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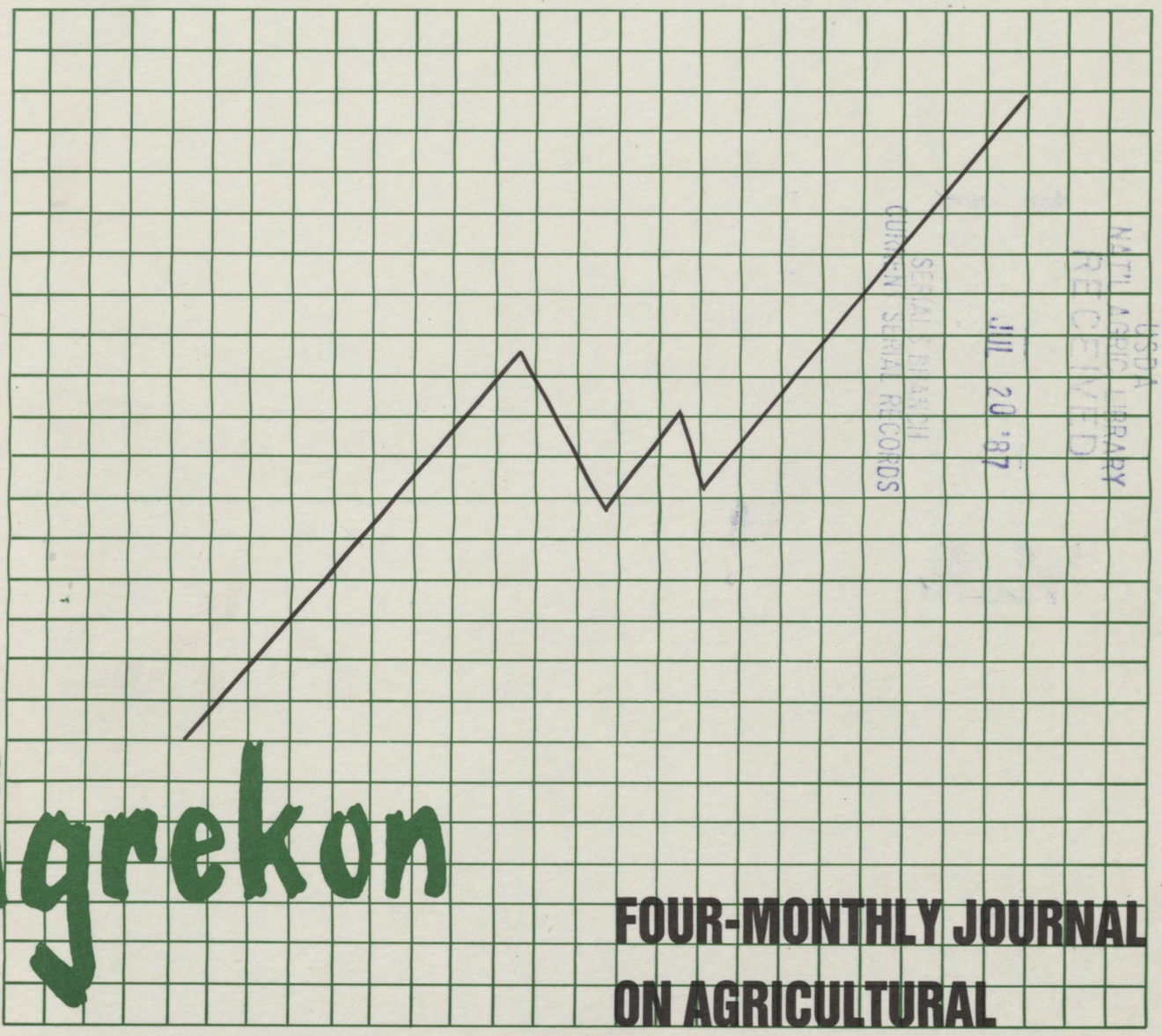

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CHANGES IN FARMING AND FINANCIAL MANAGEMENT: IMPLICATIONS FOR THE FUTURE

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"Those who ignore history are destined to repeat it.
Alas, we never learn." (Earl L. Butz, 1986)

INTRODUCTION

Yesterday's decisions are today's realities. In a previous paper the present situation with regard to farming and financial management in the RSA was outlined (Oosthuizen, 1986). The question is: How will future changes be managed? How will the realities and decisions of yesterday be managed? Which direction will South African agriculture take?

