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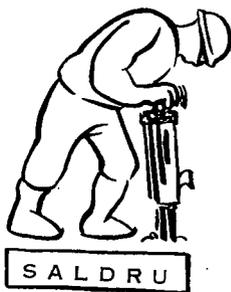
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Agriculture : The Nation's Largest Employer

- Text for a Slide Tape show -

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Agriculture does more than provide us with food.

- x The raw materials, for clothing, furniture, paper and packaging come from farms and forests too.
- x Exports from the agricultural sector, are South Africa's second biggest source of foreign earnings.
- x But most important of all, agriculture is the nation's largest single employer.
- x About 3/4 of a million permanent employees work for 80 000 white farmers, who tend and till the 88 million hectares which constitute 72% of the land area of the Republic.
- x Another 2/3 million are employed casually and there are over 100 000 domestic employees on farms.
- x A further 150 000 people are employed in the timber industry.
- x Many more work in industries which would not exist were it not for agriculture - at sawmills, abattoirs, co-operatives and Control Boards, where jobs depend on agriculture and white farmers are often ultimately in charge.

But even if we exclude those and consider only those employed directly on white farms. Although the contribution of agriculture has now fallen to about 7% of G.N.P. it is still rising fast in both monetary and real terms.

This industry is therefore playing an important part in providing for the increasing standards of living for all our peoples. Its role as an earner of foreign exchange

is also of immense importance for the country. More than a third of South Africa's export earnings (apart from those from gold) still come from her farms.

Agricultural imports meanwhile account for only one fortieth of the total. Apart from beef, which is brought in from neighbouring territories, the most significant food imports are rice, tea, coffee, cocoa and rubber. The total bill for these, about R30 to 50m, is small when compared with export revenue from wool, maize and sugar, each of which now brings in over R100m a year.

- * Agriculture has also played its part in releasing workers for other sectors of the economy.
- * Statistics are far from adequate but they indicate that although the actual number of people employed in agriculture has only recently started to drop, they have been representing a steadily declining percentage of the total national workforce.

The drift from the land has until recently been most marked in the white and Asiatic population groups but since about 1960 the number of "coloureds" on the land has also been dropping. Industrial, mining and urban competition for Africans had not until recently been as severe but indications are that the number of Africans employed by farmers is now falling too. With more intense competition from the mines, which are now recruiting locally, numbers are probably falling faster.

The advent of farm machinery was not initially used to replace labour but was rather taken as an opportunity by the farmers to extend and intensify their farming operations. Until the tractor arrived, the cultivation of large areas of land with unsophisticated labour and slow trek oxen was virtually impossible. Until motorised transport arrived, it was too tedious, expensive and slow to transport large quantities of produce from outlying farms. Until

the diesel and electrical pumps came to the Platteland, it was impossible to irrigate many of the lands which are today intensively cropped. Until the combine harvester and, more recently, the mechanical cotton picker arrived, there was insufficient time to reap the areas of crops which could have been planted.

Thus, while the number of tractors on farms increased almost threefold during the 1950's and nearly doubled again in the 1960's, agriculture's need for labour increased rather than decreased. The productivity of the labour utilized has improved substantially. While each Rand spent on farm labour in 1946 generated production worth only R4,55, by 1966 the average production from a Rand's worth of farm labour was R8,60.

Part of this improvement must be credited to the increased efficiency of both the farmers and their workers but much of the rest must be attributed to mechanisation and technical improvements, made possible by the agricultural service industry. Herbicides have, for instance, replaced hand weeding in many crops.

It should, on the other hand, be remembered that some of the new techniques which have been introduced are more labour demanding than the old methods. The use of artificial insemination is one which comes readily to mind.

The more important initial effect of mechanisation was to expand the total output of the farming sector. The volume of agricultural production has almost trebled since the War. The effect of machinery in bringing new areas of land under cultivation and irrigation can be gauged from the fact that the volume of livestock production has only doubled, while that of field crops more than tripled and that of horticultural products quadrupled.

