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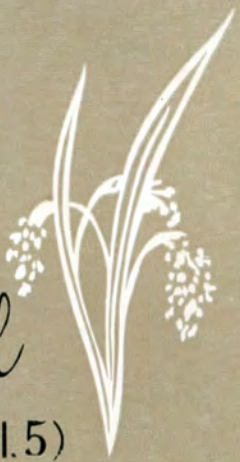

Agricultural Problems (Vol. 5)

# The Management of cooperatives

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# Vietnamese Studies

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# Contents




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**Vietnamese Studies**

# Foreword

*By 1961, most of the peasant households in northern Vietnam were grouped in agricultural co-operatives; and the U.S. air and naval war of destruction, which lasted from 1964 to 1973, was a decisive test for these newly established socialist structures. Thanks to agricultural co-operation, the country was able to overcome the many difficulties caused by the war in the field of food supplies, to avoid serious shortages and to prevent prices from rocketing; collectivization also helped peasants to deal with the devastation and sufferings caused by the war. It must be said, however, that in so far as the war greatly slowed down the development of industry and occasioned mass mobilization of the most active and the strongest peasants for military tasks, it impeded the development of agricultural co-operatives. Now that peace has been restored, the problem of agricultural development becomes one which the whole country, North and South, is involved in solving. The end of foreign aid, the high population growth rate, the necessity for rapid development in industry, the extensive war damage, have all caused further problems in agriculture. The second plenum of the Central Committee of the Communist Party of Vietnam has defined the main lines of agricultural development for the years to come in a published resolution in 1977. The complete resolution appears in this issue.*

*This issue of* Vietnamese Studies *is the fifth on agricultural problems, and concentrates on a question of prime importance for Vietnamese agriculture:* the management of co-operatives. *The co-operatives cannot make contributions of any great consequence to the development of agriculture*

*until they are well-managed. In present conditions, an agricultural co-operative comprising several thousand people and with 200-300 ha of land yielding two crops, and even three crops in the delta is a big enterprise. In such an enterprise the orientation of production, the organization of work and payment are really complicated matters, not to mention the fact that in many co-operatives people are still engaged in various handicrafts.*

*The experience of vanguard co-operatives and studies by specialized services have contributed to perfecting the methods and formulae of management which it is necessary now to introduce in all co-operatives. The development of cadres and public education make it possible to raise the managerial level of co-operatives.*

*In this issue, we provide a concrete analysis of the present methods and formulae of management. However, we are well aware that they are constantly being improved, for with the technical modernization, the raising of the cultural level of the masses and cadres, and the development of industry, no managerial technique, however perfect, can remain unchanged.*

*Hanoi, September 1977*

# RESOLUTION OF THE 2nd PLENUM (FOURTH CONGRESS) OF THE CENTRAL COMMITTEE OF THE CPV ON AGRICULTURAL DEVELOPMENT

## *PART I*

## SITUATION AND LEADERSHIP OF AGRICULTURE IN RECENT YEARS

### I

*In the last two decades, one of the greatest triumphs of our revolution has been the rapid* completion of agricultural collectivization in the North: *socialist relations of production have been established in the countryside and have steadily been consolidated; the emergence of the co-op peasantry has reinforced the political and moral unity of the country and worker-peasant alliance; and the causes of class antagonism in the countryside have been abolished. Agricultural co-operation has speeded up irrigation work, improvement of the soil, utilization of new seeds and animal species, and adoption of intensive cultivation, while favorable conditions have been created for the establishment of material and technical bases in agriculture. In the North, we have now succeeded in establishing* the first material and technical bases for development and solving some scientific and technical problems in agriculture.

*On the basis of the superior new relations of production and the existing material and technical bases, the North was able to maintain and develop agricultural production while the country was at war, making the winter-spring crop the main crop of the year, raising both yield and production, developing pig-rearing, turning some regions into specialized crop areas, promoting the development of handicrafts in the countryside and proceeding to the fair and rational distribution of products in wartime. Despite great natural calamities, the increase in the population, which has well high doubled, and our importing a considerable quantity of food-stuffs, the living standard of the population remained basically stable, and improved to some extent. The political, ideological, cultural and technical level of the peasants, and chiefly the youth, was definitely high : a new countryside has emerged and steadily been consolidated. Co-operative agriculture and the new countryside have greatly contributed to the consolidation of our rear area, to the strengthening of national defence, and have enabled the North to tackle production and fighting simultaneously and to supply the front with the human and material resources needed, and was thus one of the factors deciding the great victory of our patriotic struggle against the Americans.*

*Recently, the initial reorganization of production at district level and the improvement of agricultural management at grassroots level, combined with the management of water conservancy and gradual mechanization, has generated a new style of work aimed at making rational use both of arable land and the labour force and at developing agriculture as large-scale socialist production.*

*Since the complete liberation of the country, more than two years ago,* important changes have taken place in the countryside in the South. *The colonial and feudal vestiges of the land ownership regime*



*have been completely eradicated; the majority of peasants now have ricefields of their own. In many regions the peasants join together in various forms of low-level collective work. The mass movement behind water conservancy management, the reclaiming of land which lay fallow during the war, and the multiplication of crops ; intensive cultivation and the clearing of virgin land have developed considerably. The gradual re-transfer of the urban population to their native villages and to new economic zones has been stepped up. Pedological surveys, the planning and defining of various economic regions are now underway. State economic enterprises have been set up. The State has sent and continues to send many economic and technical cadres, tractors, pumps and other material and technical equipment to the southern provinces.*

*These tremendous achievements derive in the first place from* our Party's correct line. *After the completion of land reform, our Party* rapidly guided the peasants onto the path of agricultural co-operation *despite the absence of developed industry,* by linking co-operation with irrigation work, *practising intensive cultivation and carrying out the socialist transformation of private capitalist industry and trade in urban centres : this is the way the socialist system has been established in the North. Our policy of "giving priority to the rational development of heavy industry on the basis of developing agriculture and light industry," and our principle of "developing agriculture as large-scale socialist production," "turning animal husbandry into a main branch" and "re-organizing production at district level" are correct in every respect.*

*Our working peasantry has a high revolutionary consciousness ; our Party has considerable bases in the countryside ; our cadres, Party members and leading organs at various levels have close ties with*

*the population, in many regions, widespread mass movements have been launched to promote agricultural production.*

## II

*While affirming our great success, we are also fully aware of our errors and shortcomings. In the North, agricultural production increases slowly. The work force is not used rationally. Productivity of economic enterprises in the co-operative and state sectors is low.*

*In the South, agriculture is still carried out on an individual basis; private capitalist trade and industry have not been subjected to socialist transformation. There are thus great impediments to the establishing the regime of* collective mastery *among the labouring masses, to planning production and introducing scientific and technological improvements in agriculture. On the whole, our agriculture still does not meet the requirements of the population with regard to foodstuffs, the required animal feed, the supply of raw materials to industry and production of goods for export; it is not yet an effective corner-stone for industrial development.*

*This situation is due to the prevailing state of small-scale production in our economy, to the weakness of our material and technical bases, which were furthermore heavily damaged during the war, to the fact that the Party and state had to concentrate mind and body on the conduct of the recent war. Nevertheless, great shortcomings have become apparent in the field of leadership, chiefly in guiding the organization of practical implementation.*



### 1. On Agricultural Policy

*We have not yet realized the prime importance of agricultural development in the early stage of socialist construction; we have not fully grasped the concrete directives concerning agricultural development. That is why we are not yet concentrating all our efforts from top to bottom on this work.*

*We have also been slow to define* the concrete stages of transformation of our agriculture from small-scale production to large-scale socialist production. *For quite a long period we have not seen clearly hwo agricultural co-operation serves socialist industrialization, and that the latter must primarily consolidate and develop collectivization and intensify agricultural production, in the beginning we did not combine industry with agriculture in a unified economic structure, and we* dissociated industrial development from agricultural development *somewhat; we were not fully aware of the close links between the transformation of the relations of production and the development of the productive forces, between the change in the system of private ownership and the establishment of the new system determined by management and distribution, nor did we realize the necessity of conducting the three revolutions in the countryside simultaneously in order to build up a new agriculture, a new countryside and a new man.*

*We have been slow to define the relations between the various echelons — central, regional and grassroots — and in particular* the role played by the province and the district *in agricultural production; to realize that the district is the most appropriate unit through which to assert the right of "collective mastery" of the people; to re-organize production, the work and the daily life of the inhabitants; to combine industry with agriculture, the economy*

*of the co-operative with that of the entire people : all in aid of the process of transition from small-scale production to large-scale socialist production. This means that co-coperatives and production brigades have maintained their scattered and irrational production with very low productivity and economic efficiency for quite a long time.*

### 2. On the Orientation of Agricultural Production

*The directives aimed at solving the food problem have produced an unbalanced situation :* subsidiary crops are considerably under-estimated in the structuring of food crops.

*We have not taken sufficiently energetic measures to promote intensive cultivation, multiplication of crops, to enlarge the planted area, and bring into play the great potential of our tropical agriculture.*

*We have been slow to solve concrete problems arising from the utilization of new seeds and new strains of breed animals, supply of cattle, implementation of measures against epiphytes and murrains, thus prolonging the serious imbalance between animal husbandry and cultivation.*

*We have not organized the production of industrial crops according to the principle of concentration and specialization; we have not combined the work of planning and structuring production, of developing technology, of implementing measures proposed to this effect.*

*We have not paid sufficient attention to the development of handicrafts and cottage industry in the countryside.*

*There is room for improvement in the co-ordination between forestry and agriculture, between the protection of forests, afforestation, reafforestation and forest exploitation, between woodland activities*



*and the development of animal husbandry. Inadequate measures have been taken against the destruction of forests.*

*We have not yet stimulated the* production of export *goods, so as to rapidly cover the cost of importing machines and equipment for our agriculture. There is no concrete orientation, no mobilising measures aimed at vigorous intensification of agricultural production for export.*

### 3. On the Establishment of Material and Technical bases for Agricultural Development.

*Rigorous and co-ordinated planning of work and production is lacking in water conservancy. Not enough progress is being made with building a comprehensive irrigation system and canal network. The management and utilization of hydraulic installations is not entirely satisfactory.*

*Drastic measures should have been taken to quickly boost the production of various categories of* manures and fertilizers.

*Regarding the production of* seeds, *investments are insufficient, and the establishment of a nation-wide system of production and selection for seed and for the main plant species cultivated is going too slowly.*

*For years there has been a shortage of work implements, chiefly rudimentary and improved tools ; the tractors now available are not made full use of.*

*The timelag between successful study of science and technology and its practical application to agriculture is too long ; the leadership of this work is neither strict nor centralized.*

### 4. On Ideological and Cultural Tasks

*The triple revolution has not yet been synchronized in the establishment and consolidation of the*

*new relations of production, the vigorous development of agricultural production, and the building up of a new countryside and fostering a new, socialist man. Ideological and cultural work is still insufficiently concrete and appropriate in content, form or method to be efficient in raising the awareness of the co-op peasants and their sense of collective mastery in production, in building up the co-operative and in fulfilling their commitments toward the State, improving the technical and managerial knowledge of cadres, Party members and the population at large, and practising the new socialist mode of life.*

### 5. On Organization and Management

*We have not been able to make full use of the efficiency of the government's centralized leadership, the capacities and characters of various departments of the central administration or the initiative and creative spirit of the regional administration and the production units. Bureaucratic centralism, together with dispersion, irresponsibility, regionalism and localism in management weaken the leadership in agriculture and delays implementation.*

*The direct leading and managing apparatus in agriculture is still not entirely suitable to the work of management and operation of large-scale socialist production. We have been slow to implement managerial autonomy and create material conditions likely to give the province and district greater freedom in leading the development of agriculture, forestry, fish-breeding and regional industries.*

*The effective measures and programmes adopted to train and foster managerial cadres in agriculture, chiefly co-operative chairmen and chief accountants, are lacking. Our technicians, though trained in sufficient numbers, are weak in practice, not correctly employed and fostered and are not evenly spread to include adequate numbers in grassroots production units.*



