for rainfall with most occurring in the first week of January. This re-charged the water-table and revitalized the natural vegetation, giving better grazing for local herds of stock.

AGRICULTURE - CROP HUSBANDRY

Agricultural Trials

Up to the end of 1968 the water supply serving the experimental garden at Digidagga was of very poor quality (the total of dissoluble solids being in regions of 4,000 - 6,000 parts per million). In addition to this the soil also contained many undesirable mineral salts. However, towards the end of 1968 a new supply of water (average 1,000 parts per million) was introduced to the gardens, being pumped from Fahlein and stored in a large tank sited in the north-east of the

garden, prior to distribution by channel and pipe to the cultivated plots. During the year 1969 an obvious improvement has been very noticeable in the quality of the crops and there is every indication that 1970 will produce even better crops.

Our main work in Digdagga has continued to be investigation into the optimum variety of vegetable seed suited to local conditions. Several varieties were eliminated as unsuitable, after trials, but others have been reown for the 1969-70 season when further observations will be made and assessed. Of interest is a variety of cabbage which reached maturity in only 69 days. Its quality is good and acceptable to the local markets. An early maturing variety of tomato has also been noted, and a variety of turnip is seen to be a high yielder.

Other types of vegetables under trial were radish, beetroot, carrot, cauliflower, brussels sprouts, sprouting broccoli, peppers, parsley, lettuce, onions, brinjal, okra and spinach.

Of the cucurbit family one type of water melon proved unsuitable for growth in the Trucial States but further testing of old favourites in water melons, cucumbers and sweet melons and squash narrows proved them successful once again.

Rust-resistant wheat and barley were once again grown to produce seed to maintain the strain sold to the farmers in the mountains.

Cotton

It has now been proved that American Upland Medium Staple Cotton can be grown in the Trucial States, but it is as yet not proved that this can be done for a profit. As a result of trials it has been noted that Spiny Boll Worm is a major pest - this is most unexpected. Until effective control measures have been demonstrated it is not possible to form a final conclusion about the profitability of cotton as a Cash Crop on a large scale.

Trials are continuing.

Falaj al Mo'alla and Kelba

These gardens serve as centres for sale of fertilizers, insecticides and seeds to farmers in their areas, as well as providing nurseries for citrus and other fruit seedlings, and sources of ornamental trees and shrubs for sale throughout the territory.

Mileiha

During the year more land was brought under cultivation, directly controlled by the Office of the Agricultural Adviser. A steady supply of vegetables was maintained through the year and these were marketed in Sharjah and Dubai. Crops grown included melons, beans okra, brinjal, squash, and cucumbers. Also planted were dates, citrus, figs and mangoes.

The trial with overhead sprinkler irrigation is proving reasonably satisfactory.

It is hoped that 1970 will see the whole scheme of 300 acres in production.

Sales of produce from the scheme amounted to ODR 65,580.87 in the year 1969. An increase in the revenue is hoped for in 1970.

Other Areas of Agriculture

During the year other agricultural districts were visited by the Adviser or members of his staff, who observed with interest the progress being made by farmers. These areas included Kelba, Fujcira, Khorfakhan, Dibba, Dhaid, Masfut, Minai, Masafi, Wadi Asima, Wadi Ghor, Khayani, Sham, Etc.,

Extension Work

In the above areas it has been possible to carry on some of our Extension work to the local agricultural communities, but because of the absence of recruits as Village Extension Agents, Extension work is not going ahead as fast as one would hope. It is in this section that one expects to see an improvement over the years as our Agricultural School turns out qualified men.

EDUCATION

The Agricultural School awarded its Diploma in Agriculture to three students in 1969. Two of these diplomates are now working with the Trucial States Council on the Mileiha Scheme as Junior Field Assistants. Arrangements are in hand to send two students on a FAO course in Lebanon for training in milk production and milk products.

At the start of the academic session 1968-69 the school enrolled 26 pupils, but unfortunately 12 of these students left the area for reasons unconnected with the school or their education. This was regretted very much as the school was flourishing with its increased attendance, but the other students who stayed on made good progress in all subjects throughout the year. Their studies included agriculture both theoretical and practical, chemistry biology, mathematics, Arabic, English and religion.

During the year 1969-70 nine students are attending the full time two-year course in Agriculture. It is the sincere hope of the Agricultural Adviser that members of the Trucial States Council will back the school and encourage boys to enrol. The school is making a small but vital contribution to the development of Agriculture in the Trucial States. It will be a happy day when we see at least one trained local agriculturist in each agricultural district.

