ECONOMIC AND HISTORICAL ASPECTS OF SOME QUEENSLAND AGRICULTURAL RESOURCES

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After living at Newstead for a few months, it is perhaps easily understood that I gradually became interested in the work which the Queensland Historical Society aimed to achieve. As a result, I tried to gain some information on this matter, and found what a stupendous task it is faced with in acquiring and compiling all the authentic and really vitally important information regarding the earliest history of this State, from the foundation of the Colony right up to the present time.

It seemed to me that it would be desirable to try and understand something about the meaning of history, and particularly what it meant to the thinkers and public men of other countries. And so I turned to the ancient classics, with which long ago I was once more or less familiar when a student, because I seemed to remember quite a number of such references were made to history.

What Cicero wrote was wise and most interesting, for instance "Who does not know that it is the first law of history that it shall not dare to state anything which is false, and consequently that it shall not shrink from stating anything that is true?" He also states, "History indeed is the witness of the times, the light of truth."

Tacitus says: "I consider it to be the chief office of history that the virtuous qualities of men shall not be unrecorded, and that evil words and deeds may incur the fear of posterity and future ill report." Cicero also writes:"To be ignorant of what happened before you were born is to be ever a child, for what is man's lifetime unless the memory of past events is woven with those of earlier times?"

Doubtless other references to history were made by Latin and Greek writers, and at later periods French savants have had something to say on the subject. Montaigne in his essays points out: "One may cover over secret actions, but to be silent on what all the world knows, and things which have had effects which

are public and of so much consequence, is an inexcusable defect."

Emerson says: "The use of history is to give value to the present hour and its duty," and Carlyle believes that "History is the essence of innumerable biographies." Bacon states "It is the true office of history to represent the events themselves, together with the counsels, and leave the observations and conclusions thereupon to the liberty and faculty of every man's judgement."

It will be noted that while there is some divergence of views concerning the purpose of history, it is fairly obvious that it should be an accurate record of events of the past and dates on which they occured, and also truly reflect the period of the time. Unless this is done history may be regarded as of doubtful value.

That is why the definition of history by Mr. Morrison in his presidential address does much to clarify what its objectives should be, and how best they may be achieved.

Extract from Presidential address delivered by Mr. Morrison at the Annual Meeting of the Historical Society of Queensland Inc., on 22nd September 1949:

In a summary of the objects of the Society he said, "It is not enough for those in authority to have that understanding; every citizen must know something of the story of the development of his community, or no real development is possible. But the story of the past cannot be understood without proper records and so the Society should encourage the preservation of State archives of all descriptions, and take a very active part in such collection and preservation.

"Records of the actions of those who did their share in building up the State are to be the property of the State and not of the individual. We can consider how far the development in one area or industry is typical of that of the whole of the State, and we can suggest in what way it can be varied. Perhaps one area was responsible for altering the whole course of events, or for retarding development. We must never forget that each area, while important in itself, is only a part of the greater area of the whole State, and that again is part of the whole nation."

I would respectfully suggest that a careful consideration of the economic aspects connected with the development of the natural resources of each area and the State as a whole, also are deserving of special attention. That is because of the major part played by our primary Industries in development, but that our agricultural production is of vital importance to economic stability and well-being of the community.

It is often overlooked and sometimes entirely ignored by the majority of our people in this country, that the greater part of the world's population is facing impending horror of mass starvation, and it is due in part that modern medicine is largely responsible for the rapid increase in the world's population, but so far little has been done about providing food for countless millions of lives it has saved. For the world only the United States, Canada, Argentine, New Zealand and Australia still have a substantial margin between what their people can eat and what they produce, that is available to other people to prevent them from starving to death.

Since the ultimate problem is more food, it is possible that by the dissemination of agricultural knowledge and financial assistance required to implement it, whereby crop yields may be increased many times, that such can be done to relieve the tragic plight of undernourished people in other countries.

Although at present Queensland and Australia have an exportable surplus of food products, the time is not far distant when our production of meat, and particularly beef, will only be sufficient for Australian consumption. That is, assuming that the population increases as expected and unless the rate of production is lifted, while agricultural production in Queensland is making rapid progress and the prospects for continued expansion are particularly bright, it is still desirable that authentic records be filed.