*The directives on implementation of the various measures decided on are not issued promptly. Our policy regarding prices, purchase of agricultural produce, investment, capital, supply of agricultural materials, as well as regulations and measures affecting the co-operatives, are not effective in stimulating production, improving the living conditions of the inhabitants, raising labour efficiency, lowering cost prices, and encouraging the production units to implement the socialist operational regulations correctly.*

## *PART II*

## ORIENTATION AND TASKS OF AGRICULTURAL DEVELOPMENT IN THE NEW STAGE

*Now that Vietnam has regained independence and peace, and is advancing to socialism, conditions for the development of agriculture are very good.*

*The Fourth Congress of the Communist Party of Vietnam worked out a correct, creative line for socialist construction. Our cadres are mature, and have gained sufficient knowledge and experience in the past 20 years to implement the transformation and development of agriculture in the whole country according to the line charted by the Party Congress. Thanks to our climate, agriculture, forestry and fisheries can be developed quickly, turning out a great variety of products. Our country has great potential in land and manpower. Our people are dedicated to revolution and are very industrious. We are now in a position to achieve a nation-wide*

*redistribution of the work force and of production, and to make full use of our great natural resources and our inexhaustible store of manpower, in order to meet the needs of the people and make our country prosperous. We can also expand economic relations with the fraternal countries and other countries in many ways. The advantages of our tropical agriculture, forestry, and fisheries can be made use of to promote foreign trade. In exchange for our produce, we shall have equipment and materials for our agriculture, forestry, fisheries, and other economic branches.*

*But we have yet to overcome many difficulties. There is insufficient agricultural and forest land. We do not have adequate protection against typhoons, floods, droughts, and severe cold spells, all of which are frequent from Nghia Binh province northwards. In addition to the serious consequences of the war, our material and technical bases are weak. In the South agriculture has yet to be transformed and the transformation of private trade and industry is only beginning, and the struggle against reactionary forces continues in all its complexity. Meanwhile the Party, the administration, and mass organizations have yet to secure a firm foothold in many communes and hamlets. In the North relations of production have not been sufficiently strengthened and consolidated in agriculture, economic management leaves much to be desired, and the people's right to collective mastery has not been satisfactorily promoted.*

*If we are* to grasp the full meaning of the general line for socialist construction and the line for building a socialist economy *we must strengthen Party leadership and State management regarding agriculture, actively promote the working people's right to collective mastery, simultaneously conduct a revolution in relations of production, another in*



*science and technology, and still another in ideology and culture, the second revolution being the kingpin. All this is aimed at turning present small-scale agricultural production into large-scale socialist production, eliminating all the causes of exploitation, doing away with poverty and backwardness, transforming the countryside and fostering new, socialist people.*

*The work force must be redistributed both nationally and locally, and the organization and use of labour must be co-ordinated with the improvement of the material and technical resources, all with a view to quickly raising productivity in agriculture. Irrigation must be stepped up parallel with gradual mechanization and electrification, and with the application of new farming techniques. Specialized cultivation must be concentrated and combined with intensive farming in the whole country as the cultivated area is expanded. A balance must be achieved between crop farming and animal husbandry. Agriculture must be developed parallel with forestry, fisheries and industry. Transformation must be combined both with building and with the establishment and perfection of the socialist relations of production in the whole country. Activity by the State and the people, the centre and the grassroots, in the economy and national defence must be co-ordinated. The district level must be built into an agro-industrial economic unit.*

*The* primary tasks *in the years to come are a quick development of agriculture, forestry, and fisheries ; solving* the food problem ; *and providing two fundamental and urgent requirements : the building of the material and technical foundations of socialism, and the improvement of the material and cultural life of the people.*

*A* new movement for productive labour *must be launched throughout the country to step up agri-*

*culture, forestry, and fisheries, aimed at these objectives :*

1. Ensure the supply of food for the whole society *(including* animal *feeds) and enough for reserves.*

2. Supply raw materials from agriculture, forestry, and fishing for industry; *first of all for the food industry, for textile and paper mills, for rubber factories, saw mills, and for the production of essential consumer goods.*

3. A rapid increase of goods for export *in exchange for equipment and materials with which to develop agriculture, forestry, fisheries, and industry.*

*If we do our best, after a few five-year plans a basic change can be effected in agriculture in the direction of large-scale socialist production, a higher degree of concentration, specialization, and co-ordination, and better material and equipment, higher productivity, greater progress in intensive farming, higher quality, and lower costs will become generalized. In this way we can meet the needs of the whole society for food and other agricultural products, the requirements of socialist industrialization, and further improve the people's living conditions.*

*The following annual targets are to be reached or surpassed by 1980 :*

*— 21 million tons of food,*

*— 16.5 million pigs, one million tons of meat in live weight, more than one million tons of fish, 3.5 billion eggs, 220,000-250,000 tons of sugar,*

*— 980,000 hectares under industrial plants and fruit trees,*

*— 500,000 hectares for specialized cultivation for export,*

*— One million hectares of cultivable land to be cleared, and another 500,000 hectares fallow land to be restored to cultivation,*



*— Another 1.2 million hectares of forest to be planted, 3.5 million cubic metres of timber,*

*— 1.8 million people to settle new economic zones,*

*— Investments worth five billion* dong *in irrigation,*

*— Tilling of half of the cutivated area by mechanical means, and*

*— A ratio of one person per 1-2 cultivated hectares ; and three tons of paddy and three or four pigs per cultivated hectare.*

## Organization of Production in the Next Five Years.

Food production *will be stepped up and will lead to a gradual improvement of people's everyday diet, through a decrease in the proportion of starch consumed and an increase in protein-rich foods and processed foods. Effort is needed to develop intensive farming, raise productivity, multiply crops, and expand the rice-growing area wherever possible. Guidance in all regions must be concentrated on* rapid increase in cultivated area, productivity, and production of subsidiary crops, efficient organization in processing, the introduction of subsidiary crops in people's everyday diet, and an increase in animal feeds.

*Each district and province must grow subsidiary crops in addition to production on a national scale, and attention must be given to increasing crops of maize, sorghum, manioc, potatoes, sweet potatoes and other starch-bearing crops.* Green vegetables *must be grown in greater quantities. Cities and industrial centres must have food crop belts soon. The planting of* protein-and oil-bearing crops *must be developed, and there must be a quick expansion of the growing area for soya beans, ground-nuts, sesame, coconuts, candleberry-trees and palm. The sugar-cane area must be expanded rapidly, new specialized areas created and big sugar mills built. In hilly provinces sugar-cane should be planted on areas of one*

or two thousand hectares each to meet local needs. Cultivation of pineapples, bananas and other fruit must also be stepped up, through both specialization and individual efforts.

Regarding industrial plants, more cotton-growing areas must be created, and mulberry, jute, and rush must be planted more extensively.

We must also expand the area on which rubber, coffee, tea, tobacco, pepper and cocoa, are grown, while the growing of medicinal plants for home consumption, and later for export, must be boosted. Cultivation of aniseed, citronella, peppermint, ocimum, etc., must also be stepped up to increase the production of spices and essences.

We must make use of every opening to develop animal husbandry along the line of large-scale production, and a balance must be found between local animal husbandry and cultivation. Husbandry must be promoted in both State and collective sectors and in each household; and the proportion of production accounted for by animal husbandry on State and collective farms will gradually increase. Pig rearing must be developed in terms of both number of animals and weight, and there must be more cattle for draught purposes and for meat, as well as more dairy farms. At the same time buffalo-milk production must begin. Chicken farms must be set up near urban areas and industrial centres, and efforts made to raise bigger flocks of ducks in coastal areas and in the plains. Wherever possible, greater efforts must go into keeping goats, rabbits, horses, and honey-bees. Every expanse of water on the coast and in the plains, the uplands and mountains must be used to rear fish and shrimps.

Forestry must be closely combined with agriculture and the processing industries on each farm, in each district. Forestry activity must become an important economic branch meeting the requirements



of capital construction, food, clothing and consumer goods needs and providing necessary export products. Protection and planting of forest and processing of forest produce must be given equal attention.

Barren hills and sand-dunes on the coast must be forested quickly and afforestation must use intensive methods and aim at tree-specialization. Tree-planting and protection of forests must become a broad, continuous mass movement, and the movement for sedentary farming must be stepped up parallel with the re-organization of production. Land and forests are to be alloted to co-operatives for management, in keeping with State plans and policies. More manpower will be assigned to forestry, and more State-run forestry enterprises will be set up. At the same time forest areas where food is short must be supplied with more food to rapidly stop irresponsible exploitation of forests like farming on burnt-out clearings.

There must be workable plan and concrete measures for stepping up production for export. Specialized agricultural and forest areas must be created towards this end. Advanced techniques must be applied to the processing industry to achieve better quality, and suitable investment and price policies must be worked out. After fulfilling State-assigned quotas, provinces and district will be allowed to sell surpluses for export in exchange for equipment and materials for their own use.

## *PART III*

## POLITICAL DIRECTIVES AND MAJOR MEASURES

### I — Complete the Blueprints of Development Projects for Agricultural Forest Regions

We must rapidly complete the blueprints of general and concrete projects at district level; clearly

define the field of action and orientation of tasks *of each state farm and forest exploitation co-operative, in order to accomplish the re-organisation of production.*

Improve the Management of Field and Forest Land.

*Regulations on the management of land must be promulgated. The management of land and forest must be re-organised from central down to local level ; and we must make sure that the land be utilized in conformity with the projects already worked out, and that this use be highly profitable. We must put an end to waste, to haphazard land-utilization and arbitrary destruction of forests.*

**II — Promote Intensive Cultivation and Multiplication of Crops on the Whole Cultivated Area**

*We must step up the building of the material and technical basis for agricultural development ; apply new achievements of the "biological revolution" ; carry out crop specialization in co-ordination with overall improvement of each region ; and practise intensive cultivation, multiplication of crops, protection, improvement and fertilization of soils on all cultivated land. We must quickly sum up and publicize the experience of intensive cultivation that vanguard production units in various regions have acquired. We must devise combinations for intensive cultivation, rotation of crops, and multiplication of crops, for each region, in order to obtain high yields for various kinds of crops and animal species. We must try to raise the co-efficient of land utilization to double or more, according to the concrete conditions in each region.*



**III — Improve New Croplands**

*We must pay great attention to the protection of the environment ; closely co-ordinate clearing with the protection and improvement of soil, and the alignment of the fields ; farm newly-cleared land immediately with specialized crops using intensive cultivation, according to the pedological, hydraulic and climatic conditions in each region. We must make use of rudimentary equipment, and simultaneously make the best use of the mechanical possibilities in each region. It will be preferable to begin this work in the zones most convenient to it. We must launch a permanent revolutionary movement among the masses for the clearing of new economic zones ; and work out a plan ensuring dynamic and coherent conduct of work.*

**IV — Redeployment of the Labour Force and Increased Labour Productivity**

*We must redeploy the work force in the whole country in order to meet the requirement of re-organization and development of agricultural production. Meanwhile, we must organize work in each co-operative at district level well, in order to facilitate intensive cultivation, multiply crops, fully develop cultivation, animal husbandry, handicrafts and cottage industry, expand the irrigation network, establish material and technical bases for agricultural development and bring a new countryside into being.*

*In regions where the per-capita area of farmland is small,* it is an urgent matter to transfer the work force to new economic zones.

*Meanwhile, the redeployment of the labour force enables us to organise thing in such a way that the* nomadic people can settle down for good.

*The* task of the armed forces *is to take part in infrastructural work (water control, construction of*

*communication lines, clearing of land, re-organisation of the fields, building of dwelling-houses...) their task is also to prepare sites for future development of agricultural production and forest exploitation by the population or for the settlement of the nomadic population, while themselves establishing State forest exploitation yards in regions where it is necessary to rapidly boost production on a large scale.*

### V — Consolidate the Material and Technical Bases of Agriculture

*We must speed up the establishment of material and technical bases of agriculture and it is necessary to co-ordinate the utilization of rudimentary with mechanical equipment; we must have the sense of responsibility necessary to stimulate the creative initiative of the regions and central branches.*

*The following are problem-areas requiring satisfactory solutions:* water, manure, and seeds; work implements; insect and parasite control; animal feed; breed animals, veterinary care, and the fight against murrain in pigsties and stables.