During the year a series of classes were held for adult education. Subjects included Arabic, English and Arithmetic. Fifteen pupils, mainly from the station's staff, attended this night school.

LIVESTOCK

At the beginning of 1969 the Agricultural Adviser was responsible for a herd of Red Sindi cattle, a flock of Damascus goats imported from Lebanon in July 1968, and laying chickens and breeding stock chickens imported from U.K. in June 1968. During the year the Red Sindi cattle were sent to their new owner at Al Ain, and space was made available at Digdagga for the Development required for the projected importation of a pedigree T.T. tested herd of Friesian cattle with which it is hoped to demonstrate that under proper management an exotic breed can survive, and produce ample valuable and much-needed animal protein to enhance the diet and well-being of the population.

The herd of Friesian cattle arrived at the end of December and were housed at Digdagga without showing any major signs of stress from their journey or living conditions in entirely different climatic conditions from those in which they were reared.

By the end of December three calves had been born.

The breeding from the Damascus goats commenced during the year and five kids were born in June. Fourteen more kids were born in December. All are thriving and in good condition. It is hoped that greater numbers will be produced in 1970 and when the herd is established securely, a percentage will be sold off to interested livestock owners. This strain of goat produces an above-average sized animal, often produces twins or triplets instead of single births, and the ewes have the reputation of being high-yield milkers. Thus, again, it is anticipated that more animal protein in the form of milk or meat is going to be available locally.

In the early months of 1969 small numbers of chickens were hatched successfully in a small electrically operated incubator from the eggs of our breeding stock and later in the year the original laying birds were sold off to poultry-keepers outside Digdagga Station, after their first season of laying. Housing was then available for our own new stock coming into lay.

In December, after the installation of a larger automatic electric incubator and necessary brooders and equipment, a start was made on incubating at the rate of 150 eggs per week. It is hoped to continue this process throughout most of 1970 and the chickens hatched will be available for sale from the age of a few weeks, or as day-olds if the purchaser has adequate facilities to cater for them.

It has now been proved by this Office that poultry-keeping under careful management can be very successful in this climate with both birds and eggs comparing favourably with those reared in temperate climates. There is a very large demand for both fresh chickens and fresh eggs in the urban markets of the Trucial States and poultry-keeping would be a worthwhile venture for farmers to consider.

VETERINARY SERVICES

During the year the demand for the services of the Veterinary Officer and his staff greatly increased.

Difficulty has been found in recruiting local staff for training to work in the field as assistants to the Veterinary Officer.

During 1970 it is hoped to recruit a second Veterinary Officer who will carry some of the burden of the present Veterinary Officer, who is overworked at present.

In the period under review animals treated were:-

<u>Goats</u>	<u>Sheep</u>	<u>Cows</u>	<u>Bulls</u>	<u>Camels</u>	<u>Poultry</u>	<u>Gazelle</u>
13,761	1,035	528	8	326	19,979	2

The total number of treatments was 36,129.

FORESTRY

It will be recalled that a year ago it was proposed and approved by the Council that two small forest plots should be established in each of the six States. Planting material - *Prosopis juliflora* and *Tamarisk articulata* - for this scheme is now established in polythene pots in our nurseries and it is hoped with the co-operation of the P.W.D. as regards drilling of wells and construction of fencing, to go ahead in 1970 with planting in the field.

AGRICULTURAL MACHINERY AND TRANSPORT

Once again the Workshops have had a busy year maintaining machinery, equipment and transport. Up to December operational tractor units numbered two with ploughs etc.. However, the six new Massey Ferguson 165 tractors with Chisel Ploughs came into use in December. Other equipment handled by the workshop included maintenance of electrical generators until the power line supplied by Ras al Khaimah Electricity Company was connected to Digdagga, and the operation of the pumps and regulation of the water supply from the well-field at Fahlein.

BUILDINGS

During the year an extension to the Digdagga Office Block was completed, consisting of three rooms and toilets.

For locally engaged staff, six new quarters for married personnel and six rooms for single persons are nearing completion.

Four senior officer's houses have been completed at Digdagga.

One senior officers' house and a Rest House at Kelba are also nearing completion.

At Mileiha one senior officers' house has been completed. During a storm the roof of the Manager's house at Mileiha was damaged but this has since been repaired.

Other buildings are in good order.

The number of pens for Damascus goats has been increased and the building of the model dairy for the new herd of Friesian cattle is going ahead quickly.