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while the area under irrigation increased by more than 2000 per cent to 1,1 million hectares.

These areas are still increasing.

Meanwhile, the numbers of cattle and sheep in the country have remained comparatively stable. The increase in livestock output has come through the intensification of production methods which can be more demanding in terms of labour than traditional extensive ranching.

Although mechanisation and technology were slow to reduce the demand for employed farm labour, they have taken their toll of employers. The number of White farmers peaked at about 117 000 in 1950 and has been falling ever since. The current rate of exodus is almost 1½ per cent each year.

As the number of farm units declines and the owners of the remaining ones have to learn to live with narrower margins and larger areas, there is a definite tendency, for farmers to become more specialised and more cost conscious. This trend is very apparent in the dairy industry. Until quite recently, practically every farmer kept a few cows to provide fresh milk for the farmhouse and employees. The handful of layers for eggs was also de rigueur. These enterprises were, and in many cases, still are, highly inefficient in the use of labour.

The average size of an enterprise production unit will almost certainly grow faster than the rate at which farmers leave the industry. The machinery will get bigger and its more highly trained operators will work with greater speed and precision under the guidance of more scientific and exacting management.

All but 20 000 of the one and a half million employees are coloured or blacks. There are about 14 000 to 15 000 employed white workers. They used to be found almost exclusively in line management jobs, but as the size of units have grown, more specialist and staff positions have mater-

ialised. Many are now employed as farm mechanics, compound managers or in clerical and internal advisory posts on the larger farms and estates.

There are only about 6 000 Asian farm employees. Two out of three of these work within the metropolitan area of Durban/Pinetown/Pietermaritzburg, as defined by the Department of Planning. Sugar, timber and vegetable farmers are their major employers. Asians tend to be used in clerical, mechanical and truck drivers' jobs as much as in supervisory posts. They are seldom employed by White farmers for manual work and many have reservations about their ability to handle African labourers.

Three quarters of the Asians and nine tenths of the white employees in agriculture have permanent jobs. This contrasts sharply with the other two racial groups. Forty three per cent of the Blacks work on a casual basis and in the case of coloured, over half are casuals.

Historically, agriculture has been characterised by an erratic seasonal demand for labour. This is particularly true of crop farming, where definite peaks and troughs of activity are enforced by the seasonal growth habits of plants. Seed time, weeding and harvest especially called for a sudden increase in the number of hands.

The tendency for the demand for labour to surge, naturally gave rise to a system of casual recruitment at times of need to supplement a basic "skeleton" staff of regular workers, who saw to the routine operations. Permanent employees also tended the livestock (where their work is more evenly spread throughout the year) and undertook the skilled and semi-skilled jobs, such as tractor driving, fencing and repair work.

For these reasons, it is very natural that the ratio of casual to permanently employed labour should have been higher in those areas where intensive cash cropping is practised than in those where livestock production is predominant. To some extent, this is still the case but recent figures show that it is the areas closest to industrial cities which have the lowest percentages of their total labour force employed on a casual basis. Nearly 17 000 or 20 per cent of the farms in this country are found within the four main metropolitan areas, as defined by the Department of Planning. These farms, are clearly more intensively farmed. On 5,5 per cent of the land area, they employ 15 per cent of all farm labour. In spite of this, less than one labourer in four is a casual in those areas close to major conurbations, compared with 47 per cent in the other areas.

Low ratios of casual to permanent employees are also found in the Eastern Free State and Zululand. Both of these areas are highly mechanised and are typified by largish farms with relatively simple farm systems; grain with sheep or cattle in the Free State, sugar, timber or beef in Zululand. Both are also areas in which farmers have complained of labour shortages.

It would seem, therefore, that the predominant determinant of the nature of employment is nowadays as strongly, or more strongly influenced by the availability of casual labour than by the type of farming. Indeed the type of farming is often influenced by the availability of labourers.