*We must concentrate the forces of the State, of the population and the army to the utmost in order* to rapidly develop an irrigation system; *the State and the population sharing responsibility for the execution of the work. We must combine rudimentary and mechanized equipment, large-scale with medium and small projects; we must execute the work in a comprehensive manner, from water supply work, to ditches and canals and re-organization of the fields; and we must devote our strength to each piece of work until it is completely finished, and then manage the installation well in order to quickly make the best use of it.*

*The water conservancy services must concentrate their efforts on stepping up hydrologic surveys,*



*finishing project blueprints and executing the work planned. This will decentralize activity and make it possible for the provinces and districts to get on with the technically less complex work. Priority should be given to supplying materials and equipment to water conservancy work, and to the efficient utilization of this equipment and capital according to appropriate norms and estimates. Launch a widespread movement among the masses for good water conservancy management, and combine the impact of this with the effect of strict technico-economic directives.*

Regarding manure, *it is necessary first of all to rapidly increase the production of pig dung, to steadily develop the growing of* azolla, sesbania *and other* manuring plants *to utilize all detritus, refuse and silt to the utmost for the improvement and fertilization of the soils. Supply the countryside with coal for fuel in place of hay, which should be used to fertilize the fields and to feed cattle. We must step up the production of lime, phosphated fertilizers, ground apatite, and endeavour to increase the supply of nitrogen fertilizers.*

Accelerate the tempo of agricultural mechanization: *First of all we must mechanize tilling, irrigation work, land clearance, transport, harvesting, drying, processing of agricultural products, and concentrate efforts on solving the problem of traction power. We must supply some districts with complete sets of agricultural equipment and repair workshops so as to draw experience from their use for future work. We must ensure electricity supplies for agriculture.*

Provide sufficient good quality rudimentary and improved equipment and tools, *for water conservancy management, land clearance, soil improvement, transport, harvesting, and product processing; rapidly make more rubber-tyred hand-carts and ox-*

*carts. We must arrive at definitions for division of work between central and regional engineering, between general and specialized engineering, between the ministries of agriculture and forestry; material and equipment supply must be in sufficient quantity, and a rational price policy must be followed so as to boost the production of various categories of farm implements. Initiatives to improve them must be fostered; improved implements must rapidly be perfected and we must establish chain-production of good quality tools.*

Find good solutions to the problem of seed and breed animals — *the main plant species and animals first of all — so that by 1980, the agricultural co-operatives and the population in general will have sufficient supplies of good seed and breed animals and be in a position to eliminate degenerate strains and breeds. The State has assumed the leadership over this work, decides which seeds and breed species are best adapted to each region, and is building up* a state system *for breeding and election from Central to grassroots level. It is taking steps toward decentralization and division of labour between the central level, the region and the production units with a view to rapidly establishing large-scale production of good seed strains and animal species. With regard to pigs in particular, besides building up the selection and reproduction bases of the State and co-operatives, it is necessary to further encourage the peasant households to rear breed pigs. Rapidly apply scientific and technical progress in this field, pay keen attention to selection, hybridization, production, preservation, protection against degeneration, and development of new strains and stable breed species adapted to the conditions of our country.*

Organize the battle against parasitic insects and plants, the protection of crops and animals well.



*Strengthen the system of crop protection and veterinary services, extend them to cooperative and state farm level. Step up the work of forecasting and providing information, the alarm network, the centralised observation system for epidemics, chiefly with regard to preserving seed, strains and breed animals. Encourage the masses to strictly observe and apply the regulations for and protective measures in production, and to take steps to prevent and curb epidemics not harmful to men. Develop the manufacture of pharmaceutical products and medical implements, and gradually generalize the use of mechanized protection in areas of large-scale production.*

Find satisfactory solutions to the problem of animal fodder, maintaining a balance between fodder production and food crops, and developing it in the way required by large-scale socialist production. *Besides advising the peasants on how to make the best use of the household economic sector (reserved for them to supplement their income) to produce feed for their domestic animals,* it is imperative to reserve both 10-15% of all cultivated area *and special areas in each province and each district, which will be created for this purpose. Proceed to the re-organization of and planned growth on natural grasslands, and develop new areas in important animal husbandry regions by intensive cultivation. Use the best soil in wooded areas for the production of feed for cattle and development of animal husbandry. Develop the production of fish-bone meal and make the best use of by-products of the crops for fodder. Develop a cattle fodder processing network at all levels, including installations for complete processing, primary treatment of fodder and other green composts.*

*It is necessary to work out a plan for, and take concrete steps to solving the problems arising from the use of rudimentary, semi-mechanized and*

*mechanized means of production* to dry and process subsidiary crop products and other agricultural products, *so that the growing of subsidiary and industrial crops can surge ahead. Equip the production units with rudimentary processing equipment; in each district build processing installations for products derived from subsidiary crops, for the processing of feed for domestic animals, and at provincial level, factories turning out processed food products.*

Provide strict and prompt guidance to the various branches — industry, construction, communications and transport, equipment, home and foreign trade — so that they supply agriculture, forestry and fish breeding with necessary technical equipment and materials.

## VI — Step Up Scientific and Technical Research and Their Applications

*Regarding technico-scientific tasks, the main requirements are:*

*— Establishment in the shortest possible time of a mode of technical management suitable for the socialist mode of production, aimed at obtaining high yields, good quality and good economic relations on a large scale.*

*— Definition of the concrete technical aspects of the chain of production of main crops and animal species, as a basis on which to establish technical processes and norms. Rapidly and steadily apply scientific and technical progress in production; gradually implement the scientific and technological revolution in agriculture, forestry, and fish rearing; more specifically in water conservancy, mechanization, electrification, application of chemistry and the latest achievements of the biological revolution.*



*— Rapid evaluation of scientific (natural, socio-economic) data on the basis of which it will be possible to re-organize production in agriculture, forestry, and fish breeding according to the requirements and characteristics of each region.*

*In the North, great attention should be paid to technical work backing up the success of spring crop sowing, and to finding the best selection of seeds for the 10th month crop, so that both crops give high and regular yields, while creating conditions for the extension of the winter crop and turning it into one of the main crops, in the delta. In the south, attention must be paid to seed selection, and to rationally organising the harvest in various regions, so that the existing material and technical bases can be used efficiently, the negative aspects are reduced as far as possible and we profit to the utmost from the positive side of the climatic, meteorologic and hydrologic conditions. Throughout the country, it is necessary to study practical solutions to the multiplication and production of seed for food crops such as rice, maize, manioc, potatoes, sweet potatoes, as well as for the main industrial crops (soya, peanuts, palm, mulberry, candle berry, sugarcanes, cotton, rubber, tea, coffee, tobacco and medicinal plants...) Pay particular attention to the choice of a variety of high yield maize for fodder for the development of animal husbandry. Regarding species of breed animal, pay particular heed to the selection, hybridization, multiplication and production of breed pigs, beef cattle, milch cows, and poultry. Make further studies on improvement of acid, salt and sterile soils, and of intensive cultivation technique for sloping fields; see to the production and utilization of organic and mineral fertilizers, various kinds of tractors, motocultivators and other agricultural machines; organize prevention and measures against insects, rodents, epiphytes, murrain; have an eye to the drying, processing and storing of*

*various categories of agricultural products, chiefly dry crops.*

*Consolidate and develop the network of specialized study institutes and branches by providing them with experimental stations, distributed rationally in each region, closely link study with practical work in production. Assign and employ our scientific and technical cadres well; encourage them and create favourable conditions for them to become plant and animal specialists, and encourage them to settle in the various economic regions. Establish a Vietnamese agricultural institute. Foster cadres and workers in production units by giving them broader scientific and technological knowledge, so that we have a contingent of specialists available capable of assimilating and applying a range of scientific and technical know-how in the co-operatives, state farms and in forest exploitation, applying scientific and technological progress to production. Rapidly introduce the teaching of science, and technology of agriculture, forestry, and fish-rearing in general education schools and complementary education schools in the countryside. Mobilize and organize teachers and students of colleges and intermediate vocational schools to involve themselves in studies and scientific and technical experiments that serve agriculture, forestry and fish-breeding.*

## VII — Strengthen and Perfect the Socialist Relations of Production in the North and Carry Out Socialist Transformation in the South

*We must establish unified socialist relations of production throughout the country in two forms of ownership — collective and public ownership — in order to develop agriculture on lines of large-scale socialist production.*

*Taking as our basis the re-organization of agriculture in the whole country at district level, consolidate and strengthen agricultural co-operatives, state farms and forest exploitation enterprises in the North; carry out agricultural collectivization and step up the building of State farms and forest exploitation enterprises in the South; guide the peasant families' economy in such a way that the three economic sectors — State, co-operative and family — pool their efforts to develop together according to both the plan mapped out for each region and the State plans.*



### 1. Consolidation of Agricultural Cooperatives in the North

*Starting from the re-organization of production at district level, re-organize production and improve management in each co-operative.*

*Urge the agricultural co-operatives to start specialization and intensive cultivation according to each district's programmes and plans of production, forge close links between cultivation and animal husbandry; develop handicrafts, re-organize the work force and carry out the specified new division of labour in order to make the best use of the land and work force and to boost labour productivity; establish further material and technical bases for agricultural development; continue working out a complete system of production, scientific and technical norms; streamline economic and technical management. Bring into play the co-op-members' right of "collective mastery" in both the production and the distribution of products; do away with bureaucracy, authoritarianism and dispersion; the managing committee of each co-operative must institute centralized and unified management. Improve financial management by making it public, with annual accountability and presentation of balance-sheets obligatory. Prevent and put an end to evasion of accountability, embezzlement, waste and irregular expenditure. Improve the distribution of goods in*

*co-operatives so as to both stimulate enthusiasm for work and steadily raise the living standards of co-op members. Closely co-ordinate the collective economy with family economy. All activities of the co-op farmers should be aimed at attaining the following goals : rapidly boosting production and raising the quality of agricultural produce, increasing labour efficiency, accumulation in co-operatives, products delivered to the State, co-op members' income derived from the collective economy, as well as reducing production costs.*

*Each province or district must take any measures necessary to improve weak co-operatives, and work out plans to turn them into medium or vanguard co-operatives in a short time.*

*Increase the number of economic and technical cadres in co-operatives. Thoroughly train and foster managerial and technical cadres. The State must appoint chief-accountants and chief-technicians to the co-operatives and strictly supervize the activities of co-operatives chairmen so that there is stability in the leadership of the co-operatives.*

**2. Vigorous Consolidation and Development of State Farms**

*Consolidation of the existing state farms involves farming the whole area allotted to them, carrying out intensive cultivation on the whole planted area, applying the accounting system properly, delivering all products itemized in the plans, and making a profit.*

*Many more State farms must be set up.*

*The State farms must, closely co-ordinate cultivation and animal husbandry, agriculture and forestry, production and product processing, and take a lead in the application of science and technology to production, organization of labour, utilization of rudimentary, improved and mechanized implements,*



*application of the accounting system and in developing land for a high economic efficiency.*

**3. Toward Socialist Transformation of Agriculture in the South**

*Socialist transformations are aimed at putting agriculture on the road to large-scale socialist production, abolishing exploitation and its cause, raising labour productivity, developing production, and fostering a new life in the countryside. Such are the aspirations of all the peasants as well as the imperative requirements of the re-organization of agriculture and socialist industrialization.*

*To this end, it is necessary to closely co-ordinate the transformation of agriculture with that of private capitalist trade and industry for the districts themselves to carry out re-organization of production at district level, to turn the district into an agro-industrial economic structure, and thus to achieve agricultural co-operation at grassroots level. Agricultural collectivization must be co-ordinated with water conservancy planning and the gradual mechanization of agriculture. Observe all relevant directives and measures, and apply strict operational guidance ; launch a powerful mass movement to bring about agricultural co-operations and a vigorous development of production.*

*By the beginning of 1978, each province must have set up a "pilot" district and some "pilot" co-operatives. Good results in this experiment will be the basis on which to dynamically and steadily extend socialist transformations of agriculture, reorganize production at district level and by and large establish socialist relations of production throughout the southern countryside by the beginning of the eighties.*