This paper deals with present-day economic realities in the RSA, the problems being experienced in farm management at present, expected changes in agriculture and the implications for the future. A distinction is drawn between farm management at the professional level and at the farm level.

Groenewald (1985) *et al.* gave a critical evaluation of the performance of agriculture and commercial policy in South Africa. Future changes in farming and financial management will have to be evaluated as part of this political milieu. Dillon (1979) also gave a critical evaluation of the present state of farm management.

Like the USA, Australia, Britain and Western Europe, South Africa is experiencing structural problems in agriculture. The symptoms are discernible in the current debt burden, cash flow and low profitability problems. The causes can be sought in a combination of the following factors: drought, high interest rates, inflation, government policy, poor strategic and operational decisions by farmers, the State (through subsidies) and co-operatives, and a lack of a marketing-oriented approach.

It would appear that for the most part the present problem-situations have been repeatedly predicted. Groenewald (1983) has referred to Kohls regarding expected changes in the agricultural milieu and remarked that South Africa normally has a time lag of 10 years. It is also clear that previous events/policy decisions have merely repeated themselves.

Several agricultural economists have already referred to the effect of the deteriorating rate of exchange, higher inflation and the increased probability of a financial crisis in agriculture (Groenewald (1979), Tomlinson (1979), Louw (1979) Groenewald (1980), Groenewald (1981), Louw (1981)). However, these warnings were not taken seriously. Indeed, it would appear that the lessons of history are not easily learnt.

The challenges facing the commercial farmer of today are the following:

(a) How to incorporate new technology profitably into his existing business organization;
(b) How to be sufficiently flexible, mentally and financially, to adjust his resource management to meet both changed economic circumstances and widely varying climatic condtions." (Dillon, 1979).

ECONOMIC REALITIES

At present producers are experiencing an imbalance between their debt burden structure and their income potential (SAAU (1984), Davel (1985), Louw (1985)). Inflation and high interest rates will compel banks as well as farmers to change their financial strategies. Up to 1983 negative real interest rates were a powerful incentive to acquire assets and enlarge the debt burden. There was an artificially stimulated demand for land and equipment as a result of factors such as subsidies and forms of agricultural price support, with accompanying price rises. This also contributed to overmechanisation.

Furthermore, inflation provided protection for poor managerial efficiency and cash flow problems and caused the value of the rand to fall. Although farmers are vulnerable to changes in monetary and fiscal policy, instability and cash flow problems, *inter alia*, can be corrected by monetary and fiscal policy rather than by price increases (Nieuwoudt, 1985, pp. 74, 75, 85). A responsible and stable monetary and fiscal environment is essential in agriculture. The drought, high interest rates and inflation were admittedly largely responsible for farmers' financial problems. However the question arises: To what extent was farmers' response to economic signals from fiscal and monetary policy to blame for their poor financial position? The fact that agriculture is subordinate to general economic and political policy in a country, as well as its dependence on changeable natural conditions, makes a sound agricultural policy all the more necessary.

The long-term growth in the value of assets (land) was interrupted by abnormally high interest

rates. At the same time subsidised interest rates caused a disproportionate rise in land values. Farmers cannot continue to operate on a negative financial leverage for long without the value of their assets being affected. Future programmes to assist farmers will have to include some attention to the restructuring of liabilities and reallocation of assets and resources in order to ensure the survival of farmers. The above will, however, have to be effected at a particular price. Capital values in agriculture could drop in order to bring the return on capital into proportion with the leverage in industry and the cost of borrowed capital.