It has been the policy of the Adviser to give, where possible, an attractive and cohesive appearance to establishments over which he has control, especially in Digdagga where most of the staff live and which seems to attract visitors from many places. To this end, during the past year an effort has been made to establish a pleasant environment for work and living, making use of the natural setting. Gravel roads have been laid, fencing completed for demarcation purposes, trees, shrubs and flowers have been planted and uniformity in paint-work has been achieved. Much work has still to be done but it is gratifying that recent visitors are generally complimentary about the appearance of Digdagga.

SALES AND SERVICES

Sales and services have been carried on as before - namely selling seeds selected through knowledge of farmers' requirements and our experience of suitable varieties, fertilizers, and pesticides. We have been happy to extend the range of our tractor hire service this year and feel this has gone some way to meet the demand of farmers. However, more tractor units are required to fully meet farmers' demands and to provide a larger selection of implements so that we may vary the service given to farmers. Currently our fleet can do little more than go some way to meet the basic demand for ploughing. An increase in the fleet would permit us to perform land levelling, ridging and construct irrigation channels for farmers.

The current hire charge for a tractor is ODR 5.00 per hour. It is recommended that the hire charge should be reviewed by the Council to give an increase of revenue. A hire charge of ODR 15.00 per hour would be more economic.

/ At present

At present the six tractors are distributed by States - one each. It is proposed that when work is slack in any one State its tractor should be diverted to meet a heavy demand in another State. At the moment the demand in one State is virtually nil while in another State the demand considerably outstrips the supply, thus revenue is being lost because one machine is standing idle, and also for this reason agricultural production is being held back.

PEST CONTROL

Through the year efforts were made to eradicate crop pests as they occurred and it is hoped that with the arrival of an entomologist a survey will be made for the most damaging of the pests and more effective means to combat them will be prescribed.

We are glad to report that no swarms of locusts appeared in the Trucial States during the year.

STAFF

The number of staff has been increased during the year by the addition of

Mr. M.A. Harani	Teacher of Agriculture, Biology, Chemistry
Mr. M. Barwani	Farm Manager
Mr. P.N. Uthran	Surveyor
Mr. C. Yewdall	Dairy Manager
Mr. A.D. Hurst	Entomologist

Mr. Mohammed Abdulaziz was transferred from Digdaga to Mileiha and later to Dubai.

For the new tractors additional drivers have been employed. During the year there has been a large turnover in Land Rover and other vehicle drivers.

CONCLUSION

1969 was a year of considerable development and expansion agriculturally. It saw the expansion of many schemes started the previous year and also the foundations were laid for projects in the future. But the most encouraging aspect of 1969 was to see the increase in the area of land being brought under cultivation by the farmers of all districts and especially so on the Batina Coast. The opening of the asphalt road from Sharjah to Dhaid must have played a major part in the encouragement of this important development, and as further progress is made on road improvements to the East Coast one would expect to see even greater progress in that area.

The information collated in the 'Economic Survey of the Northern Trucial States 1969' by the Middle East Development Division, British Embassy, Beirut, has been of valuable assistance to this Office and greatly appreciated. It is of considerable note that the Economic Survey team recorded that the six Northern Trucial States have an estimated gross production of crop revenue in the region of ODR 8,000,000 - 9,000,000 per annum, derived from a total of 7,875 acres under cultivation.

The Office of the Agricultural Adviser also wishes to acknowledge and thank the following for their assistance and co-operation during the year

Sir William Halcrow & Partners and the Water Resources Survey
The Ras al Khaimah Electricity Company
The Commandant, Trucial Oman Scouts
All Departments of the Development Office, Trucial States Council.

Botulism in Cattle

In this area some cattle have the bad habit of eating the carcasses of other dead cows, including bones and vermin. Normally health animals, particularly cattle, do not eat carases; so why does this happen?

We must first differentiate between this habit and that of cannibalism, which is confined to animals which eat carcasses and putrified meat BY nature. But when a cow is seen eating a bone or a carcass we should suspect that it is searching for something its body needs; this something is Mineral Phosphorus.

In spring the herbage usually contains adequate supplies of phosphorus and no trouble takes place; but during winter and later summer the lack of phosphorus leads grazing cattle to chew the bones of animals that have died to regain the phosphorus in their bodies. But though the cow has now got phosphorus, its life is under peril of the dreadful bacterial toxin, Collistridium Botulism

The bacteria normally live in the soil without multiplication, but once they have found succulent raw meat they gain access and multiply; and in addition to multiplication the bacteria produce the poisonous toxin which if swallowed by cattle causes the malady.

The prognosis and fate of the sick animal is very bad, and mortality may reach up to 100% once the symptoms appear. From the commencement of the symptoms death takes place within one week.