## VIII — Step Up Ideological and Cultural Work

*Parallel with the intensification of agricultural production, and in the period of transition of agriculture to large-scale socialist production, we must pay particular attention to fostering a new moral and cultural life in the countryside.*

*We must accelerate ideological and cultural work in order to create and channel a permanent revolutionary movement among the masses into carrying out agricultural tasks and reaching the targets set in the 4th National Congress of the Party while developing a new culture and fostering a new man.*

*To this end, it is necessary to carry out the following tasks :*

*1. Through the mass movement, inculcate in the peasants a socialist mode of thinking ; help them grasp the Party line, directives and tasks so that they are in a position to develop agriculture as a large-scale socialist production ; raise thin level of consciousness and enable them to assume their role of "collective masters" ; instil in them a self-reliant mentality, an enthusiastic revolutionary spirit in production, a sense of discipline and organization, of thrift and appreciation of labour in socialist construction, a sense of responsibility toward the fulfilment of all their obligations to the State, etc., as well as the will to combat the ideology of the former exploiting class and the negative aspects inherent in small-scale productions.*

*2. Raise the cultural, scientific and technical level of the workers, improve their health and their professional standard, in order to increase their ability to assume their role of "collective masters" and raise their labour efficiency.*

*3. Increase cultural and artistic activities, broaden the radio and television broadcasting coverage, improve sanitary and hygiene measures, develop the physical education and sports movement, etc., in order to gradually raise the cultural level of the population to meet requirements.*

*4. Train leading, managerial, scientific, technical and professional cadres and raise the standard of existing cadres.*

*Fostering a new moral and cultural life in the countryside must be done according to plans worked out in each production unit and at district level. From now to 1980, each production unit, each district must do its best to establish such material bases as a crèche, an infant class, a general education school, a complementary school, a vocational class or school, house of tradition or local museum, a club, a library, a public address system establishments for cultural activities, physical education and sports, an infirmary, a maternity-home, a polyclinic. Generally speaking, the co-operatives and regions themselves are responsible for setting up these material bases, the necessary investments being made through the regional budget.*



## XI — Building the District, Re-organizing Production at District Level

The co-operatives, state farms and timber yards, industrial enterprises, and combined enterprises of the same district, must be organized in a single production structure, turning the district into an agro-industrial economic unit in which each enterprise, state farm, timber yard, and agricultural co-operative, is a unit applying the cost accounting system.

*The district level re-organization of production and aspects affecting the daily life of the population in various farms, at district level, are aimed at finding ever better solutions to the problems of food supply, clothing, housing, public transport, education, health protection... faced by the population, and guarantee-*

*ing the fulfilment of their obligations towards the State.*

*The following measures must be taken:*

*— A general and a detailed district programme of these projects, and similar programmes for each small area, each co-operative, state farm or timber yard, must be worked out on the basis of both the general plan and economic regionalization of natural resources, pedologic, climatic and meteorologic conditions, and the inhabitants' experience in production in each district. Economic and technical projects must be worked out for the best possible utilization of the work force and conditions of production. Co-ordinate the planning of production and relocation of the population; build up a new countryside.*

*— Start the specialization of production in each region immediately, and rapidly bring about equilibrium between cultivation and animal husbandry.*

*— Re-organize the work force and proceed to a new division of work at district level.*

*— Establish the necessary material and technical bases for agricultural development in the district: step up water conservancy organization; develop regional industry including various handicraft branches and small industry related to production, the processing of goods, construction and the everyday life of the rural population, workshops for farm implements and building materials, carpentry workshops, processing of animal feed, preparation of agricultural, forest and maritime products, and tractor and mechanical repair stations. Build the transport and communications network necessary for agricultural mechanization, for the daily life of the population; set up a network of warehouses, and a network for technical material and equipment supplies, as well as supplies of manufactured goods for the population and a network for the collection of agricultural, forest and maritime products. Set up*



*seed and breeding stations, and centres specializing in prevention of epiphytes and murrains, veterinary care, and other technical stations...; open classes for the training and improvement of grassroots cadres and technical workers.*

*— Strengthen the body of cadres of various sectors in a rational manner; train and foster cadres in the district so that, in a few years, the leading apparatus at this level will be in a position to master its new tasks.*

## X — On Planning and the Execution of Directives

*1. Planning must stimulate all creative initiative at different levels — provincial and district levels and production units — and be geared to centralized management by the central level.*

*It is important to map out agricultural and forestry plans at the co-operative, state farm, forestry exploitation yard, and enterprises level and at district level. The districts must work out yearly plans, crop plans, and try to work out a long-term programme and plans for production and the organization of the people's daily life.*

*We must complete the system of targets imposed by the State so as to give the provinces, districts and production units freedom of action regarding the distribution of the work force, re-organization and development of production, organization of the circulation and distribution of products, and the development of material and cultural life in the regions.*

*2. Check concrete policies with regard to material incentives and economic levers, adjusting and completing them. Where necessary, in order to stimulate and develop production (intensive cultivation, multiplication of crops, irrigation work, mechanization, increase in labour productivity). Correctly co-ordinate planning and utilization of the law of value*

*to meet the fundamental requirements, namely the strengthening of material and technical bases and satisfaction of the material and cultural needs of the population.*

*The directives of the State must relate the collective interests of the whole of society to those of each production unit and each worker ; they must aim at establishing and broadening the rational relations between public and collective ownership.*

## *PART IV*

### STRENGTHENING THE PARTY'S AND GOVERNMENT'S LEADERSHIP
### GUARANTEEING PROPER USE AND ADMINISTRATION OF THE CADRES
### MAKING THE BEST USE OF THE POPULATION'S EXERCISE OF THE RIGHT OF "COLLECTIVE MASTERY"

*1. The Party Political Bureau must devote sufficient time to leading agriculture, forestry and fish-breeding. The Secretariat of the Party Central Committee must pay more attention than ever to supervising and stimulating the application of the Central Committee directives by various branches and regions.*

*The Government must provide centralized leadership of agriculture, forestry and fish-breeding. It must rapidly concretize the Party's line and directives, translate them into plans, laws and regulations, work out concrete measures. It must ensure the synchronization of activities between various branches and echelons, rapid execution of tasks, it must provide the material required by production and solve problems affecting the regions and production units on time.*



Strengthen the ministries of agriculture, forestry and maritime products, the General Department for Land Clearance, and the General Department for Technical Equipment of the Ministry of Agriculture. *Set up general companies, companies and complexes for the full development of cultivation and animal husbandry, with a high degree of specialization and concentrated special production, a potential large-scale processing industry.*

Set up a committee for the socialist transformation of agriculture in the South, *whose task is to help the Party Central Committee and Government lead the building up of the district level, the re-organization of production at district level and the completion of agricultural collectivization.*

*In their* basic work programmes *the ministries and general departments must make their anxiety to serve agriculture, forestry and pisciculture clear through concrete proposals and plans.*

Complete the decentralization of management and make it possible to stimulate the role of the province *in developing regional economy as an agro-industrial structure. Work in such a way that the province has freedom of action in fulfilling the plan and satisfying the requirements of the region, and in fulfilling the tasks entrusted to it by the central administration ; the province and the ministries co-ordinate in developing* the districts as agro-industrial-economic units. *Improve and strengthen the management of grassroots production units.*

2. Build and consolidate the Party's leading committees and cells in the countryside.

*Through the re-organization of production at district level, the establishment and strengthening of agricultural co-operatives, raise the leadership capacity of the Party committee at various levels, consolidate and improve these committees, form, temper and make judicious appointments of cadres, raise*

*the quality of Party cells and grassroots committees in all fields, improve the quality of Party members, exclude from the Party those who are no longer up to requirements.*

*In the South, the Party cells and grassroots committees in the countryside must display a vanguard spirit and fighting spirit in guiding the peasants toward collectivization, large-scale socialist production, zealously developing production according to the plans worked out, and enthusiastically fulfilling their commitments toward the State. In the South the Party Committees must give their members a thorough education in socialism,* foster a spirit of socialist collective mastery *and raise their political, economic and cultural standard so that they continue to fight in the front line and are capable of leading the masses to collectivization and socialist production. It is through these movements that the grassroots organizations are consolidated and strengthened, the Party cadres and members are tempered, a network of cadres is established among the masses, and vanguard and tested elements are selected to perfect their formation and join the ranks of the Party.*

3. Formation, improvement and assignment of cadres: *At present, it is an urgent task to strengthen the districts with competent cadres and increase the number of managerial and technical cadres in the co-operatives. Be firm in reducing the personnel working in the central and provincial administration; give guidance to some cadres in the army in making contributions to the economic tasks at hand; strengthen the district level, organs responsible for the exploitation of economic resources and the units directly involved in production, by assigning new cadres to them.*

*Make efficient use of existing scientific, technical and professional cadres, chiefly graduates and post-*



*graduates, including the economic and technical cadres who worked for the old regime. Carry out a policy of stimulating the cadres to become increasingly specialized in cultivation and animal husbandry, in a particular trade, and to be willing to go wherever their presence is necessary to the development of production. Policy toward the cadres in the countryside and in co-operatives must be realistic.*

*Work out plans for the training and improvement of cadres so as to meet the needs involved in transforming agriculture in the South, strengthening co-operatives in the North, developing State farms, and building up the districts, etc.*

4. Mobilizing the masses

*Rely on the Party cells and Party primary unit Committees on the mass organizations (Peasants' associations, Youth Union, Women's Union. Trade-Unions), and on grassroots economic organs, and make use of the Party and Government propaganda network, in order to intensify political and ideological education in the Party and among the population, to promote a constant revolutionary movement among the peasants and other section of the population in implementing the transformation and building of agriculture, with the zeal of workers conscious of their socialist collective mastery. Speed up the movement for intensive cultivation, multiplication of crops, irrigation work, making and growing fertilizers, building new economic zones, acquiring scientific and technical knowledge, and joining agricultural co-operatives.*

*It is through the mass movement that the working peasants become politically and ideologically conscious, that they are taught to be socialist collective masters and that they develop pride in their wholehearted support to the Party in the victorious strug-*

*gle against the imperialist powers and for the abolition of the feudal landlord class. Make the working peasants understand that the road to socialism goes through abolishing class exploitation, to prosperity and national grandeur, and that this is the road to abundance and welfare for our people. Urge the broad masses to embark on the socialist road with resolution, to knit together, to support and implement all policies and measures of the Party and Government, to increase their revolutionary vigilance, to be clearsighted and resolute in frustrating all plots aimed at ethnic and religious division and fight against any sabotage of socialist construction.*

*Inculcate in the working class the consciousness of their duty to serve agriculture, and to launch a movement to this effect within its ranks.*

*It is necessary to devise many forms of organization and socialist emulation movements in agriculture. Hold lively conferences on various aspects of agricultural production among the workers so that they quickly draw experience from them and become aware of the vanguard elements in the work ; rouse the masses and organize them so that they follow the examples of these elements and work consistently. In the southern provinces, convene a conference of delegates of the peasants' associations with a view to encouraging the peasants to take the road to agricultural collectivization. In the North, continue holding conferences of co-op members' delegates so as to induce the co-operatives to consolidate socialist relations of production and boost production, and in this way prepare for a national conference of co-op members' delegates.*

*We have considerable agricultural, forestry and fish-rearing potential. We hold the trump cards in terms of basic requirements ; but at present our difficulties are still great. Our whole Party, our whole people, all our armed forces must make strenuous efforts to ensure a good start in the development of our agriculture, forestry and fisheries, and fully understand the objectives outlined by the 4th National Congress of the Party.*



*Successful fulfilment of the 5-year plan (1976-1980) in agriculture, forestry and fisheries is of paramount importance in our socialist revolution.*

*Our entire Party, people and armed forces are determined to win greater success, create the best possible conditions for socialist industrialization and the gradual raising of the living standards of our people.*

*Let us resolutely mobilize all the force of the country, the aggregate force of the regime of socialist collective mastery and launch a widespred mass movement in production and socialist construction, in a spirit of thrift, enthusiasm to implement the resolutions of the Party 4th National Congress on the development of agriculture, forestry and fisheries, building up a new countryside and fostering a new, socialist man !*

## ORIENTATION OF PRODUCTION

Agricultural co-operativization has brought about a profound transformation in the relations of production in the countryside in northern Vietnam.