The location of the country's tobacco, ground nut and cotton industries are cases in point. Cotton can be a highly profitable crop but the quality and, therefore, the profitability of a hand-picked crop is far higher than that of a machine-picked one. The labour demanded by a hand-picked crop, is however, highly seasonal. There is a very low labour requirement for most of the year, followed by a huge demand in the short picking season. The fact that major producing areas, along the Orange River in the far

Northern and Eastern Transvaal, are well removed from the big cities is not entirely due to soils and climate. The availability of labour has played a big part.

The non-availability of casual labour is also having other influences on the structure of farms. To a great extent, the mechanization programmes of individual farms are aimed specifically at reducing labour bottlenecks - even where they actually increase unit costs of production. Maize harvesting by combine is only marginally cheaper (and in many cases, more expensive) than hand reaping, but today very little is hand harvested purely because it would be almost impossible to recruit the labour to do it. Incidentally, in the case of maize production, the availability of casual labour is notoriously weak because most of the rural Africans, who would normally be prepared to consider an offer of casual employment, have their own crops of maize to tend as well.

The sugar industry has been particularly successful in evening out the seasonal demand for workers. Once heavily dependent on casual labour, the better farmers have learned to dovetail their planting programmes with the cutting season, and employ herbicides to reduce the demand for weeders when that demand would clash with either of the former jobs.

Similarly, vegetable, nursery and fruit growers have often succeeded in developing a sequence of crops which evens out their monthly labour requirements.

There is no doubt that the absence of labour available for casual employment will force farmers to take further steps to reduce their dependence on it. Casual labour will be part of the farm scene for many more years, but its relative importance will decline. As greater value is attached to skills and training by employers and to housing, schooling and prerequisites by employees, the labour force can be expected to become more settled.

At is already a common observation of farmers that the recruitment of male casual and contract labour is becoming much more difficult; the modern tendency is, therefore, to rely more on the wives and children of permanent employees to see the farm through busy periods. The stripping of wattle bark in parts of the Natal Midlands, has, for instance, changed from a predominantly male to a predominantly female labour task during the past two decades.

South Africa can grow an unusually wide variety of crops but most of our land is poor for cropping by international standards. In the few areas where rainfall is modestly reliable, the soils tend to be leached or easily eroded. Hail and droughts are still likely. Only 15 per cent of our land is reckoned to be suitable for cropping and quite a lot of that area is well removed from the major consuming areas and the ports.

Under these circumstances, it was not surprising that South Africa's agriculture was historically dependent on livestock. Wool was our big agricultural export. It could be produced in dry areas, stored for a long time and had sufficient value in relation to its mass to justify the cost of transportation to the markets of the Northern Hemisphere.

South Africa also used to export butter, cheese and ostrich feathers, and she relied heavily on cattle as draught animals as well as producers of beef. Nowadays, we are importers of butter, cheese and beef. Wool has been dislodged from its pre-eminent place by maize.

Even so, livestock products still account for 40 per cent of total agricultural production. In the early 1960's they were the most important users of farm labour. Just under 40 per cent of the estimated total expenditure on farm and forest labour was used in livestock production, compared with 36 per cent for field crops, 21 per cent for horticulture and 4 per cent for Timber and Wattle Bark.

These ratios have probably altered slightly during the last decade with a higher proportion now being used on horticulture and field cropping at the expense of wool and dairying.

The relative profitability of crops vis à vis livestock during most of the late 1960's and early 1970's resulted in some significant structural changes within our industry. Large areas of the Orange Free State and Transvaal were brought under the plough for the first time. The raising of the price of wheat to encourage local self sufficiency led to a series of record crops and a huge expansion of the area of winter wheat planted in summer rainfall districts. Sheep were moved or sold to make way for the plough. At the same time, the stock reduction scheme was introduced to encourage farmers to rest their veld. Large numbers of sheep and goats were removed from overgrazed farms, particularly in the Cape Province where these farms have come back into use, they have often been restocked with cattle, rather than small stock.