What I have indicated does serve to underline the great economic importance and historical interest in the early inception and progressive development of primary industries in Queensland; that is with particular reference to agriculture, grazing, including animal husbandry and mining of the vast potential mineral wealth of the State. In other words, there is an urgent need for accurate records concerning the exploitation of the land and other natural resources.

In that connection it is not too much to say that the future stability and welfare of the community as a whole is largely if not entirely dependent on such progress. For example the sugar industry has become in less than a decade only second in importance to that of wool production as a source of financial income, and yet it was seriously asserted when coloured labour could no longer be employed to grow sugar cane that the industry was doomed. It still remains true in the economic sense that, for over half a century Queensland and Australia has been "Riding on the sheep's back."

Perhaps it would not be out of place in this paper to point out the vital economic importance of both wool and sugar to Queensland. Our wool for the twelve months to May 31st 1953 realised £54,259,629. The Queensland production of raw sugar in 1952 was a record of 933,759 tons and the export of raw sugar for the 1952 season will total 471,760 tons. The approximate value of raw sugar produced in Queensland last season is £39,767,338 and in the 1953 season will probably be £50,000,000. (Tonnage is expressed here in terms of 94 net titre sugar; i.e. about 3% higher than the sack tonnage of actual sugar produced.)

These figures underline the significance of primary production to Queensland and should utterly confound those who are inclined to believe that our land industries are not of paramount importance to the welfare and economic security of the community.

In a return of land in cultivation in the Colony on April 7th 1861, it shows that the total of 196 acres of wheat was grown of which 153 acres was in the Warwick Police District, this appears to be the first official record of wheat production of much account. It is probable of course that very small areas of wheat may have been grown by early settlers in the Brisbane Valley, but at that period most of the flour used was brought from New South Wales. In 1870 the total yield of wheat for the year was 58,787 bushels and this was increased to 81,161 bushels in 1873, while in 1891 it was 392,309 bushels. Wheat acreage grew slowly for a few years, from 4,153 acres in 1875-76 and reached 119,356 acres in 1905-06. On the other hand

in 1886 only 21,221 bushels were reaped in the Colony, while in 1888 there were cut for grain only 499 acres which gave a yield of 8,265 bushels of grain. The fluctuations in the wheat yield may be regarded as little less than remarkable.

Here, in a country ranking with the first in abundance, cheapness, and excellent quality of its natural herbage, hay in all its forms found the best market in the world. The effect of all this upon the wheat crop has been precisely what might be expected and what the statistics show, says an early commentator. On the first appearance of rustiness in the crop or on the slightest provocation of threatened drought the mower was put at work and the wheat crop was sent to the market as hay.

There was a jump to 227,778 acres in the first world war 1916-1917 but there was a decline until the 1930's. In the 1950-51 season 558,780 acres of wheat were sown, the yield being 8,785,254 bushels and the value was £6,285,124. The overseas exports were 1,179,434 bushels. In the 1951-52 season 454,543 acres were sown for a yield of 6,631,644 bushels and the value is £5,375,520. In the 1952-53 season 700,000 acres were sown and the yield was 17,100,000 bushels and the estimated value is £15,000,000. This figure is approximate and the returns are incomplete.

Maize was grown to some extent in the convict settlements and official records show that in 1861 some 1,526 acres were grown in Queensland of which 545 was in the Brisbane Valley, 351 in Ipswich, 162 in Toowoomba and 383 in the Warwick District. In 1865-66 some 6,244 acres were grown; in 1870-71, 16,244 acres. In 1880-81, 38,711 acres, in 1885-86, 100,481 acres, in 1910-11 180,863 acres and in 1927-28, 234,013 acres. In the 1951-52 season 111,151 acres of maize were sown for a yield of 2,438,871 bushels and the estimated value is put at £2,000,000. The previous 1950-51 season 112,467 acres were planted and the yield 3,028,899 bushels, the value was £1,756,187. The Maize harvest which is now in progress after an exceptionally good season will yield under two million bushels. It will come from an 85,000 acre planting—the smallest since 1887. The crop estimated at 1,800,000 bushels in May is in line with the downward trend in Maize production in this State since the mid 1920's, only twice since

1889 and in 1902 has production fallen below this season's estimate. Plantings this year were the poorest since early in Queensland's agricultural history, of the 85,000 acres sown, 75,000 acres is being harvested as grain. There was a temporary revival of Maize growing in the arly War years. However the decline was most evident over the last decade.