Developing agriculture and implementing the State plan for agricultural production are dependent on how the thousands of co-operative function, while the development of each co-operative since it came into existence has been closely linked with the guidance and help given by the State.

Due to their socialist character and to their being an integral part of the national economic system, the agricultural co-operatives have a great responsibility with regard to the economic development of the country and the implementation of the State plan ; it is imposible to divorce the development of the co-operatives and the co-op members from the building of socialism. At the same time, as an economic unit founded on the peasants' collective ownership of the means of production (land, livestock, farming tools), they have to promote production with a view to improving the living conditions of their co-op members. These two obligations, towards the State and towards the co-op members, are inseparable, interdependant and interact with each other.

### Deciding the Orientation of Production

Agricultural production involves various branches and various products whose development necessitates a preliminary study of the soil conditions and the climate of each region and each co-operative, what improvements must be made in the co-op members' living conditions, and the demands of the State.



On the basis of the national agricultural policy, which views "the production of foodstuffs as the central task, while promoting industrial crops and animal husbandry, paying sufficient attention to fish-rearing and subsidiary occupations... Bearing in mind the concrete tasks of each province and each region, as well as its own economic and natural conditions, every co-operative must work out its own *orientation of production,* i.e., which crops to grow (rice, subsidiary food crops, market gardening or industrial crops) and in what proportions ; which animals to breed (pigs, poultry or cattle) and what subsidiary occupations to engage in — all to be done increasingly efficiently — in order to satisfy its own needs (co-op members' income and fund accumulation) and the growing requirements of the State for national industrialization (supplies both for the non-agricultural population, and for light industry).

The two dictinct parts of each co-operative's production are thus one for home consumption (the co-operative and its members) ; and the other for society, the latter being saleable products.

The latter part is the more important, and includes the agricultural products delivered to the State (as taxes and other compulsory deliveries), those sold on the free market, and those sold to the State at market prices. The steady growth of this part reflects the growth of the collectivized economy, its sizeable contribution to socialist construction, the improvement of the peasants' living conditions and the gradual progress from a small-scale and scattered subsistence economy to large-scale marketing production. Increasing marketing production is therefore a frontline task of all the co-operatives.

It requires that every co-operative have a correct *orientation of production* and improve management for rational and appropriate utilization of the land and the work force.

The lengthy monoculture of rice has meant that agriculture has been unbalanced on a national scale, with subsidiary food crops and industrial crops taking second place, and animal husbandry being just a complementary job done mainly for the farmers' families. Modernization of agriculture to meet the growing and diverse needs of the ever larger population and of the State involves, putting an end to this imbalance, by multilateral development of agricultural activities. This must be one of the fundamental principles for determining the orientation of production in every co-operative.

### Specialization of Production

Deciding the orientation of production involves accurate calculations made with a view to obtaining heightened economic efficiency.

However, not every co-operative (or every region) can engage in all varieties of agricultural activity while both ensuring high yields and low production costs. Each co-operative has its own economic and natural conditions and its own farming and work traditions, making it a suitable and profitable area for certain varieties, even a single variety, of crops or animal husbandry.

Each co-operative must therefore *specialize* in one or two varieties of crops or animals most suitable to its conditions.

*Specialization* makes rational and full use of all the socio-economic and natural advantages possible, thus creating favourable conditions for the practice of large-scale and developed intensive farming, concentrated and wide-ranging production, and high productivity and an abundance of market products



at low production costs. Specialization must be concentrated within the framework of the major tasks assigned to agriculture, those which must "largely solve the problem of foodstuffs; intensify food production and make animal husbandry a major and independent farming branch; and increase industrial crops to meet raw materials needs both of light industry and of agricultural production for export..."

Specialization within each co-operative, one of the key factors in defining its orientation of production, is itself decided in present conditions by a number of factors which affect it, namely:

— Agriculture is carried out on a small-scale and there has a subsistence nature and there has been monoculture of rice.

We aim to change from monoculture to diversification of agricultural activities by promoting subsidiary food crops, vegetable and industrial crops, live stock-breeding and the subsidiary handicraft occupations. On the basis of its own natural and socio-economic conditions, each co-operative should decide the proper ratio for itself between cultivation and animal husbandry, between production and product processing. Instead of rice monoculture it may specialize simply in rice, or in other food crops, industrial crops, or in animal husbandry (pigs or fish), in the production of seeds or the rearing of breed animals.

**— We have a tropical climate with sub-tropical and temperate climatic elements**

This is favourable to growing *two* or *three* crops per year, as is actually done by numerous co-operatives in the delta and the midland region (the Spring rice crop, the Autumn rice crop, the Winter subsidiary crops. The "micro-climates" in the mountainous regions require climatic and pedological research

to find out the most appropriate crops or branch of animal husbandry for each area; the aim here is to avoid scattered production and ensure more efficient utilization of capital, man-power, land and other means of production.

The question in present socio-economic and natural conditions requiring an answer is how to determine an orientation of production which ensures both high economic gains and low production costs.

**— There is no proper zoning of the economy and agriculture.**

This alone gives rise to numerous difficulties for the co-operatives in deciding on the orientation and specialization of their activities.

Economic and agricultural zoning is a precondition for specialization in the co-operatives, since decisions on the orientation of each of them must proceed from the orientation of the region. As no definite zoning has been effected, many co-operatives have worked out their orientation according to this socio-economic and natural conditions and the tasks set in the State plan.

**— The growth of the productive forces has been feeble.**

The general specialization of agriculture and specialization in the co-operatives are interrelated. Too advanced specialization in a co-operative not geared to the objective possibilities, will result in an imbalance, *on the one hand between* the different branches, and *on the other* between the factors of production, adding to the impediments to production growth caused by the seasonal character of the agricultural work.

Present transport facilities are limited, outdated, and scattered, as are our means of storing and processing agricultural products, and these conditions constitute great obstacles to specialization. However, the creation of big industrial or urgan centres, large extensive economic zones for agriculture, and new agro-industrial enterprises (rearing poultry or pigs for meat, processing fruit, producing treated fodder for cattle...) has enabled the local co-operatives to embark on the road of specialization nevertheless. In such cases their work ensures supplies agricultural products to the processing plants (sugar-cane, tea, citrus fruit, ground-nuts...), as well as to the non-agricultural population (vegetables and meat).



**— Cultivable land is limited and the rate of population growth high. The geographical distribution of productive forces is uneven.**

*These characteristics require :*

— *On the one hand,* co-ordination of specialization and diversification of activities within each co-operative, each region, for rational and thorough utilization of the advantages in land and man-power; in deciding its orientation of production, each co-operative or region must re-distribute the work force among various branches in order to liberate man-power in cultivation for animal husbandry (pigs) and subsidiary occupations, and for the crop sector, rice cultivation and for subsidiary food, industrial or vegetable crops. The advanced and large-scale practice of intensive farming and the strengthening of the material and technical basis for agricultural development constitute an important lever in putting this measure into effect.

— *On the other,* the working population from the crowded rural areas must move to the mountainous regions and put new land under cultivation there. There are several objectives of this nation-wide inter-regional distribution of the productive forces: to relieve congestion in the overcrowded delta, put the

economic potential of the new regions to use by establishing agro-industrial enterprises, and pave the way for specialization in each co-operative and each region. The implementation of this measure involves large investments in connection with settling the people, opening communication lines and setting up socio-economic public services (transport, hospitals, schools, shops...).

*Specialization* and *diversification* of the agricultural activities in a co-operative go hand in hand :

— Unlike industry, the agricultural activities are inter-complementary and inter-dependent : cultivation, particularly the main crop (for example, *rice*) cannot develop without the use of pig manure (especially while the use of chemical fertilizers remains limited) ; animal husbandry, in turn, is dependent for its development in increased subsidiary crops for fodder...

— The different soils are suited to different crops and cultivation.

— The seasonal character of agricultural work makes it necessary to give attention, not only to the development of cultivation and animal husbandry, but also to subsidiary handicraft occupations to make use of the work force in periods between crops : These include family crafts, and traditional rural handicraft, whose techniques can be steadily improved.

— The frequency of climatic reverses : damage to crops due to typhoons, submersion, floods and droughts..., can be offset by other activities, for example, annual sowing of subsidiary crops, or industrial crops.

— The utilization of the by-products of cultivation and livestock-breeding in subsidiary occupations and the production of fodder for cattle, provides an important source of raw materials and absorbs surplus manpower.



**The classification of agricultural branches**

In general, almost all the co-operatives have the same activities : mainly food crops, subsidiary food crops, industrial crops, and animal husbandry. But the importance of each of these activities varies from co-operative to co-operative and from region to region. It is therefore essential to grasp the interdependence between these activities ; or in other words, to classify them in order of importance, into *principal branch, complementary branch* and *supplementary branch* (or secondary branch).

Under the old regime, rice was the predominant crop.

With the co-operitivization of agriculture, production begins to diversify and new activities appear in the form of distinct branches.

A co-operative cannot engage in all branches ; it must define its orientation in terms of which branch is the *major,* which the *subsidiary.*

In capitalist agriculture, the principal branch is the one that gives the most profit ; in a socialist co-operative, it must carry out the main task set by the State plan. In general, the job of this branch is to produce a large quantity of market products, to employ most of the manpower and the investment funds of the co-operative. This will be the *specialized branch* of the co-operative.

The central task at present — and for a long time to come — is the production of foodstuffs, above all rice ; so the major branch of most of the co-operatives, especially in the delta, remains rice. The socio-economic and natural conditions determine the principal branch : rice for the low-lying regions liable to submersion during a great part of the year, and vegetable crops and animal husbandry for the suburban areas.

Depending on conditions in a co-operative, it may have at most two major branches with a view to fully utilizing its potential.

The *complementary branch* backs up the development of the main branch, while turning the favourable socio-economic and natural conditions of the co-operative to maximum account. Usually, this branch produces quite an important part of the market products which are included in the State plan as an obligatory item. Pig-raising, for example. This supplies manure for rice cultivation, and at the same time ensures the obligatory annual deliveries of meat to the State in accordance with the quotas fixed in the plan. In other words, the development of crops, mainly the food crops, requires an abundant supply of fertilizers, and in this work pig raising is promoted as a *complementary branch*. The major and complementary branches are interdependent, and constitute an important, integral part of production.

The complementary branch must also include products of some importance, with a view to quickly increasing the market produce.

The orientation of a co-operative will often be described in terms of its major branch and its complementary branches: for example, "Rice-rush-pig" in which the complementary branches are "rush" and the "pig."

The *supplementary* (or *secondary)* branch, involving only a limited scale of second scale of production, is created above all to satisfy the internal needs of the co-operative, i.e., the co-op members of the two principal and complementary branches. Thus, supplementary branch production does not figure among the targets of the State plan, and does not necessarily include market products. The supplementary branch covers subsidiary occupations, like brick-making, the lime kiln, manufacture and repair of work tools and means of transport, treating agricultural produce for processing as food products, basket work, making cattle fodder... In co-operatives where the diversification of activities is highly advanced, the creation of a supplementary branch makes it possible not only to increase the co-op members' income but also to absorb the surplus man-power, and thus providing a solution, although inadequate, to the problem of rural under-employment.



Once the role and importance of the different branches have been decided, strict synchronization is necessary to bring about large-scale market production, increased productivity and low costs, all on the basis of limited capital investments.

In the rice co-operative now growing vegetable crops or annual industrial crops, the promotion of pig rearing as a complementary branch is vital for supplies of manure. In the meantime, if pig raising is the major branch, the production of foodstuffs for the pigs will be the most important complementary branch: in such co-operatives some food crops or subsidiary crops can be grown both to provide the people with foodstuffs and food products and to enrich the annual fodder.

The different types of land of each co-operative can be used for different crops or other activities. Apart from rice, the main production, it is possible to grow subsidiary crops (sweet potato, maize, manioc), subsidiary crops fodder, annual industrial crops, vegetable crops, intercropping (e.g. maize with various kinds of beans), and fish breeding or ducks in submerged ricefields.

The by-products and crop residue (straw, paddy bran, stems of maize or sweet potato, cabbage leaves...) can be used as animal fodder or as raw material in subsidiary occupations.

