The object of this report is to pick out trends, new features and discernible gaps in work on agricultural structure as it has been presented at this conference, to show how the discipline is developing, and suggest new directions for research.

Taking into account the rich extent of the programme and the short time available, this report has to be only an outline, even a caricature, and provide a subjective view. However, Vice President Renborg has freed us from any doubts about this by inviting us to express our personal views; provocation can often be more useful than subtlety.

What do we mean by ‘structure’? All the related elements making up forms of organisation and exchange, enjoying some level of stability and with some ability to recur. This definition obviously needs clarification but, keeping it as a provisional one, one can see emerging a common feature of the papers, i.e. a reading of the dynamics of agricultural structures on the basis of macroeconomic determinants. This common link undoubtedly arises from the pursuit of the well known process of integrating agriculture into trade, but today, as this conference has recognised, new factors are contributing to this integration. Let us first briefly recall them before discussing their consequences.

The coexistence of situations of surplus and shortage accentuates the competition between developed countries to secure LDC markets. This turns them into battle stakes, a factor which no doubt partly explains the importance attached to them by this conference. The trade brought about by this coexistence brings together agricultural structures of very different types.

Increasing unemployment slows down the process of structural change in agriculture.

Monetary factors play a very important role. The instability of exchange rates is a relatively new source of uncertainty. The increase in capital movements resulting from government debts, bank credits and budget deficits emerges on to an integrated (but uncontrolled) capital market which directs the volume and cost of credits. This creates a new form of dependence for agricultural production in relation to monetary mechanisms and policies, both domestic and foreign, particularly marked
for those countries involved in international trade and exposed to fluctuating exchange rates.

Agricultural production thus becomes a pawn in the exchange of goods, in movements of capital, and in relations between states.

The environment surrounding agriculture, the increasing decisiveness of whose role I have justifiably underlined, is becoming more complex, and more unstable. It results from a new situation which cuts through the relative stability of the 30 years since the Second World War. Even if the relations between agriculture and its environment have become more complex and diversified, possibilities emerge for adaptation under constraint, new determining factors enter into the picture, while the way in which traditional factors operate can change. This is the objective of the first part of my report, to evaluate the effects of these changes in the agricultural environment on analysis of agricultural structures. But this new situation gives rise to questions and debates not only about the way agricultural structures develop in different countries but also the status accorded to this view in our discussion. Part II will examine some of these arguments.

I CONSEQUENCES OF THE NEW SITUATION

Changes in the environment of agricultural production give rise to new fields of interest and generate renewed interest in analysis of types of farm organisation and development policy instruments, with many writers emphasising the role of social groups.

1. New fields of interest

An immediate result of the recognition of new determinants is the appearance of hitherto little studied subject areas: in addition to agricultural trade between countries, which I shall review in Part II, monetary relations have come to be added to the factors usually brought into analysis of evolution of structures: factor endowment, productivity, demand elasticity.

To reach these new fields, we first have to reorientate our current view of agriculture: we often persist in analysing agriculture as a branch of activity which purchases inputs and satisfies a demand when agriculture becomes involved in the exchange of goods; it also becomes part of the monetary and financial markers, as well as of a network of diversified activities bringing about alternative uses for labour and capital.

In the monetary field, many papers give us information on the mechanisms of global quantities, econometric analyses which study their effect on the composition of production, conditions for trade, and change in terms of trade. A way towards some progress might lie in identifying the actors, analysing their interests and behaviour, and locating their areas of common interest or conflict. This kind of research into the logic involved seems necessary for understanding the management of money flows; it is also a precondition for any eventual organisation of capital.
markets, the desirability of which has sometimes been mentioned at this conference.

As far as individual agricultural producers are concerned, monetary variables – prices, interest rates, real and nominal exchange rates, monetary policy – have repercussions for production decisions which have still been little studied.

This often risky dependence on monetary factors added to the growth of farm capital and indebtedness underlines the interest in new sources of finance and problems of farm transfer. Several papers remind us of the difficulties experienced by family farms because of their lack of resources, and their dependence on the life cycle, and examines existing or easily complementable formulae to remedy their situation in forms of communal ownership, forms of land development, pluri-activity, legal title to the farm, to the land and to the workers, adjustment of inheritance arrangements etc; these are research suggestions with obvious institutional implications and from which emerge themes familiar to agricultural economists.

2. Types of farming and their development
The changes in macroeconomic conditions I have already indicated which make agricultural production more uncertain and more risky, give rise to various forms of adjustment. There seems to be unanimous agreement on the heterogeneity and diversity of types of farming, giving rise to such categorical statements as: 'there is no such thing as the average peasant farmer or typical farm'. In support of heterogeneity, the papers indicate the many forms of pluri-activity, the diversification of production systems, the setting up of new forms of organisation to make use of local resources, the existence of communal types of organisation etc, and the theme of the dual economy is often raised.