Within the cattle industry, there have been changes too. The draught oxen has all but disappeared. Dairying, apart from cheese and yoghurt, has been on the decline, partly as a result of the increasing scarcity of labour willing to work at weekends, but more because of the disappearance of two thirds of the butter market since the introduction of yellow margarine. The sudden increase in the price and profitability of beef between 1972 and 1975 spurred the swing.

The increasing demand for meat has not only affected beef. The poultry and the pig industries have grown rapidly over the last two decades.

Pigs, chickens, intensively fed beef animals and sophisticated dairying all call for more grain feeding. The demand for animal feeds, both at home and abroad, has ensured fast growth for what is now our most important single agricultural product - maize.

Maize now accounts for nearly one fifth of our total agricultural output and almost half the total of field crops. The value of the maize harvest exceeds the total value of all the horticultural products put together.

Maize is probably the most important provider of farm jobs as well. It is certainly the most important in the "maize triangle", which produces 80 per cent of the total crop. Growing the crop in this area is now highly mechanized. Hand labour, which was formerly used extensively for harvesting, weeding and planting, has now been replaced by machinery and herbicides. Even the bags have disappeared in favour of bulk deliveries.

Outside the maize triangle, where maize is often grown in small areas, as a source of farm feed or rations, the cultivation techniques are often still on more traditional lines, but most of these producers will eventually be forced to mechanize or give up maize grain production. Most of them are already working on narrow margins and many realise this.

The problem is what else to grow. Wheat has been one popular choice for those living on the drier fringes of the maize triangle. The Orange Free State now produces more wheat than the traditional area in the Cape. Although wheat now occupies about two million hectares, compared with four and a half million under maize, its labour requirement is well below half that of maize. Small grains are amongst the most easily mechanised of all farm enterprises and have a very low labour requirement, with nearly all operations being carried out from a tractor seat or, in the case of spraying, from a cock-pit.

More important than wheat, from the point of view of farm labour, is sugar. Sugar cane is labour intensive. It is also a crop which has become increasingly important to South Africa, especially as a source of foreign exchange. The industry has spread from its traditional Natal coastal slopes up into Zululand and Pongola, then the Natal Midlands

and now the Eastern Transvaal Lowveld. While it used to have a highly seasonal demand for labour and used a tremendous number of casual employees, the sugar farmers have proved themselves amongst the most successful at adapting to, and indeed, anticipating changed circumstances. The industry is dominated by a handful of large, wealthy and well managed companies prepared to innovate. Growers are also guided by an excellent research and extension service, financed by levies on their product.

Sugar farmers have learnt to plan their operations to even out seasonal labour requirements and they have been amongst the first to recognise the need for balanced diets and health programmes for their workers. They have also made greater efforts than most in providing good housing facilities and proper training schemes.

Mechanization of cane harvesting is still in its infancy in South Africa but it is widely anticipated that the next decade will see huge strides in this direction. The area under sugar and the yields per hectare will both undoubtedly grow but it seems more likely that this will be matched by an improvement in the quality and productivity of workers, rather than an increase in numbers.

The timber and wattle bark industries have much in common with sugar from the point of view of management. In both cases, there is a long, relatively simple growing cycle, followed by a repetitive but labour intensive harvest with large tonnages of produce to be carted a short distance to a railway or mill. In both cases, establishment and weed control are critical to yields, and labour intensive operations. Perhaps the most important thing they have in common with sugar, however, is in the attitude of growers. Several farmers produce both sugar and timber. The same enthusiasm and preparedness to adapt to modern methods is evident. The wattle producers and the timber growers have initiated their own research and extension services, both

of which are highly conscious of the need for labour training, in order to achieve greater productivity.