The production of wheat and grain sorghum has shown remarkable expansion in the last ten years and from Queensland having to import flour and wheat the State now has ample for its own requirements and a substantial surplus available for export.

Various districts in Queensland were tried with the growing of tobacco from time to time with widely varied results. The first tobacco grown commercially in this State according to a return of land under cultivation on April 17th 1860 was a small area of 3½ acres at Rockhampton and 17½ acres were grown in 1861. The increase after this being very little up to 1869 at which time the first tobacco factories were established. After this the increase in production was very slow having only amounted to 117 acres in 1885, when the increase became more rapid and culminated in the crop of 1,061 acres in 1895. The districts about Killarney and Warwick produced considerable quantities of Tobacco leaf at the time. In the meantime experiments in the cultivation of Tobacco were being tried in the area about Texas, the first grower being James M. McPhillips who planted 1½ acres in 1882 and produced 25 cwt. and sold it to Mr. Corten a manufacturer of Toowoomba for 11d. per lb. The increase from 1930 onwards as North Queensland areas came into production of Flue-cured leaf as distinct from air-cured leaf of the South-West up to that time was very rapid. This was partly because of the improved quality of the flue-cured leaf but mainly due to the increase in yield due to irrigation. This is shown by the fact that in the 1900-01 season only 665 acres were grown, while in the 1949-50 season 2,677 acres produced 2,540,000 lbs. of cured leaf valued at £767,000. The 1951-52 crop was 4,666,699 lbs. of cured leaf from 5,038 acres.

During the last decade tobacco gave promise of becoming a source of expanding wealth but unfortunately, like cotton growing these industries have suffered

many serious setbacks. This was due to a large extent to lack of local demand and uneconomic price offered by processors and manufacturers. Although both tobacco and cotton were grown over fifty years ago to a small extent these industries have been heavily handicapped by imports of leaf, cigarettes, and pipe tobacco. Irrigation was certainly required to produce maximum crops, but this was only made available recently in the case of tobacco and cotton crops still have to depend on rainfall during the critical period of growth and this is often inadequate. Given irrigation, crops of quality cotton could be produced equal to any country in the world. It does seem quite unsound economically to import annually nearly all our requirements of raw cotton goods and the greater percentage of leaf cigarettes and pipe tobacco.

In 1847 Dr. Lang conceived a scheme for utilising the coastal districts to grow cotton and in 1849-50 brought out three shiploads of migrants to establish a cotton growing colony near Brisbane. Ten years later however the area of cotton in cultivation was only 3,557 acres. It is recorded that during the forties John Thompson, Inspector-General of Government Hospitals in New South Wales, raised a good cotton crop at Moreton Bay. This stimulated Dr. Lang to propound his scheme, but the first official record of cotton being grown in Queensland was in a return of land cultivation of April 7th 1861 shows that only a total of 14 acres of cotton were grown the previous year, of which 12 acres were grown in the Maryborough Police District. The high price of cotton during the American Civil War between the Northern and Southern States from 1861 to 1865 established cotton growing in Queensland and an area of 12,963 acres planted in 1871 yielded a peak production of about one million pounds of seed cotton. The industry then rapidly declined and did not substantially revive until 1922-23. About this time a number of migrants arrived from Lancashire and were engaged in cotton growing with indifferent results. The guaranteed price for seed cotton in 1919 was $5\frac{1}{2}$d. lb.

Being impressed with the cotton possibilities in Queensland Mr. Crawford Vaughan of South Australia (and former Premier) interested himself in the formation of a company with sufficient capital to develop the industry on sound lines. As a result the British

Australian Cotton Association was registered in 1925 and every effort was made to stimulate the more extensive growing of cotton. Cotton ginneries were erected at Whinstanes near Brisbane and at Rockhampton but owing to the poor seasonal conditions and the rather low price paid growers for seed cotton, many became discouraged and ceased cultivating the crop.