This result is not trivial. Analysis of farms through the model of the firm could lead one to believe in the progressive emergence of a dominant type of farm through elimination of the less well endowed units and accumulation of resources by the rest. In fact, for several years the thesis of promoting modernised family farms has probably been most prevalent and today's agricultural policies frequently refer to this mode. This recognition of diversity and heterogeneity thus opposes the linear, homogenising, reducing to a common denominator interpretation, to which we have so often been subjected in the past.

This movement in favour of heterogeneity is all the more remarkable in that it results from such varied intellectual starting points. Models drawn in the neoclassical mould illustrate the possibility of retaining heterogeneity and the conditions which explain it: the continued evolution of techniques while changes in price continuously alter the optimal combination of factors of production sought by producers.

Economists who are anxious to interpret types of farming in terms of macro-economic determinants underline the logic of diversity as emerging from the interplay of these determinants. Those who study
changes in rural areas or rural societies always see more varied forms of production than those seen by administrators or agricultural policy makers. Statisticians confirm this general observation.

Finally, and surprisingly missing from the conference, Marxist thought, or at least some of its movements, accepts the idea that capital operating as a social link effects a permanent change in farm structure, giving way to new and varied types of organisation.

This finding of diversity often leads researchers to alter their way of approaching farms, which are no longer merely considered as farms (enterprises) but as households with consumption and investment needs which they must satisfy by mobilising resources with a wide range of uses in terms of systems of activity and capital investment. The basic identity frequently used for studying farms – 1 farm = 1 household = 1 exclusively agricultural activity = 1 farm income which has to finance consumption and investment – is today often called into question because of the diversification of activities and sources of income. Agricultural production thus becomes part of a family-based economy in which it is only one element. This shift in method of approach provides an opportunity for taking a closer interest in agricultural household consumption (level, composition, finance) and in localisation of activities.

This remarkable unanimity disappears when, seeking to complete the picture of agreement on heterogeneity, one asks a question about its constituent parts. This question has been very little tackled in either papers or discussions. For most papers, ‘structures’ are seen in terms of farm organisation. There is no attempt to combine these structures to understand their origins, their repetition, or to place them in a higher degree context which may be able to explain their dynamics. Perhaps even to propose such an idea would be considered futile by many speakers.

On the other hand, taking heterogeneity on board does not mean we can ignore two points concerning, first, taking account in economic policy of structures and their heterogeneous nature and, second, considering the social groups involved in these structures.

3. The instruments of development policy

The evolution of production conditions renews the debate on instruments of agricultural development policy. At the conference, this debate was limited to the case of developing countries.

Agreement was easily reached on underlining the importance of the role of prices and their inadequate levels. But the risk of contradictions in the resulting effects of changes in prices is also indicated: it is difficult to use price as a single policy instrument to simultaneously satisfy various objectives. I can understand the division of opinion between those wanting action on prices alone and those who think action on prices and on production structures is necessary to facilitate a response from the production system. However, the justification and forms of actions on structures have very often taken the form of appendices to papers and
discussions. This seems to me regrettable, first because those in charge of development operations come face to face with them, and second, because action on prices is linked with action on structures: a price policy is also a structural policy (since it defines those farms able to continue and extend) while a structural policy is also a price policy (since it determines the performance of the production structure).

4. The role of social groups
Reference is certainly very frequently made to the importance of peasant participation, consulting their interests and getting them involved. In actual fact, much more frequently than an analysis, there is a simple, often conventional call for mobilisation of the actors involved.

Analyses on the constitution of an agrarian social movement, its role in managing a situation, or in sharing out the surplus are almost non-existent. Do we have to conclude, then, that for many speakers, these preoccupations are outside our scientific field? This is an extreme view, as Olson’s paper shows, but for most of the papers and discussion, the question needs to be asked, and the answer would probably be affirmative.

The predominance of such an attitude is regrettable. The history of economic thought already shows the validity and the relevance of taking into account social categories more rigorously defined than by a simple reference to consulting those concerned. In considering the more limited field of agricultural economics, two arguments could be put forward in favour of more differentiated approaches.

In the first place, social groups are a determining factor in how structures evolve. Taking such a determinant seriously should lead to studying the social space occupied by the agricultural population in society. Through this space, peasant farmers can influence access to land, price relationships, the marketing system, allocation of public resources, and the role of the agricultural social movement. This social space is also the precondition for rural societies to become aware of their situation and contribute, under constraint, to the direction of their own development.