Considering the seasonal character of the agricultural work, rational organization is important in

order to even out the work in the rush periods and the idle periods, to utilize the work force, draught power, work tools all year round, with a view to reducing the basic investments and the sinking funds. The rice co-operatives have chosen *Spring rice* with a growing period of three to four months for the areas that used to be planted with 5th-lunar-month rice, which requires a growing period of five to six months. In this way, it is possible to grow two crops in seven months (November — February: Winter dry crops; February — June: Spring rice). The concentrated use of manpower and draught power is relaxed during the Winter-Spring rice season (December and January), while the production of other foodstuffs for men and fodder for cattle is increased in period between crops. In co-operatives concentrating on industrial crops, rushes for example, basket-work and rope-making can be done during the idle period between major crops.

The subsidiary occupations satisfy needs of both the co-operative and the co-op members: for example, the small-scale machine preparation of animal fodder for the co-operative's husbandry enterprises can be co-ordinated with the husking and winnowing of paddy for the co-op members in simple machine stations; the black-smith and carpentry workshops can also be used to make and repair the work implements and the means of transport, the grain stores, the co-operative's pigsties and the dwelling-houses.

The feed-back from investment funds is often slow, six to seven years for the perennial industrial crops or fruit trees. However, it may be paid off and reinvested two, three (or even four) times per year for the annual crops (food crops, dry crops for cattle fodder, vegetable crops, annual industrial crops) or for the raising of pigs or poultry. In numerous co-operatives where the principal branch consists of perennial crops, there is co-ordination between annual and perennial crops, and this together with the multiplication and the extensior of crops, planting overlapping crops and undertaking secondary animal husbandry (ducks, fish) in addition to pig raising..., makes it possible to utilize invested funds more efficiently and to raise incomes.



Synchronizing the three principal, complementary and supplementary branches is highly complicated. It often gives rise to contradictory tendencies: scattering production becomes scattered in extreme diversification of activities; or too limited specializations, a one-sided development of the principal branch leads to wastage.

A correct definition of the orientation of production involves establishing a *concrete production structure,* on the basis of a thorough study of the natural and socio-economic conditions and the state's needs in market products, and the fixing of techno-economic norms for different activities. It also requires that the ratio between different branches be fixed: land acreage, number of heads of cattle, quantity of labour, amount of investment, rate of acceleration of production, value of market products in the total production (in value and in kind).

A clear-cut distinction should be made between the orientation of a co-operative and the tasks of its production brigades. The role of the co-operative is to diversity its activities connected with the specialized branch, while each production brigade takes charge of a sole branch, either principal, complementary or secondary, working in keeping with its specific conditions (soil, man-power) and, above all, with the division of work within each co-operative. In short, all the activities of the different teams must contribute to implementing the general orientation; meanwhile, the equilibrium between various aspects of production and the distribution of earnings must be done on the level of the whole co-op scale, not separately in each team.

The orientation of production must gradually be *perfected* and *adjusted,* in keeping with the growth of the productive forces of the co-operative, while maintaining its *stability.* Its instability would entail disruption of the material and technical basis, and of the management and organization of production, to the detriment of production increase.

Modification can be caused by exterior changes only, namely :

— The deliveries of market products to the State are adjusted following a new economic zoning, the creation of new industrial, urban or dwelling centres.

— The expansion of the co-operation entails enlargement of cultivable land, increase man-power and strengthening the material and technical basis for developing agriculture.

— The co-operation and the division of work are no longer confined within a co-operative, but have become inter-co-operative and inter-regional, following the creation of new enterprises which serve several co-operatives, for example enterprises producing cattle fodder, building materials and processing agricultural products, mechanical installations manufacturing and repairing small machines or improved work tools, stations for selecting seeds or animal species... In this case, the co-operative profiting from these modifications may revise its production structure by giving up any of its established branches.

Sometimes it is even necessary to redress an inappropriate orientation which obstructs the development of production.

## Interdependent Relationships Relevant to Defining the Orientation of Production

The orientation of production of all the cooperatives must :



— improve the living conditions of the co-op members.

— satisfy the needs involved in the industrialization of the country.

— ensure the balance between crop growing and animal husbandry.

In other words, it must help increase, and accelerate the production of foodstuffs and other products.

How are we to solve this vital problem on the present basis of one-tenth of a hectare of cultivable land per head ?

The key lies in foodstuffs, for it is impossible to create solid foundations for the increase of industrial crops and animal husbandry without ensuring sufficient food for the men and the cattle involved.

### Rice-subsidiary Food Crops

In foodstuffs we include *rice* and *subsidiary crops,* and a correct and appropriate relationship between these two crops is of utmost importance.

As rice is predominant, subsidiary crops are often underestimated : the area on which they are grown is limited, farming techniques remain backward, and degenerate varieties and decreasing yields continue to be used and noted.

A correct and appropriate orientation should include both rice and subsidiary crops, as rice monoculture in permanently submerged fields impoverishes the soil and impedes intensive farming. Meanwhile, alternating rice and subsidiary crops, at the same time intercropping subsidiary crops, facilitates not only the abolition of monoculture but also the enrichment of the soil.

The *vital factor* in the development and the modernization of agriculture is therefore the promotion of rice farming and subsidiary crops, *with faster progress needed for the latter than the former,* with a

view to increasing foodstuffs for men and for cattle simultaneously. It has been shown that during the years of adverse climatic conditions, subsidiary crops were more stable than rice, and in the regions where the sweet potato crops are good, there was less difficulty as regards food supplies in the pre-harvest periods.

The simultaneous development of rice and subsidiary crops, particularly the subsidiary crops for animal husbandry, also makes it possible to gradually redress the imbalance between crop growing and animal husbandry and to transform animal husbandry into a major branch independent of crop-growing.

New land to be cleared being limited, we must practise intensive farming in two directions : increasing production yield and multiplying the crops, with the former being given more attention than the latter. The multiplication of crops will be affected mainly in the ricefields which only yield one annual crop now, though these are not many. The results will not be satisfactory without intensive farming. The multiplication of crops can be done successfully by planting rice varieties of short duration and high yield, or of the three-month varieties of high-yield, subsidiary crops (sweet potatoes, maize, potatoes, beans...). This farming technique, however, limited by the scarcity of cultivable land available for it.

The foremost measure for producing both more rice and more subsidiary crops is to *increase production yield* through intensive farming. As the material and technical basis of agriculture remains weak, the technical improvements must envisage all aspects :

— Control of water by efficient management of the irrigation network and the fields.



— Selection and multiplication of strains which are more productive, better adapted to different seasons and more resistant to diseases and heavy rains.

— Enrichment of the soil by liming against acidity and by abundant fertilizing (mainly with pigs' dung and azolla).

— Repeated ploughing and harrowing.

— Improved transplanting (both in seedling tufts and in straight rows).

— Care given to the crops must include repeated weeding, and a constant battle against weeds and parasites.

— Strict observation of the timing of crops.

— Improvement of the rudimentary work-implements and gradually mechanization of various jobs (by means of small machines) which help increase production yield and productivity.

In short, we can always expand the area of subsidiary crops without reducing production of rice so much, even in the delta where rice has been cultivated for centuries, on one condition : that is the production yield of both be increased. There is another problem concerning the utilization of the products of subsidiary crops : their storage and processing. The solution here lies in the promotion of auxiliary handicraft jobs as a secondary branch in every co-operative, and in the creation of regional specialized enterprises.

*The development of subsidiary crops,* for foodstuffs as well as for animal husbandry *is thus the essential link in solving the food problem.*

What percentage is to be fixed for subsidiary crops in the cultivation of food crops ?

"Increase subsidiary crops faster than rice without reducing the rice area ; gradually raise the proportion of subsidiary crops produced in terms of pro-

ducts as well as the area on which food crops are grown," to 25% for the former and 20% for the latter. These percentages are reasonable.

For each region, approximate percentages have been fixed which conform with its specific conditions :

| Regions according to terrain and crop-type | % of total area | Production |
|---|---|---|
| *Regions with two rice crops per year :* | | |
| — Lowlands (e.g. coastal plain and delta) | ± 10 % | ± 15 % |
| — Midlands (situated between the high, upland region and the lowland region) | ± 20 % | ± 25 % |
| — *Regions with 1 subsidiary food crop + 1 (10th-lunar-month) rice crop :* | | |
| — On fields protected by dykes | 30 — 35 % | 40 — 45 % |
| — along river banks | 40 — 45 % | 50 — 55 % |
| — *Semi-mountainous region :* | | |
| — hilly region | 30 — 35 % | 35 — 40 % |

The structure of food crops is very important in bringing all the material and socio-economic potential of each region into play.

Various combinations have been worked out and put into effect :

*Regions with two rice crops per year.*

In areas where the second rice crop used to be "5th-lunar-month rice" (transplanted in December and harvested in June), and where there are water conservancy installations, *Spring rice* is now grown instead (transplanted in February and harvested in June). The intervening 3 to 4 months (November — February) thus gained can be devoted to a short-duration subsidiary crop (sweet potato, maize) or



to a crop of green manure (azolla). After reaping the Spring rice in June, farmers seed, transplant and harvest the "10th-lunar-month rice" as usual between June — July and October — November. Thus we have 1 *subsidiary crop + two rice crops instead of two rice crops only.*

The formula *sweet potato (or maize) + two rice crops* contributes best to breaking rice monoculture.

*Subsidiary + 10th-lunar-month rice regions*

In these areas land was generally used for a long-duration subsidiary crop (December — June), of either sweet potato (4 to 5 months) or maize (6 months), plus a crop of 10th-lunar-month rice. Now it is possible to grow two three-month dry crops sweet potatoes + three-month maize, or two crops of three-month maize in addition to the 10th-lunar-month rice crop. *One subsidiary crop + one rice crop* land has become *two subsidiary crops + one rice crop* land. In the high regions where rice crops are chancy, *three subsidiary crops* is the growing pattern practised.

*"Fallow or Single crop" regions*

It is entirely possible to grow two rice crops per year in the high regions of the delta, but these areas are left uncultivated during the Winter-Spring period because of the lack of water. Thanks to the increase of irrigation works, relatively high land produces one subsidiary crop while rice is grown on lower areas. Moreover, Spring rice is gradually introduced into areas formerly left uncultivated but where the water question has now been solved. In general, thanks to water conservancy work, it is now possible in regions previously left fallow for six months a year to grow *either two rice crops ; or one subsidiary crop + two rice crops ; or one subsidiary + one crop of 10th-lunar-month rice.*

In the last few years, the introduction of a new variety of rice — the quick-growing, high-yield 10th-month rice, which is transplanted in July and harvested in late October, one month has been gained from that formerly needed for the 10th-month rice crop. This is incorporated into a new crop, the four month *Winter crop* (November-February) in which chiefly *potato* and various kinds of lentils are grown.

The adoption of new varieties of quick-growing and high-yield rice and subsidiary crops has made the multiplication of crops possible. In the delta and in the greater part of the middle region, *three crops are grown* yearly :

— *the Winter-Spring crop (November-June): Spring rice + subsidiary crops + azolla.*

— *the 10th-lunar-month rice crop* (July-October-November).

— *the Winter crop* (October-November-February) : *potato + various kinds of beans + market-garden crops.*

*The cultivation of rice and subsidiary crops must both be increased simultaneously,* in area under cultivation and yield as well ; the subsidiary crops should make faster progress than rice. This orientation is being followed and has opened the way for the diversification of agriculture and for the transformation of subsistence agriculture in small units into large-scale marketing production.

**Food Crops and Industrial Crops**

The development of industrial crops is dependent on intensifying and stabilizing food crop production by the crop-multiplication and above all by intensive farming: only then can sizeable area and labour be freed for the cultivation of industrial crops. Practice has shown that those co-operatives and regions where food crop yield was low had not fulfilled their part of the State plan in these areas and thus fell short in industrial crop production. Moreover the practice of industrial crop intercropping, e.g. sugar-cane or mulberry with beans of various kinds often gives low yields.