The present tax legislation has increased rather than reduced financial risks in farming. Overinvestment in machinery has caused the financial position of many farmers to deteriorate. Furthermore, the present income tax legislation (100% write-off) has merely aggravated the situation. Under the existing legislation farmers find it difficult to build up reserves under dynamic conditions.

The skew distribution in farm income is expected to become even more marked. According to Hattingh (1986) 70 per cent of the country's farmers contributed 25% of the gross farm income, 50% contributed 10% cent and 30% a mere 3,5%. This skew distribution is increasing and is a logical consequence of inflation, the deteriorating rate of exchange, the drought and the high interest rates of the past few years.

There is already a tendency towards some degree of marketing orientation among farmers, financial institutions, co-operatives and institutions that serve farmers and certain marketing councils. Considerably greater marketing orientation in the agricultural sector (at the primary and the secondary level) will be required in future.

Banks find themselves in an extremely competitive climate (they are in competition not only with each other but also with building societies, the Post Office, co-operatives and the Land Bank). Banks cannot be expected to become involved in programmes that would reduce their profitability.

FARM MANAGEMENT AT THE PROFESSIONAL LEVEL

According to the approach outlined in Dillon's article (1979) it is necessary to distinguish between farm management at the professional level and at the farm level.

(i) One might well ask to what extent farm management at the professional level has kept pace with research, training and extension, and especially with the continuous changes in the economic environment and the disciplines that support farm management.

(ii) Farm management should fulfil an integral function with regard to the various production-oriented disciplines at the training, research and extension levels. The question arises to what extent farmers turn to farm management at the professional level for guidance on their management problems. The same question applies with regard to the status of farm management vis-à-vis other production-oriented disciplines.

(iii) Given the increasing integration of agriculture with the international economy at the input and output levels, the instability and uncertainty in farming and the exchange rate fluctuations, farmers' need for information has increased considerably. Means will have to be found to adjust to this increasing need for information.

(iv) The deregulation of the banking system in South Africa over the past years has given rise to high and unstable interest rates in agriculture. Such rates will be a reality in future (Jacobs (1984), (1985)). Provision for this has largely been made already at the training, research and extension levels. It will have to be possible to act proactively rather than reactively.

(v) A larger share of agricultural assets is being concentrated on large farms, with a consequently larger output from larger farms. In the USA medium-sized farms appear to be decreasing in their relative importance. The smaller farms are those of part-time farmers, impecunious farmers with few resources and young farmers. Each of these groups has its unique problems. To what extent are these problems known?

(vi) The need for information in agriculture will have to be supported by decision-making aids so that the information can be used effectively. The analytical and conceptual framework that will help farmers to put the large body of information at their disposal to good use is still lacking at the professional level. At the same time the results of research should be meaningfully and usefully communicated to farmers.

(vii) The changing role of the private and public sectors should be regarded as an opportunity and not a threat. The role of each can be clearly defined and a greater degree of synergism rather than competition is possible. The impression is being created at present that the private sector poses a threat to the public sector.

FARM MANAGEMENT AT THE FARM LEVEL

The following deficiencies in farm management at the farm level have emerged over a period.

(i) A lack of skills with regard to marketing, production, financing and administration in relation to the size of the farm enterprise and the demands it will pose in future.

(ii) An increasing dependence on (and vulnerability to) external factors and an accompanying lack of planning, control and ability to become less dependent.

(iii) A lack of realistic goals and accompanying long-term planning. The goal orientation of farmers could have a considerable effect on the growth and survival of their enterprises. "Greater empirical knowledge of farmers' goals and aspirations is necessary to increase our understanding of

decision-making and the effects of goal orientations on farm firm and growth" (Patrick, 1981, p. 38).

(iv) A lack of business experience. Despite an increasing realisation that farming is no longer a way of life but a business, farmers seldom have business training, aids and experience.