The Area rose to 50,186 acres in 1924 but averaged 20,000 acres from 1926 to 1931. The Commonwealth Government guaranteed growers a minimum of 14d. per lb. for seed cotton in 1932 and there is now more optimism for the future of the Queensland Cotton Industry; this and the excellent season just finishing has given the growers more faith in the future. From 10,000 acres this season it is expected to harvest 3,000 bales of seed cotton the best since World War II. This minimum price applies to the present and the 1954 harvest, but could be exceeded when the cotton is sold. A larger planting is anticipated in 1954. Had a satisfactory price been offered earlier and if irrigation facilities had been available the story is likely to have been very different.

Although small areas of rice have been grown in a few parts of Queensland and the results generally have semed encouraging no large scale production however was attempted because a sort of "Gentleman's Agreement" was arranged between New South Wales that no rice should be grown in Queensland, presumably on account of the industry having been established on an extensive scale in the Murrumbidgee Irrigation Area, and it was feared it might have an adverse effect on our sugar industry otherwise. There is also the fact that the New South Wales Government Dept. of Agriculture has always refused to make available suitable Rice seed to Queensland. Recently it appears that the Queensland Dept. of Agriculture is impressed with the possibility of growing rice here, and plans are being carried out for a further series of experiments. I see no valid reason why rice growing should not prove successful here where irrigation facilities are adequate or in North Queensland in view of the annual rainfall ranging from about 80 inches in the Herbert River area and upwards further north. It is suggested that if the land is graded and the rain is impounded by check banks during the monsoon season,

that the natural precipitation should be sufficient for the needs of the crop until near harvesting.

I speak with some confidence, because I have observed how rice was being grown in the Netherlands East Indies (now Indonesia) and Malaya where I lived for some time. I am also aware of the methods of rice production adopted in the United States, Italy, and other countries. By reason of this knowledge and experience I suggested in 1915 at Leeton in the Murrumbidgee Irrigation Area that rice could be grown on a commercial scale in that locality. As a direct result of my representations the industry was eventually established.

While efforts have been made over many years to encourage the conservation of fodder, the results certainly reveal the sad lack of progress on the part of dairymen and farmers generally, and yet during the dry season stock rapidly loose condition, and when a real drought occurs there is a heavy loss of stock with a corresponding lack of income. But with the return of good seasons the tragic lessons are often forgotten, and there is a return to the usual gamble on the seasons. In this connection, it is frequently urged that in most cases, the necessary labour is not available, nor are the implements required, and in the circumstances it is not considered an economic proposition. While this may be true to a certain extent, in the majority of cases there is no justification for the common belief that nothing can be done to make some provision in a good season against a scarcity of fodder when it is sorely needed by the livestock.

Graziers have previously held that the conservation of the natural growth of grass during a favourable season is not practicable, owing to the shortage of labour and the high cost involved. But during the last few years several progressive graziers have demonstrated that the conservation of baled grass hay is not only practicable but financially sound, where the use of mechanised mowing machines and pick-up hay balers are used. As a matter of fact, several station owners have stored stacks of such baled grass hay containing many thousand of tons of nutricious Mitchell and Flinders grasses. This has been found a great standby and been responsible for reducing to a minimum loss of sheep.

The conservation of water and irrigation has generally proved highly satisfactory, wherever it has been done, and by this means the production of vegetables, fruit, sugar cane, tobacco, and pastures has been greatly increased. Indeed; the extension of irrigation in this State during the last decade has clearly established that in this lies the best hope for the future progress and prosperity.

Here I might add something about the fruit industry, the mining and timber industries, and the inception and development of our growing secondry industries. While these are obviously of great economic importance to Queensland and of considerable interest, time does not permit specific reference to all their ramifications in this paper. Briefly, my purpose was to point out the beginning and gradual progress made by our principal wealth.

Scientific research has played a notable part so far, and still greater possibilities await in the near future. Perhaps one of the most astonishing things was the recent announcement made in Brisbane by Dr. J. Griffiths Davies, Associate chief of the C.S.I.R.O. Division of Plant Industry. He claimed that new knowledge of trace elements lacking in the soil will allow Australia to double its livestock numbers. He referred to the comparatively recent transformation of poor scrub land in Western Australia, and the so called Ninety-Mile Desert in South Australia to highly productive pasture, was only the prelude to similar improvement throughout all better rainfall areas in the Continent.