Because of the limited amount of arable land and the high demographic growth, food is of prime importance. As long as insufficient food is produced, industrialization will be affected: refineries will lack sugar-cane, or peanuts ; canning factories will have insufficient supplies of citrus fruits or pineapples ; silk mills will not have enough cocoons ; industry, both heavy and light, transport and communications, agriculture will be short of machines, equipment, spare parts, raw materials, fuel..., for we have no foreign currency to import such things. In order to "serve industry and agriculture," we must develop food and industrial crops simultaneously.

In view of the importance of foodstuffs, no more than *10 %* of the country's cultivable land is devoted to industrial crops. For regions where natural and socio-economic conditions are more propitious, this figure may be higher : for instance, 15% in mulberry-growing areas on the banks of the Red and the Day rivers, over 20% and even 30%, in regions with traditional industrial crops (sugar-cane in Nam Dinh, peanuts in Nghe An, Ha Bac...)

The regionalization of industrial crops constitutes an imperative demand: emphasis must be put on annual varieties (such as peanut, sugar-cane, tobacco, soya, pineapple, banana, flax, and mulberry) while giving sufficient attention to perennial varieties in mountainous or coastal regions (such as tea, coffee, oranges, bancoulier, trees giving essential oils, and rattan). However, in the framework of a natural and autarchic economy, there have been small zones of industrial crops, with very low yields, and cultivated

by techniques passed on from father to son (tobacco, sugar-cane, tea, peanuts, pineapples). The question now is to renovate them by the new techniques of intensive farming so as to increase outputs, to improve the quality of products, and to have large regions of concentrated commercial production: new agricultural problems have to be solved in the fields of techniques, equipment, management, exploitation..., the main one always being the food problem.

**Crops and Animal Husbandry**

Developing crops and husbandry simultaneously is comparable to "walking on both feet."

In co-operatives where family as well as co-operative pig-rearing is weak, farmers will have great difficulty in meeting their food requirements because of the unstable output and production of food crops. Rice is the persistently most popular crop and for this reason industrial crops are grown only to a very limited extent and basically only to meet the needs of the co-operatives.

*Striking a balance between animal husbandry and crop cultivation is of great importance.* This boils down to the question of fodder for draught animals and manure for crops, and, in the final analysis, to agriculture making use of its potential in the absence of sufficient foodstuffs for draught animals being produced.

As an example, let us examine a region specialized in the cultivation of rice: 100 hectares of cultivable land, 1000 inhabitants (about 200 households) and an average 1/10 hectare per inhabitant.

In order to be sure of obtaining "five tons per hectare over two crops a year," 6,5 tons of cattle dung per hectare per crop is needed, besides the chemical fertilizers supplied in very limited quantities and the green manures. This means a total



of 1,300 tons per year (6,5 tons × 100 hectares × 2 harvests). 300 tons of dung furnished by 50 heads of cattle (6 tons × 50) can be added to 1,000 tons of pigsty dung from a herd of 500 pigs supplying two tons of dung per head per year. Thus one hectare of cultivated land can be manured by 2.5 pigs (500 pigs/200 hectares of cultivated lands) if the calculated quantity of dung is maintained.

The following question arises: on 90 hectares (out of the 100 hectares, five are deducted for collective husbandry and five for family animal rearing) can we produce the necessary quantity of paddy to feed 1,000 inhabitants?

The annual production of paddy on 90 ha will be 450 tons (5 tons × 90 hectares). After deducting 240 tons for consumption (240 kg per inhabitant per year × 1,000), 100 tons of compulsory supply to the State (22% of 450 tons), 10 tons for seeds, 45 tons as reserve and accumulation, and 9 tons for encouraging family husbandry — all told 404 tons — remains a surplus of 46 tons of paddy.

Experience has shown that a peasant household of five persons, who each consume 18 — 20kg of paddy monthly, by rationally exploiting the family patches allotted after the collectivization of land (5% of the average cultivable area per inhabitant of the commune for each member of the household, i.e., about 300 square metres for five persons), and using the by-products of the crops for animal husbandry, can rear *two pigs*, which furnish at least 100 kg of meat and *four tons of dung a year*. Thus, the above-mentioned 200 households can be rearing 400 pigs giving *800 tons of dung a year*. Using the 5% of cultivable lands reserved for collective animal breeding and growing the winter subsidiary crops on part of the cultivable areas, the co-operative can easily raise a herd of 150 hogs, which furnish 200 tons of dung a year.

In the North, there are great possibilities for both collective and family animal husbandry: on 90,000 hectares reserved for this purpose, collective animal husbandry could easily rear two million hogs each weighing minimum 50 kg, instead of the present 600,000 head. In the family sector, 15% of all peasant households are not yet rearing hogs. This is a serious shortcoming that must be urgently remedied if the food problem is to be resolved quickly, and the obstacles are not insurmountable. In two or three years vanguard co-operatives have raised the annuel rice output from 4 — 4.5 tons/hectare to 6 — 8 tons, solely by developing collective and family animal husbandry, keeping 4 — 5 hogs per cultivated hectare. These last few years large areas of Nam Ninh district in Ha Nam Ninh province and Dong Hung district in Thai Binh province have obtained 7 — 8 tons of rice per hectare (over two crops a year) on all their land, also thanks to the development of hog rearing.

**Collectivized Economy — Family Economy**

Once co-operation is established, nearly all the means of production become collective property and are managed by the co-operative, and the labour force comes under collective management and is used in collective production. Besides rice — priority product — the collectivized economy also supplies a part of the peasants' other major needs, either in kind or in payment, as it develops. However, for the time being and for a long time to come, the collectivized economy cannot yet meet all their needs.

In view of the scantiness of cultivable land (1/10 hectare per inhabitant on average), the peasants have to have extra-agricultural occupations from which to improve their incomes a little. From "the patch of land reserved for each household (after the collectivization of land) and which amounts to a maximum 5% of the cultivable area per inhabitant of the commune for each member, and is allotted for the purpose of growing foodcrops, vegetables, fruit trees, etc.), and small-scale husbandry (pigs, poultry)... "the peasants can get foodstuffs, animal fodder, and cash from the sale of the products of the family patch of land which will cover their extra-alimentary needs (clothes, medicine, furniture, cultural items).



This coexistence will last for a long time as the material and technical basis of the co-operatives remains weak.

Shifting the emphasis in *the interdependence between the collectivized and the family economies,* consists in defining the role and the position of each of these two sectors exactly, and is a problem of great complexity. What is needed is delegate a *leading role* to the collectivized economy, while the family economy will only complement and support the former, in spite of its present size. The reason is that without the food, particularly rice, furnished by the co-operative, the co-op members would have insuperable difficulties in their daily lives and would fall in the claws of speculations and usurers; if they had to "run after their daily rice ration" would they have time to look after their family patches of land? We have to ensure simultaneous development of these two sectors. The cooperative sector must progress at a more accelarated, and steadier rate than the family sector, so as to gradually and continuously raise the co-op members' incomes in absolute as well as in relative value.

However, stimulating the family economy does not mean to develop it excessively and in a disordered fashion, to the detriment of the collectivized economy. This has been done in certain co-operatives, either by leaving more land than expected for the private use of the co-op members, or more than they

themselves brought to the collectivity, or by "three-point contracts" granted on an individual basis for subsidiary food crops or industrial crops, actually giving collectivized land back to individual peasants. On the other hand, an under-estimation of the significance of this economy has led to illegal reductions of the "5 %" left to co-op members, thus preventing them from growing certain crops, particularly fruit-trees, and from practising occupations not controlled by the co-operatives.

The existence of the family economy implies the rural markets where peasants sell the products of their patches of land and buy what they want ; these transactions are vital for their daily existence and cannot be ensured by the State commercial services. This is an objective reality, giving rise to a necessary phenomenon inherent to the appearance of the agricultural co-operatives, the under-estimation of which will do great harm to the regularization and the stability of commercial exchanges in the countryside. As an indispensable complement of the State commercial services, the rural markets will exist as long as the family economy : therefore, *on the one hand* their normal operation must be ensured, while their negative aspects limited ; and *on the other hand,* the State commercial services and the network of sales and purchasing co-operatives must be developed and strengthened in the villages.

In co-operative production, the family sector must be concretely defined : what percentage is to be given over to hog rearing ; how to use the "5% patch of land" for this purpose so as to meet the co-operative's need for dung and the population's meat needs ; what subsidiary occupations could be practised besides those under the management of the co-operative, with a view to improving the incomes... In brief, the activities of this sector had to be defined as targets of the co-operative plan.



**Orientation of Production —**
**Orientation of Techniques —**
**Orientation of Labour.**

The orientation of production is concretized in the targets of the plan. Once defined, the plan can only be completed by using technical measures and labour organization, measures required in the production targets. For instance, making sure of "five tons per hectare for two rice crops a year" calls for so many tons of manure, so many work-days and so on.

Following up the orientation of production requires strict observation of the balance between three elements : the orientation of production — the orientation of techniques, and the orientation of labour, which function in interaction and are complementary to one another.

A correct definition of the orientation of production paves the way for the judicious choice and use of techniques in agriculture and animal husbandry. The quantity of seeds and fertilizers to be used, the system of irrigation or drainage to be adopted, the quantity of food-units necessary for each animal species per day, etc., can be determined only when one has decided which varieties of crops are to be grown (in what proportions, on what soil, at what time of the year, providing what yield per hectare, what production per crop) and the species of animals to be reared. Likewise, when the orientation of production is not defined in any region, one cannot stabilize either cultivation or animal husbandry, nor can one make any judicious decision about technical measures.

What must be done is to establish precise and concrete technical norms for the different factors — *water, fertilizer, labour, seeds* — involved in growing each crop, at each stage of the growth of the plants, in each period of cultivation, for every category of soil it is grown on.

Norms are also needed for:

— quantity of each kind of fertilizer, of lime; mode of manuring and liming.

— method of irrigation; maintenance of 3 — 5cm of water on ricefields after the seedlings are transplanted and during tillage; draining at the end of tillage and at the beginning of the earing stage; maintenance of 5 — 10 cm of water at the differentiation of the floral organs and during the earing period.

— treatment of seeds and the preparation of seedlings.

— standards for transplanting in thin or thick tufts and in straight lines.

— definition of work to be done with modernized or semi-mechanical implements: all regular ploughing, harrowing, weeding, insecticide spraying.

The application of all these techniques will be more effective if they are combined with the traditional growing techniques.

Correct orientation of production makes the management of labour easier and more effective: the organization of labour, the division of tasks among the production groups, and of hands to each branch and each job, the census of the labour force, the calculation of expenses (in terms of workdays) necessary for each kind of work, the specialization of labour, the fixing of labour norms, and the classification of work... would be impossible if one did not know which kinds and the proportions of crops were to be developed in each growing season and during the year as a whole, which species of animal were to be reared, which subsidiary occupations, were to be stimulated.

On this basis, a concrete division of labour has to be carried out in each branch. For example: 70% field crops, 10% to animal husbandry, 8% to subsidiary occupations, 12% to construction. For each branch, accurate calculations have to be made with regard to labour expenses. For instance: 390 — 450 wordays for one hectare of rice, 900 — 1,350 workdays for one hectare of industrial crops, etc. The human investment necessary will vary according to the techniques and the tools and equipment used. Against the present background of scant cultivable area and high demographic growth, these norms for division of the labour force will help reduce underemployment in rural areas, and will raise crop yields.



A well-defined orientation of production is based on stability in the size of the co-operative and the production brigades, and on the creation of specialized groups.

**Zoning of Production**
**Orientation of Production in Each Region**

Defining the orientation of diversified production and working out a new crop system, with detailed guidance on technical and labour questions requires the zoning of production.

The farming characteristics and traditions of each region, are the basis on which one can adopt for instance three major types of region, each of which has roughly two sorts of zones:

— *Rice-growing region:*

Midland-upland zone (i.e., between the high and the low zones) where water supply and drainage conditions are suitable for diversified crops.

+ *Low zone* may be submerged for a part of the year.

— *"Subsidiary food crops + 10th-lunar-month rice" region:*

+ *River bank zone:* often subjected both to drought, and to submersion during the flood season.

+ *Intra-dyke zone:* suitable for subsidiary food crops and for 10th-lunar-month rice.

— *Semi-Mountainous region*

+ *Hilly zone*: often subjected to drought.