(v) At the farm level, farmers lack the ability to adapt rapidly to changes in production costs and income, one reason being that they expect product prices to be adapted to production costs. The farmer could gear his branches of farming, production systems and production planning to changes and risks in his environment, which are admittedly inherent in agriculture.

(vi) Unwillingness to adapt to a changed environment or to follow professional advice in solving financial problems.

(vii) Greater financial risks as a result of high fixed costs in an industry that is subject to numerous business risks.

(viii) A lack of accurate and meaningful financial management information regarding his own enterprise. The quality of decision-making and planning suffers as a result. Besides, banks have traditionally had to advance credit on the basis of relatively inadequate information.

(ix) In a going concern a farmer has to be able to pay his debts, incur personal expenses and finance expansion from earnings on his enterprise. So far the producer has given little attention to the business performance of his enterprise and the measurement of his income. The reliability and usefulness of available data are suspect. A more sophisticated financial reporting system is essential.

(x) With high capital investment through excessive use of and dependence on credit at high interest rates, farmers have increased their financial vulnerability, which has attracted public attention to farmers.

(xi) An unhealthy dependence on State aid in the event of crises, no reserves having been built up, is a disquieting characteristic.

IMPLICATIONS OF CHANGES IN AGRICULTURE: FARM MANAGEMENT AT THE FARM LEVEL

Certain changes at the farm management level and the financial management level can be identified.

Increasing emphasis will be placed on the efficient farmer in future. At the same time relations between the farmer, agricultural input companies, co-operatives, the State and banks will have to improve. More innovative products/services for sound financial management will have to be provided by the authorities, the private sector and the co-operatives.

More emphasis will be placed on the analysis of the performance of resources, land, labour, capital and management. Farmers will also have to become less dependent on credit and build up their own capital reserves. The Income Tax Act will have to make provision for this, however. The ability to repay will also play a considerably larger part in credit rating.

The information needs of farmers are expected to increase dramatically at various levels, both internally and externally. Farmers' own management information systems will also have to assume more practical management significance in future. The farmer of tomorrow will have to be prepared to pay for services such as better information, advice, management information, etc. Information will probably provide the highest marginal income per time unit.

Increasing demands will be made on farmers in respect of the protection of their cash resources (greater liquidity), creativity and knowledge. The margin for error possible by farmers is becoming smaller and smaller and particular emphasis will therefore fall on information management, the management of risks and liquidity. Conservatism will have to be part of everyday decision-making.

In future the emphasis in farm management is expected to fall largely on the objective of increased productivity, the management of risks, labour and financial management. Given these goals, the emphasis will fall not on further development but rather on the application of basic principles, available research and knowledge. However, the onus rests not only on the farmer to effect this but also on the State, co-operatives and the private sector (including commercial banks).

Farmers will be more militant, with emphasis on group action through their farmers' organisations. It can be expected that in future financially powerful farmers will show a greater tendency to form groups (outside organised agriculture) in order to undertake purchases on a combined basis. The loyalty of the farmer towards his co-operative and his bank will be determined by the quality of the services provided. This will naturally undermine the activities of the co-operatives. This shift in loyalties will mean that the bodies that serve agriculture will have to conduct a critical self examination, especially with regard to their own strategies.

Co-operatives will have to improve their management in order to retain a sound core of members, become marketing-oriented and restore and maintain their own capital base in a sound manner. In the short term the co-operatives still have a certain hold on the farmers (as a result of debt obligations) and they are consequently able to exert more pressure on debtors.

Greater community involvement, with regard to the farmer's employees as well, is a future development that could effect greater labour and political stability in the rural areas. Trade union activities among farm labourers, a strong possibility, will be slower to develop, however.

Crop insurance programmes (such as Sentra Crop) could receive greater support in order to place the avoidance of risk on a formal footing. However, the State cannot enforce this. Premiums should be adapted to the actuarial reality. Nieuwoudt (1984) refers to the problems that may be experienced with

crop insurance programmes and welcomes crop insurance through private channels.