In the second place, collective action by farmers, or some groups among them, is the result of confrontation between economic interests dependent upon structures which agricultural economists quite rightly study with minute attention. In terms of this conference, a paradoxical view may be noted: the heterogeneity of structures is emphasised on the one hand, while at the same time talking of farmers as a homogeneous indistinguishable group whose role in collective and action and policy making is little studied. In this field Olson’s communication provides particular relief. His proposals on group make-up and effectiveness seem applicable to analysis of the success, failures and operations of agricultural organisations. They also offer an invitation to pursue the study of the conditions required to change latent groups into working groups and, inversely, how economic and social structures favour, or do not favour, these transitions. Ignoring this question could lead to looking
for explanations within groups without considering their mutual relationships.

5. A note on methodology
This review of work on structures and structural change, their original features, and their limitations can be concluded with a note on the methodological attitude of many authors of papers. These emphasise the multiplicity and complexity of the determining factors at work, whose result one cannot always predict. This is not a trivial observation; it indicates that the solution is not always strictly determined and the linear trends to which the preceding time period has made us accustomed are less frequently justified. In support of this, one could also note the attention given to the perverse effects indicated in relation to both interventionist and liberal policies.

A scientific caution emerges from these remarks which is favourable for identifying closed situations for which determinism is vital and open situations whose dynamic is uncertain. This is a not inconsiderable result if one admits that determinism is not indispensable in understanding social phenomena or in their interests. It is undoubtedly the crisis which, by weakening certainties, explains this methodological trend which leads agricultural economists to look again for contemporary questions on scientific determinism, as found in the works of Karl Popper.

This trend is opportune for identifying the themes of discussions and pinpointing unanswered questions which can be more deeply examined later.

II QUESTIONS AND DISCUSSIONS
Among the whole range of debates opened up by the papers given at the conference in the field of structures, two merit particular attention.

The first is the case of the relationship between the agriculture of developed and developing countries, for two reasons: (1) because of the scientific and political stakes involved, and (2) because our meeting, bringing economists from all over the world, is a particularly appropriate forum in which to tackle these questions.

In the second place, the remarks made below on the place and role of the notion of structure in our analyses invites us to consider the image agricultural economists have of this concept and the significance they allow it. With a view to clarification, I shall attempt to explain, in broad terms, the major well known differences between us in resorting to this notion of structure. This clarification seems to be a precondition for recognising the diversity of approaches, getting to the bottom of them, and questioning them together.

1. Relations between the agricultures of developed and developing countries
These relationships between countries at different stages of development
seem to me to challenge agricultural economists in two particular areas: comparison of their structures, and analysis of the interrelationships between heterogenous agricultural structures.

(a) Comparison of structures

It has been usual to insist on the specificity of production conditions in developed and developing countries. This might justify different methods, different forms or even separate sciences. In fact, during our conference, individual papers have been devoted to one or the other field. This very clear-cut distinction seems to me regrettable.

One gets a better understanding of the agricultural structures of developed countries from the research on agricultural structures carried out in developing countries. While the production condition may differ from one country to the next, the working methods and approaches seem comparable and likely to provide mutual benefit. Numerous examples can be cited from various fields: supply elasticities, migration, family organisation, relationship between the farm and the environment, etc. As the remarks of Polanyi remind us, observing modern societies in the light of developing societies stops us from separating economic phenomena from the rest of society as if they constituted an airtight and autonomous field.

It is true that there are risks of improper transfers of economic concepts or techniques, but this is due to the clumsiness of economists who tack a pre-established representation on to the real situation being studied, rather than seeking to understand how it works. This is also a risk in studying developed country agriculture.

This interest in comparing structures is further strengthened through the increasingly frequent communication between different agricultures because of trade.

(b) Interrelations between heterogeneous structures

Relating the varied types of agriculture belonging to unequally developed countries gives rise to a double debate: scientific, about how to divide up agricultural activities, and political, on the direction of national food and agricultural strategies.

To simplify the usual concepts, location of production occurs according to comparative advantage, the market ensures communication between the various production regions, and international division of labour is thus found to be justified. In their most classical interpretation, these mechanisms offer such advantages that the economic policies to be implemented are self-evident. Given the questions at stake in this analysis, it seems to be important to carry to its limits the debate over the effects of competition between heterogeneous and unequal structures.

Consumption models for developing countries are similar to those for developed countries under the effect of imports made necessary through situations of extreme shortage, decided upon by governments, solicited by privileged social categories, or brought about by surplus situations in
developed countries. This consumption model is thus not always oriented in favour of the operation and development of national agricultural structures. Developing countries' agriculture often finds itself both dependent on the export market, if it is an exporting country, but also on the import market, which provides products which are direct competitors with nationally produced or substitute products. And in this competition, the productivity gaps are such that LDC agriculture cannot rival that in developed countries.