Dr. Davies said that previous concepts of Australia's possibilities for development must be drastically revised. He added that there were at least 342 million acres in Australia's better rainfall areas capable of improvement. In Queensland we may have the staggering total of 190 million acres yet undeveloped. He stated most of these areas had remained undeveloped because the reason for their infertility was not understood.

It was now obvious that everywhere the most important deficiency was in nitrogen. This deficiency must be corrected by pastures based on legumes such as clover and trefoils. In turn legumes could be grown only when mineral deficiencies were corrected. In track-

ing down missing elements, research is now providing the final key which will unlock the fertility of all this land, said Dr. Davies.

Copper, zinc, molybdenum and cobalt are some of the elements most commonly deficient, but it is also being shown that the long established results from superphosphates are due to the correction of the deficiency of sulphur and calcium as well as phosphorous (Doubtless this goes far to explain one of the reasons why the use of superphosphates in Queensland has not proved as successful as is generally the case in the Southern States and Western Australia).

Dr. Davies expressed the view that this new knowledge would add 19 million cattle to Queensland's present total of about 8 million, but he emphasised that fodder conservation against drought years would still be needed.

In effect, this means that Australia may be intensively grazing 342 million acres which to-day is regarded as worthless wasteland, and if this comes to pass Queensland will be the largest beneficiary. It should not be thought that the prospects visualised by Dr. Davies are in the nature of wild conjecture or an overvivid imagination, for what happened on the Ninety-Mile Desert a few years ago has proved that such results are quite possible. As its name implies this fairly large area of land was regarded as practically useless because it would not grow any crop nor carry any stock., but the A.M.P. Society became interested in experiments carried out by the C.S.I.R.O. in that area of South Australia, and as the results were so astounding it was decided to adopt a scheme to finance large scale extension of the system of treating the soil with deficient trace elements. That the time and money spent was fully justified is shown by the fact that to-day excellent crops of grain and fodder are now being grown, and the pasture is carrying more sheep per acre than some of the good grazing land in that State.

Dr. Davies believes that it is probable that somewhat similar results can be achieved in Queensland on some of our poor country within the 20 inch rainfall belt that is now considered quite worthless. At any rate the Dept. of Agriculture and Stock have initiated experiments on coastal Wallum country, a considerable

area of which lies between the Tweed River and Bundaberg. I understand that so far the results of the experiments are regarded as most encouraging.

Unfortunately, the splendid results obtained by scientific research are not generally applied by those farmers and graziers for whom such efforts are expressly designed to benefit. With the exception of the sugar industry, and to a limited extent other industries have made comparatively little use of this valuable information, but it is hoped that in the near future greater advantage will be taken of the "know how" to improve methods of production of crops and livestock.

In regard to our secondary industries, remarkable advancement has been made in Queensland and throughout Australia and particularly by chemical, mining and textile industries. We are now manufacturing many goods and requirements which were previously imported from the Southern States and Overseas, and now we are becoming increasingly independent of outside sources of our needs.

It may be asked what exactly has all this to do with the Historical Society? As I understand it, its objective is to maintain an accurate record of everything of real historical importance to Queensland. Although the Society is deeply concerned with the earliest efforts of achievement, I take it that it is also of great importance to collate in its archives all those things which have been achieved since for the progress and welfare of the community. In other words, to provide a continuance of what has been done so that future generations may have available the historical milestones in the evolution of Queensland. Much of this information can be readily ascertained at present, but with the passing of time it will probably be more difficult to obtain. That being so, may I respectfully suggest that some effort be made to file for reference under specific headings all such subjects that are deemed of historical value. I quite realise, Mr. President, Ladies and Gentlemen, that this involves a considerable amount of work for a start, but once the foundation has been established, additional information may be gleamed from a careful perusal of current daily and weekly newspapers, monthly journals and those publications devoted to agricultural, pastoral, mining and secondary industries. It is fairly obvious that the

compilation of such information will necessarily have to be restricted, but so long as sufficient is done it should provide for those seeking more detailed information and when and where to look for it.

Perhaps it may be that what I am advocating is a counsel of perfection, but in extenuation I have become keenly interested in the work of the Queensland Historical Society, and desire if possible, to make some slight contribution which may be of some benefit.