Farmers will continue to place a high premium on their independence. Programmes launched by the authorities should therefore keep decision-making in the hands of the farmers. A high value should also be placed on this independence by consultants, extension officers, etc. Farmers will strive to reduce their dependence on State support. This will largely be determined by circumstances, however.

Inflation will remain a reality in South African agriculture (De Kock, 1986). The farmer will have to plan accordingly. More efficient and effective use and replacement of resources and inputs will become necessary.

As regards farm mangement, greater emphasis will have to be placed on purposefulness and efficiency and therefore on strategic management. This involves the formulation of well-defined goals and plans (at the technical, economic and financial levels), the judicious use and profitable application of technology, a systems approach, planning for risks (through flexibility, diversification, liquidity, insurance), the optimal timing of decisions (the right choice of credit and cultivation at the right time) and a greater degree of discipline and control over farming on a continuous basis.

Farmers can be expected to be younger and better qualified, with a greater interest in professional development courses such as courses on financial mangement, computers and taxation, and courses on the principles of cash flow, long-term planning, time mangement and mangement in general. Farmers are expected to demand better advice, client-oriented services and educational opportunities.

Women will play an important role in farm decision-making. Greater emphasis will have to be placed on women as information flow managers and bookkeepers, on the development of their decision-making abilities as a result of the greater share they will have in the decision-making process, and on their role in farming organisation. In general the women involved in agriculture are highly qualified. There are few channels for creativity and development in agriculture and this resource should therefore receive more attention in future.

Future farmers will make greater demands in respect of services, require more accurate and timely advice and information, place greater pressure on financial institutions and salesmen for information and service and will desire better information on complex financial matters such as pension plans, insurance, bank acceptances, shares etc. Farmers are expected to be more sophisticated in regard to technology and have their own computers and data systems, in addition to possessing more mechanical equipment. Greater marketing orientation in respect of the needs and demands of consumers may develop.

Part-time farmers will probably represent a greater portion of the farming population. Although they are relatively well endowed with capital, there are shortcomings in their abilities from the point of view of farm management.

MANAGEMENT OF CHANGE: THE TASK OF PROFESSIONAL FARM MANGEMENT

6.1 Change: Threat or opportunity?

Change may bring threats or opportunities in its wake. Although it creates uncertainty, it is part of the environment within which the farming enterprise functions. An attempt should be made to manage change rather than to,oppose it. The faster the pace of change and the more uncertain the environment in which the enterprise functions, the faster the contrastream in terms of management information needs to be.

Any body, be it the State, a marketing council, a co-operative, bank, university or farming enterprise, has to be able to plan for change and requires, a specific long-term goal and strategy which, although it will be regularly revised and adapted, will give a general direction to mangement. It is critical that strategic planning for agriculture as a whole (and for the farmer at the micro level) be carried out on a regular basis so that guidelines within an environment of change can be laid down.

Drucker (1964, p. 16) puts it as follows: "(1) The present business must be made effective; (2) its potential must be identified and realized; (3) it must be made into a different business for a different future. Each task requires a different approach. Each asks different questions. Each comes out with different conclusions. Yet they are inseparable. All have to be done at the same time: today."

At the farm management level the farmer will have to school himself in the following aspects in particular: risk management, time management, cash management, information management and strategic management (a high level of purposefulness and efficiency). The challenges of the future lie in these aspects and the ability to survive and grow will be determined by how efficiently the farmer is able to adapt to the changed technological, economic, political and social environment. It is the task of professional farm mangement to provide the farmer with this training, research and extension.

At the professional level of farm mangement in particular there are certain aspects with regard to research, training and extension that require attention. The management problems that farmers face today and will face in future are far more complex than they were in past. The total environment has become more unstable. A better understanding of management abilities, targets and processes and of decision-making is required and better mangement skills will have to be developed. This also implies an interdisciplinary approach. Farms of different sizes have different needs and present different problems; professional farm management has to take cognisance of this.