Undoubtedly, the market offers advantages, frequently mentioned during the course of the conference, in terms of reducing surpluses and deficits but the characteristics of international agricultural trade provide contradictions to the thesis of international division of labour brought about by market mechanisms. Overproduction leads the developed countries to make price concessions or agree to export-linked advantages – credit, purchases, military protection, more or less overt political support. The market thus keeps an economic and political dependence; it may be a means of redistributing, but is also a way of dividing up the world. International trade cannot thus be analysed only in terms of supply and demand without explaining how they are directed and determined by the agricultural structures of the countries doing the trading.

2. On the use of the notion of structure
Although very little alluded to directly in our work, this question has always been implied, without there being any debate or argument about it. This can result in a poor appreciation of the dynamics of the discipline in this field. To begin to clarify the matter and encourage its study in greater depth, two concepts of the idea of structure can be set against one another. The way already prepared by earlier discussion, these concepts seems to be very clearly introduced by referring to the discussion between Berlan and Gonzalez-Vega on the problems of a particular agricultural change – setting up the maize-soya model.

In Berlan's exposé, this change results from the functioning of a structure characterised by a certain level of technical development and a given social organisation. It is the functioning of this structure which ensures change in the production model. In the comments by Gonzalez-Vega, the change in question is the result of adjustment of the price mechanism resulting from the encounter between, on the one hand, supply which works according to comparative advantage and, on the other, demand, dictated by changes in income.

From this example, one can distinguish a concept which sees in the idea of structure a means of clarifying, of precisely defining, the whole field of study, and a concept according to which the structure is a basic characterisation of the whole, giving it its operational logic.

According to a first concept, the notion of structure is a way of disaggregating global quantities while taking account of their organisations. The latter can make for efficient operations of economic mechanisms. In frequent cases the structure impedes economic opera-
tions; but adjustment of supply through price will end up doing it too. If one takes even a passing interest in the analysis of structures, it is simply to facilitate the movement towards rationality. One may also analyse structures to improve the representativeness of models; this process could then lead to research on constraints so as to take better account of the behaviour of the actors involved. Briefly, in this context, the economy is a process of adjustment through the price mechanism imposed on the social organisation which has then to adapt itself. Structures can thus have a second or secondary status.

Such a theoretical position often leads from description of a reality to confirmation of a norm. If economic science is a means not only of defining rationality but also of defining the conditions in which this rationality is beneficial to society, at least for a time, one can see that the researcher in economics can claim to define the norms of good operations.

According to a second concept, structure is a way of characterising the society being studied. Economic operation is not an adjustment procedure which is necessary at all times and in all places, independently of the social organisation, but the product of social links which make up a system. Rationality is not postulated, it is the result of research.

In this perspective, economic relationships are not a separate field, independent of social organisation, condemning other relationships to the role of exogenous variables or to an institutional role. The objective of the analysis is to find areas of connection, contradiction and complementarity between the various components of the society under study. These proposals reserve a privileged place for analyses of stratification which can pinpoint social relationships (who does what and how) and historical analyses to study how social groups develop, and their linkages.

Contrary to a widely held idea, this process excludes neither quantification nor model building but subjects them to preliminary knowledge, at least hypotheses, of the logic of operations of the whole being studied.

Surprisingly enough this view of the notion of structure has featured very little at the conference, although in the world at large it is often referred to by many agricultural economists; as evidenced by the frequency of systems analysis carried out by agricultural economists, the world of economic anthropologists and the various currents emanating from Marxism. As can be seen, there is a wide range of ideas on this theme, which cannot be reviewed here.

The concept is obviously full of risks and confronted with difficulties. On the one hand it faces the threat of monotony of hypotheses, verified by some researchers for all circumstances as if they offer the universal answer for all situations, the concessions having been predetermined before the research was even carried out! On the other hand, this approach generally covers broad fields, and has as a result to deal with delicate questions concerning the relationships between these fields;
technical progress and economic organisation, state and society, ecosystem and social dynamic. In Marxist analysis, there are innumerable debates on the identification and articulation of modes of production making up a social formation, and in the relationships between infrastructure and superstructure or between productive forces and social returns.

This attention given at the end of our conference to the concept of structure and its current status in our discipline, marks an opportune end to our discussions. To clarify and perhaps ultimately enrich these discussions on the status of structures in our analysis is undoubtedly a good way of finding out our differences when one is placed immediately on the methodological level. It is in any case a precondition for exchanges of views on the scientific nature of the view of structure we accept. For this, our Association should make room for the various currents of thought running through the agricultural economics profession. In this connection, it seems to me that the interpretation of structures as a foundation of the logic at work is over-represented in the world at large as much as in our organisation. If this organisation claims international status, it should be open to this wide range of currents and examine them in depth. This is also an excellent protection against the risk of creating an intellectual monolith. This wish, if it is shared, means that we are already involved in preparations for our next meeting.