This malady is generally a paralytic one, i.e. it begins by paralysis of the hind quarters, then the forequarters, neck and tongue are involved. Treatment of the malady is unfortunately useless.

The solution of the problem is not impossible, if there is cooperation between the Development Office, the Governments of the Trucial States and the people to combat the disease; simply, once the carcasses of dead animals are destroyed the disease will authomatically vanish. The burying or burning of carcasses and remains of dead animals should be made compulsory on the owners by law.

Another precaution which can be taken by the farmers is to dose their animals with sterlised bone meal once weekly; the animals will then be satisfied and never eat a dead body.

1st April, 1970

Report on Animal Husbandry, Production and Health
in the Northern Trucial States

By Dr. D. E. Faulkner, N.E. Regional Animal Production Officer

General

Animal production is at present mainly a Bedouin activity. Unknown numbers of adaptable but low producing sheep, goats, cattle (the Gulf Region breed/type) and camels, with the goat predominating, are herded on a semi-nomadic basis in the region. Conditions for livestock, generally, except where irrigated agriculture is undertaken, is adverse in the extreme. Supplementary feeding is not commonly practised.

Infectious pleuro-pneumonia is a rife throughout the goat population of the region and presents a difficult problem. Tick-borne diseases and foot- & -mouth disease will present severe problems in cattle production with the introduction of exotic, high yielding stock. Similar problems will arise in poultry production as flocks increase in numbers.

Imports of livestock for consumption in Dubai during the past two years have been as follows:

	<u>1967</u>	<u>1968</u>
Sheep and goats	26,640	30,847
Calves	2,520	2,634
Cows and Oxen	1,086	1,034
Camels	1,062	1,145

There is no control of any kind over importations and no quarantine facilities are available. Imports come from Iran (sheep, goats, cows, camels), Pakistan (sheep and goats with a few buffaloes), Somalia (sheep and goats) and Tanzania (goats).

Excellent new markets have recently been constructed, including those for fish and meat. Slaughtering facilities are at present inadequate and unsatisfactory, but this is shortly to be remedied.

A progressive Indian cow-keeper maintains a town dairy near the town, but right on the sea, consisting of some 60-70 milking cows. The animals represent a great variety of breed/types resulting from the introduction of cattle from the countries named above with some exotic cross breeds and including a small number of buffaloes.

The cows were in good condition as also were the female calves being reared for replacement. Sanitation and hygiene were good. Such an effort seemed to deserve encouragement. A good type of young Freisian bull had been obtained and was apparently to be used for grading up the herd. Advice, and possibly breeding stock, resulting from the work on Freisians at the Digdaga Experimental Station could eventually be useful to town dairies of this kind.

Two intensive poultry farms on the outskirts of Dubai were visited. Both these utilized modern methods of housing and management and obtained hybrid chicks from Lebanon. One of these farms was maintaining up to 30,000 broilers.

Both these farms seemed to be well located, planned and managed and also deserved encouragement and assistance. One unusual feature of the houses used was their narrowness in relation to length and their siting in order to minimize the length of time the building was subjected to the direct rays of the sun. No artificial ventilation was employed and apparently production continued throughout the year.

Digdaga Experimental Station - Animal Husbandry Activities

The Experimental Station is the centre for the at present one Veterinary Officer in the Trucial States (a further officer is now being recruited). The Station includes in its facilities a veterinary clinic and a livestock farm unit. On the latter, some 30 purebred Freisians, recently imported as heifers and young cows, with two bulls and a flock of Shami goats and poultry are maintained.

Simple, paved yarding, partly roofed over, is provided for the Freisian herd which appeared in excellent condition when seen (January). Freshly calved heifers were averaging about 2½ gallons of milk per day. Green alfalfa, alfalfa hay and an imported concentrate mixture are at present being fed. An expatriate herd manager is responsible for the herd.

The hot season is bound to raise problems of management and feeding and the tick-borne diseases (especially theileriosis) and foot-and-mouth disease, will have to be watched for. Spraying is being carried out although a crush would seem to be needed and would facilitate this and other work.

Rations utilizing locally available foodstuffs, such as dates, will have to be evolved since imported rations are costly.

The Shami goats, maintained under very simple conditions in wire pens with earth floors, looked in excellent condition. High fertility has been achieved but limited milking trials had given disappointing results. Parasitism and caprine pleuro-pneumonia will have to be safeguarded against in the case of this flock and locally compounded rations evolved.

The poultry flock has, as its object, the production of eggs and chicks for local farmers. Trouble has been experienced from taeniasis resulting from an intermediate cockroach host.

Both on the Station and outside excellent stands of alfalfa were to be observed.