Furthermore, increasing free-market orientation and privatisation in the economy are creating problems of a different kind at the farm level and at the professional level, especially with regard to marketing and financing.

Strategic management

Enterprise strategy is the relationship between an enterprise and its environment.

Strategic planning comprises the process of the formulation of long-term strategic goals and policy plans that change the nature or direction of the enterprise. It is consequently geared to the long term, is qualitative in nature and provides a guideline for short-term plans. Strategic planning therefore influences the physical, financial and organizational framework within which operations take place and lays down strategic guidelines and policy in respect of the management or business planning process. "Strategy is the match between an organisation's resources and skills and the environmental opportunity and risks it faces and the purposes it wishes to accomplish" (Hofer and Schendal, 1978, p. 11). Environmental conditions, changes in such conditions and competitive action therefore dictate strategy to a large extent. A match of opportunities, risks, environmental changes and skills must result in efficient and purposeful resource utilisation. The competitive advantages and strong points of the organisation in relation to its competitors and the organisation of resources and skills need to be identified in order to bring about a synergism.

Strategic management therefore comprises the identification, formulation, implementation and evaluation of strategy. It is a continuous process in an enterprise. It gives the enterprise direction in changing circumstances and should be reviewed regularly. Hitherto this aspect has largely been neglected in agriculture at the macro, micro and training levels.

The strategic management process has been discussed in recent papers, especially at a macro policy level. At the business and therefore the farm level it has not yet had much impact. Just as an AGROCON takes place annually, there is a need for three-yearly delphi technique investigations, nominal group techniques and think tanks to conduct a critical examination of the goals and policy in agriculture as a whole, especially with regard to the macro, marketing and micro environment in which it functions. These seminars are urgently needed in the agricultural industry.

The management of information

As changes take place in the environment and in technology and the margins of error within which the farmer is operating are reduced, more accurate and immediately available information is required. The time utility of information will probably become greater and greater in future. A management information system at the macro and micro levels will have to be created to support the farmer (adviser and policy-maker) in his decision-making.

A system can be described as follows: ". . an orderly arrangement of interacting parts that operate together to achieve an objective or purpose" (Boehlje, 1985, p. 866). Naturally these comprise the physical-biological (technical), economic, legal and social environment within which the farmer functions. A complex system can be divided into a series of manageable subsystems (e.g. a farming information system) that will eventually show inter-relationships and will be useful in planning and controlling the enterprise. Dillon (1979) and Seuster and Oosthuizen (1984) describe these systems and subsystems. It would appear that agriculture will have to give greater attention at both the management and the training levels to managing and accommodating change more easily in future.

Information from these interdependent subsystems can improve the quality of decision-making for the enterprise. Information will increasingly become a more sought after resource.

It should be possible to use the computer as a true decision-making aid and not merely as an instrument for gathering information. The farmer should be able, using his own data and parameters, to evaluate various strategies and so facilitate decision-making.

Risk management

Risk management comprises the identification and evaluation of risks and the choice of the most advantageous method of dealing with them. A risk management programme has to be given time if it is to succeed. This frequently involves unavoidable costs. From a financial point of view, however, the aim is to find the most effective balance between risk control, self-funding (own retention) and insurance.

As a result of the present market conditions, droughts and interest rates, farmers today experience more instability and uncertainty than formerly. Prices often only provide short-term signals about the market and are not necessarily a permanent phenomenon. "Effective management of agricultural resources does not require perfectly stable farm prices and income. Too much stability can be as costly as too much instability" (Bullock, 1985, p. 9). Risk management is a continuous challenge to farmers.

The subsidisation of credit and inputs does not have the desired effect. ". . . additional debt decreases rather than increases (have diminished) the farmer's ability to withstand adversity" (Bullock, 1985, p. 14). Given the negative financial leverage on which farmers are operating this fact cannot be overemphasised in South Africa.