Timber is, on the other hand, a much slower growing crop and the labour requirements are, therefore, not so great. Since the introduction of the chain saw and of mechanical loaders, the need for strength in timber workers has not been so great. This, coupled with a tendency for contract labour to become more scarce, has led to the greater use of female labourers in the industry. When large gangs of contract labourers used to be brought in for specific jobs, there is now more likely to be a "forest plan", which provides constant employment for a lesser number of semi-skilled or skilled workers. Their wives and families provide the casual labour at peak periods. With both sugar and timber the use of "task" systems is common. The main timber employment areas are in Natal, Zululand and the Eastern Transvaal. Although there are also large areas of timber along the Cape coastal belt, they are mainly of slow growing species, which have a low annual labour requirement.

Tobacco, ground nuts and potatoes are the next most important users of labour amongst the field crops. Potatoes are grown in rotation with other crops in several different areas of the Republic, which between them ensure a reasonably steady flow on the markets. The summer crop from the Highveld is now highly mechanized and, for the most part, a "big" farmer's group. Female togt labour is taken on at lifting time but mainly to help with sorting and grading nowadays, rather than the actual lifting, which has been mechanized. The early and late crops of potatoes, which come mainly from hotter irrigation areas are more labour intensive.

Tobacco uses a lot of labour throughout the year. Seed beds, transplanting, weeding, harvesting, curing, sorting and hulling are all still hand jobs. Many of these require simple repetitive skills, which make them attractive to women but farmers are finding it even more difficult to get the quality of labour they want. This has led many

to discontinue growing the crop.

Groundnuts, cotton and dried fruit are all mainly irrigated crops with high seasonal requirements for unskilled labour. They each have to compete for markets, with crops produced in other countries and each depends on a source of cheap labour to enable it to do so. Hence, the main production areas are to be found well away from cities, which can offer alternative employment; Vaalharts, Unington, Groblersdaal, Komatipoort. If labour becomes more expensive these crops must either become mechanized or become unprofitable. In the meantime, they provide valuable employment in areas where it would otherwise be scarce. The production of lucerne, hay and dried beans is often found in the same areas.

Vegetable production, almost entirely for the local market, is a big employer but naturally a diverse one. The industry, which was traditionally centred round the main cities, is tending to split into two segments. The traditional market gardener is being rivalled by the large scale specialist producer, who is able to take advantage of ideal conditions and the economies of size in order to compete in areas well removed from the customer. Thus, for instance, Mouketsé in the North Eastern Transvaal is supplying tomatoes to Johannesburg and Durban, while the Garden Route supplies them with frozen peas, brussel sprouts and broccoli. This is perhaps one of the few cases where decentralization of employment is happening without any assistance from the Government.

Deciduous fruit, grapes and wine farming are all highly important employers of coloured labour in the Western Cape. They, like the sugar and timber industries, are well organised and aware of the need for training and productivity. Unlike sugar and timber however, they are not finding it easy to change their highly seasonal pattern of labour demand. The wine farmers are starting to harvest mechanically but table grapes and deciduous fruit can only compete in export

markets if they are handled with care and hand sorted. Britain's entry to the Common Market is causing concern to the exporters; labour is becoming scarce as more people have the opportunity of permanent employment in the towns; local competition from new production areas, such as the Orange Free State with apples and the Northern Transvaal with grapes, all point to more difficult times for the Western Province farmers.

The citrus industry is also facing marketing problems. In spite of the "Outspan" organisation, which is possibly South Africa's best run agricultural promotional team, the forecasts are gloomy. Increasing competition is expected from South America during our high season, while Northern Hemisphere competitors are lengthening their marketing seasons and encroaching on the months when we export. Citrus growers are, for the most part, progressive employers with a good record of labour relations. They employ a lot of female casual labour in the packsheds and in the orchards. Piece work is commonly in use for fruit packing.

The future for subtropical fruit exports is considered more promising but, so far, the production of lychees, mangoes and pawpaws, pecan nuts and macadamias is on a fairly small scale. Avocados and bananas are bigger business and the latter rely on labour throughout the year. This is another crop which has left its traditional area. The Transvaal Lowveld now produces substantially more bananas than Natal.