Technological uncertainty as a result of technological changes is increasing in agriculture. The greater range of inputs, genetic changes and changes in pest control have become part of the agricultural environment. Louw (1979) and Van Zyl (1985) undertook research on risk decision-making

which pointed expressly to the importance of liquidity in the farming enterprise. Considerably more research of this kind is required.

Financial structure

The cost of capital in an enterprise is the weighted cost of each source of capital in an enterprise according to its long-term use level in the enterprise's capital structure (Musser *et al.* 1979, p. 163).

It has been traditionally accepted that the cost of the entrepreneur's capital is less than that of borrowed capital. However, since own capital is the risk-bearing capital in the enterprise, it merits a risk premium. The extent of foreign and own capital is determined by the risk preferences and the impact of the leverage on the riskiness of the own capital of the entrepreneur and the debt due to the lender. The more inclined the farmer is to take risks the greater will be the amount of own capital in the enterprise.

The optimum financial structure in a farming enterprise is affected by solvency, ability to repay (liquidity), composition of the debt burden (short, medium and long term), risks (variations in income levels), existing fixed obligations, variations in interest rate levels, and the risk preferences of the entrepreneur and the supplier of credit).

Given the varying income levels in farming and the relatively high interest costs, it is necessary for a farming enterprise to be able to meet its interest obligations even during the worst years. Therefore, the greater and more regular these variations and the higher the interest costs, the lower the debt burden levels agriculture can maintain.

Given the business risks (drought) and financial risks (interest rates) to which farming is subject, a relatively conservative financing policy should be followed.

The greater the relative variations in income and the higher the interest costs, the more sensitive an optimum relationship of assets to liabilities in an enterprise becomes. A combination of varying income and high interest costs merely requires greater solvency levels. These variations in income should therefore be specifically taken into account in the long-term financial planning of the enterprise and reviewed regularly.

The farmer should also attempt to build up credit reserves (in other words, unused credit in relation to his permissible limit). A cash cushion of this kind in the form of a credit reserve will increase the farmer's flexibility, give him room to manoeuvre and reduce the risk.

Training

The nature and complexity of farm management require a more interdisciplinary and dynamic approach. It may be possible to learn from the successes and failures of schools of management. Agricultural policy, agricultural marketing, strategic management and risk management will form part of the farmer's environment. Farming management training should therefore become more market-oriented. Knowledge of management processes, target orientation (budgeting by objectives), and time management, as well as the digestibility of available information, are necessary.

The question may be posed: Are farmers/students trained in the acquisition of resources and in growth and survival strategies? Are alternative strategies considered, given the varying interest and inflation rates and climatic conditions? Do such strategies exist? Is the farmer aware that he requires a strategy of this kind?

Extension

Extension in its present form will disappear. No free extension will be provided by the State to advanced agriculture. The present extension structure will be suitable for the subsistence sector, but modern agriculture will move in the direction of advanced, professional and fee-based, business-oriented advice. Given modern communication technology, information will also have to be transmitted to farmers in a more creative manner than in the past. The existing supply mechanisms in agricultural extension will probably change considerably. Similarly, private sector involvement will increase and this should be welcomed. In all aspects of the economy where agricultural extension is involved, more attention will have to be given to career planning for professional farm management.

Research

The challenge for professional farm management in future is to undertake research at the farm level in such a way that it eventually makes an impact at the macro and policy levels. Naturally such research will have to keep pace with changes in the environment and provide the necessary guidance. Certain existing research results could also be developed in this way for useful implementation at the farm level.

CONCLUSION

Farm management in South Africa is facing the challenge of renewal. A sound foundation has already been laid. At the macro policy level more attention will have to be given in future to research results at the farm management level. Farm management at both the farm and the professional levels will have to be able to deal with the changes to come both purposefully and effectively. It is therefore necessary to take cognisance at both the macro and the micro levels of the events and errors of the past so that the errors are not repeated in the future.

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