The labour requirements of livestock production are more stable than those of horticulture. Casual labour is seldom needed. Because animals have to be tended 365 days a year, it is normal for stock farmers to employ enough permanent staff to ensure that they can cope with weekends, holidays, sickness and absenteeism. The tendency to overstaff for that reason also gives them the resilience to cope with what surges in labour demand there may be. Sheep farmers may take on extra staff or hire contract labour at shearing time and dairy farmers may use casual women in

the growing of fodder crops but there is little other casual employment in the livestock sector. Some women are employed but although a lot of the work is light, traditional attitudes have mitigated against the widespread employment of females. The livestock work force is predominantly male. Very few women are to be found tending sheep, goats or beef cattle. These three types of stock provide over half the total employment in the livestock sector and probably as much as 80 per cent of it in areas remote from the main metropolitan areas. If light jobs are available on stock farms in these areas, they tend to be filled by children or pensioners.

Beef cattle were traditionally found mainly in the tall grassveld and sourveld areas of the country, such as the Northern and Eastern Transvaal, the Northern Cape and Natal. As the price ratio has moved in their favour and as the small stock farmers have come to realise how badly sheep and goats can damage their veld, beef cattle have penetrated further into traditional sheep country, such as the Eastern Cape and the Orange Free State.

The use of planted pastures, crop residues and grain for feeding has brought beef-finishing and intensive livestock into traditional grain producing regions.

The profitability of turning grain into animal proteins is also being exploited by pig and poultry farmers. Numbers of pigs and, more especially, of poultry have been multiplying rapidly, both industries tending to fall into the hands of a few large "factory farming" operators close to the main market areas.

Fresh milk production is also becoming concentrated in the hands of fewer and larger farmers, while industrial milk production, especially for butter, is in general decline. The dairy industry is thus gravitating towards more professional farmers, with large herds and mechanized milking.

Dairy stockmanship is becoming highly sophisticated and now requires labour which is both intelligent and skilled. Many dairy farmers are aware of the need for training and several small training schemes are starting to appear.

There is an economizing tendency throughout agriculture for farmers to realise that, as their businesses become more sophisticated and bigger, more responsibility will have to be delegated. This can only be done if training is provided and training is only justifiable to the employer if he can rely on the trained man to stay with him.

To the small family farmer, trained labour still seems to be an expensive luxury. The few decisions can be made by the owner. Unskilled labour with few aspirations is adequate for him and conveniently inexpensive.

It is in those sectors of farming where units are larger and techniques more sophisticated that present opportunities for labour advancement exist. The number of opportunities for skilled stockmen in the dairy, poultry and pig industries far exceeds the supply. On the arable farms, the demand is more for trained machine operators and mechanics, while in horticulture and irrigation farming, there is a need for both skilled operators and for junior management staff, who can supervise the large numbers of unskilled operators on whom those crops depend. The needs of the sugar and timber industries are similar.

Farmers are aware of these needs. They do not need to be told of them. They are at the stage where they need help with the training and with the new communication problems which arise when they have to delegate responsibilities as well as simply physical tasks.

Most farmers still have a much closer personal relationship with their labour than other employers do. Employers and employees live close to each other and usually have "roots" in the area. Many farmers have known their workers and their workers' families since childhood. To the city obser-

ver, the relationship may seem feudal, the skills rudimentary and the productivity low, but he should not forget that many of the tensions which typify industrial work relationships are absent on the Plattelend. Farmers like to make haste slowly. Experience has taught them to be wary of change but their reputation of being averse to it is undeserved. They are too independent to be forced into changes but they are open minded when it comes to suggestions.

The speed with which the farm labour situation is changing is causing anxiety in many farmers' minds but the farmer is accustomed to finding his own solution to problems. He will respond to the challenges presented. In doing so, he will use many of the best ideas from industry, but as long as he is not forced to make changes too quickly, he will not make as many mistakes.