+ *Mountain foot zone* : ravaged by annual floods in spate season.

In each zone, there are special measures that must be taken, for instance, the solving of the acute problem of flooding, which constitutes the central and imperative task in the low-lying zone, where three harvests — two rice and one subsidiary crop — are possible yearly once the water question is solved ; the hill zone, where sterile soil requires water conservancy installations and soil improvement through abundant manuring so that subsidiary crops and industrial crops can be grown, and animal husbandry established.

Specialized crop, animal husbandry, subsidiary food crop and market-gardening production in each zone must be planned to suit the region.

Regionalization of production is of great importance and brings with it stability to production, a steady crop system and animal husbandry, modernization of techniques, implements and equipment, water conservancy installations, alignment of the fields, mechanization of labour...

**Different Formulae for the Orientation of Production**

Defining the orientation for every aspect of production is very difficult work. After many years of practice, several formulae, have gradually been improved and adapted to the different regions :

*Rice-growing*

This includes land where it is possible to grow two rice crops yearly and where the low-lying land is capable of producing only one crop, 5th-lunar-month rice. Because of insufficient subsidiary food crops, animal husbandry is little developed, and there is thus not enough dung for fertilizer and rice yield remains low.

Thanks to the progress of water conservancy work and to the rotation of crops, most of the co-operatives grow rice while diversifying their farming according to the following formulae :



— Rice + subsidiary crops + hog rearing.

— Rice + subsidiary crops + hog rearing industrial crops.

— Rice + hog (and duck) rearing.

*"Rice + subsidiary crops — industrial crops region"*

There is great diversified development potential here if the first two formulae alone are applied.

*Food — producing areas*

These are above all the suburban belts or areas surrounding large industrial centres where specialization in the production of foodstuffs has made noticeable progress, particularly animal husbandry (pigs, fish, poultry), by using agricultural by-products. Here the formulae for the orientation of production are :

— market-gardening-rice-animal husbandry.

— market-gardening-animal husbandry.

— animal husbandry-market-gardening.

— animal husbandry-market-gardening — rice and subsidiary crops.

*Areas where there is a concentration of industrial crops*

These are in the vicinity of industrial enterprises processing agricultural products, and have varying degrees of specialization.

— industrial crops — food crops — animal husbandry.

— industrial crops — animal husbandry.

— industrial crops-market-gardening-animal husbandry.

In the last two types of area, where the progressive specialization of production facilitates large-scale commercial production, solutions must be found for a series of techno-economic problems, particularly the question of organising food supply by the State and the question of purchasing prices.

Co-operatives in the midland-upland region and mountain regions have adopted an orientation of production combining agricultural activities and forest exploitation:

— food crops — cattle rearing — pluri-annual industrial crops.

In coastal regions, it is:

— food crops — industrial crops (reed)-maritime fishing.

Finally, the efficiency of the orientation must be assessed, in terms of:

— the commercial production.

— the rational use of land, labour force, and tools and equipment.

— the simultaneous development of various production branches.

— the accumulation necessary for enlarged production.

— the improvement of the co-op members' living conditions.

Lastly, an effective orientation must create conditions conducive to successful intensive cultivation.

This evaluation involves work of great complexity, and must take into consideration how the orientation will be applied over a long period (4 to 5 years), so as to balance the effects of the fluctuations caused by natural or economic factors in the course of the development of the co-operative.

Below is a concrete example of a production plan.

## ORIENTATION OF PRODUCTION OF GIAO AN CO-OPERATIVE IN 1970

(Xuan Thuy district — Ha Nam Ninh province)

Main branch: *rice*

major subsidiary branches: *reeds and hog rearing,*

supplementary branches: *production of bricks, lime, etc.*



| Production branches | Structure and value of commercial production % | Structure and value of total production % | Apportioning of cultivated areas % | Distribution of production costs % |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| *1 — Crops:* | *78.4* | *80.2* | | *68.9* |
| — rice | 49.8 | 56.4 | 86.6 | 62.8 |
| — reeds | 28.6 | 23.8 | 11.7 | 6.1 |
| — market-gardening | — | — | 0.7 | — |
| — subsidiary food crops | — | — | 1.0 | — |
| — fruit-trees | — | — | | |
| *2 — Animal Husbandry* | *21.6* | *9.3* | — | *23.8* |
| — pigs | 10.7 | 4.5 | — | 14.5 |
| — drakes | 2.3 | 0.8 | — | 1.7 |
| — ducks | 8.2 | 4.0 | — | 6.9 |
| — fish | 0.4 | — | — | 0.7 |
| — cattle (buffaloes) | — | — | — | — |
| *3 — Subsidiary occupations* | — | *8.4* | — | *7.1* |
| — brick-making | — | 1.6 | — | 2.6 |
| — lime-production | — | 0.5 | — | 0.3 |
| — boat-construction | — | 1.5 | — | 4.2 |
| — sea-fishing | — | 2.0 | — | — |
| — carpentry | — | — | — | — |
| — reed-mat making | | 0.3 | — | — |
| — duck-egg hatching | — | 2.5 | — | — |
| | — | | | |
| *4 — Miscellaneous* | | | | |
| — Various buildings constructed | — | *2.1* | — | *0.2* |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

## ORGANIZATION OF WORK

In northern Viet Nam, agricultural co-operation has preceded mechanization, rendering *the organization of work, a matter of primordial importance.*

Peasant organization in co-operatives in itself makes it possible to raise labour productivity, intensify production and improve the living standards of the co-op members, even though the tools and equipment used remain rudimentary. The experience of many co-operatives, particularly the vanguard ones, has confirmed this and in those where labour is not well organized, results have been correspondingly poor.

### Fixed Production Groups

During the first years of co-operation, the peasants were organized in *mobile production groups* of 10 to 20 persons who owned neither land nor cattle. All decisions were taken by the administration committee which had a free hand in apportioning work to labour hands, dividing the tasks as required ; and deciding what remuneration the workers should receive. Dozens of workers and buffaloes might be moved from one field to another for a few hours' work, and this bad organization of work led a certain inertia among the workers. Work was done badly, the draught animals were not well cared for, and the farming tools and equipment were given scarcely any maintenance, labour efficiency was low,



co-ordination of work poor, and planting and harvesting schedules were frequently disregarded.

Campaigns aimed at improving co-operative management have resulted in a better form of organization of work: *the provisional production brigades.* These brigades formed for the duration of a harvest are composed of a fixed number of workers who are responsible for the land and the draught animals and equipment they use for a fixed period.

The double advantage of this form of organization is as follows: *on the one hand* these brigades have both more responsibility and greater freedom of action in implementing the production plan, at least for the one crop they are assigned ; *on the other hand,* the management committee, now freed from the direct tasks of production, can devote itself to its task of leadership.

Order and stability have begun to prevail in the co-operatives. However, in view of the *provisional* character of the above-mentioned organization in groups, there are still negative aspects to this mode of organization. The component elements of these production brigades (labour force, draught power, land, tools and equipment) are shuffled from one brigade to another at every harvest, and the co-operative members do not feel much responsibility for production. The fields, draught animals, and equipment are still badly looked after, resulting in low crop yields.

As the co-operatives shift from the semi-socialist to the socialist stage, this form of *provisional* organization is being replaced by socialist organization of work in the form of *fixed production brigades,* which makes it possible to stabilize both the labour force and the means of production (land, draught animals, tools and equipment).

The new production brigades are provided with a sufficient number of workers, draught animals and

agricultural implements to cultivate a fixed area entrusted to them by the management committee for a long period (at least 3 to 5 years). It is necessary for the workers to feel that this is "their" land and "their" animals, and to stay with the same piece of land long enough to gather experience in production.

Several years' experience of this type of organization have proved that fixing the factors of production in a group provides stability and encourages development, as well as being a considerable help in the management of the co-operatives.

When working in a fixed group, the co-op members show more responsibility and better discipline in fulfilling the tasks assigned to them, those in charge can rely on effective labour hands, and on the basis of assessments of capacity of each worker, his state of mind, and his family situation can organize and divide the work up rationally. The draught animals are better cared for, the implements used and maintained more carefully, the land better managed and improved, and water conservancy is better organized. The crops are more rationally structured, and leadership and management improved. With this new form of organization of work, crop-yields as well as labour efficiency are higher as a result of the consequent gradual specialization of work.

Being the most rational organization of labour, *the fixed production brigade* has become "the basic organization for promoting responsibility in agricultural production" the essential, fundamental form of organization for collectivized agriculture.

Because of the special nature of agricultural production, some people thought that it would be a good idea to stimulate production by giving the fixed group certain rights, for instance: "to really own" a certain area of land, a certain number of draught animals and labour instruments, to manage



their own funds and to organize their own activities, to have complete freedom of decision on production matters, and to decide for themselves how incomes should be allotted...

This is what actually happened in practice in a good number of co-operatives, chiefly at the beginning, as production brigades turned into "small co-operatives" within the mother co-operative. With the exception of fulfilling their obligations to the State (taxes and compulsory sales) and making contributions to various collective funds of the co-operative (accumulation, social welfare and undertakings, reserves...) everything was decided by the leaders of the brigade. As for the leaders of the co-operative, they felt that this "independence," although relative, "kept people happy," alleviated dissension between brigades, stimulated production, and facilitated their own task of leadership.

This laxity not only led to stagnation in production, falling incomes and the deterioration of the co-op members' living standards; but even in some cases, resulted in the disbanding of co-operatives. This was quite simply a return to private ownership.

The fixed production brigade is no more than *a form of organization and division of labour within a co-operative*, aimed at fulfilling the production plan. By its very nature it cannot own land, draught animals or equipment; nor can it have its own funds to manage itself at will.

As a constituent element of the co-operative, the rights of a production brigade do not extend beyond using the means of production that the management committee has put at its disposal in the most rational and profitable way. It is at all times bound by its obligations to the State, the co-operative and the co-op members mentioned in the Statutes and the internal regulations of the co-operative, and by the leadership of the management committee in these

matters. When plan targets are overfulfilled, the brigade will be given material advantages and incentives in keeping with the system of labour remuneration. This in no way lessens the role of the regular material incentives. However they must not be excessive for this would cause negative reactions and harm production. The size of the fixed production brigade too small, it will not have enough labour force to accomplish its tasks and work on a rational basis ; if too large it will have management difficulties, particularly in the present conditions.

Deciding the size of the production brigade has great economic importance ; it boils down to working out the norms for distribution of land, draught animals, tools and equipment, and workers in each brigade. The optimum size is that which is suitable for the execution of the tasks of production and management.

A few years after the completion of agricultural co-operativization, the fusion of small co-operatives into larger ones produced an erroneous tendency to believe that the larger the co-operative, the better its management, and that the same held true for a production brigade. Brigades of 100, even 150 persons were formed in consequence.

In fact, because of their weak managerial capability, very large brigades caused a great deal of embarassment to cadres : some were unable to get around to all the land being worked ; others had to spend 3 to 4 full days a week on inspecting the work put under their management. The waste of labour and draught power was enormous, and the management superficial. Some co-operatives which realized what difficulties were caused by the creation of production brigades of this kind, dissolved them and formed *fixed production brigades* of 10 to 20 workers. Management of these brigades was



easier but production was hindered by insufficient labour force and draught animals, particularly when there was great pressure of work, and then the deadlines could be met only with the assistance of other brigades. This situation created new difficulties for the remuneration of work, and apportioning of incomes, and thus adversely affected the internal life of the co-operative.

The size of a production brigade and that of the co-operative can only be decided on the basis of its own particular economic conditions. Rational size for a co-op means that the tasks of production and management of the brigades as well as of the co-operative as a whole can be accomplished easily in it.

The size of each production brigade has a direct bearing on how fixed it is and thereby on the fulfilment of the production plan of the co-operative. Size must be worked out on the basis of :

— *The production tasks of the brigade :* each activity has its own requirements with regard to land, labour, tools and equipment. A brigade responsible for food crops must have large expanses of land at its disposal ; one engaged in market-gardening, growing perennial industrial crops or fruit trees will not need such extensive area ; one engaged in animal husbandry will require less labour.

— *The size of co-operatives :* a commune-size co-operative must form larger production brigades than village-size co-operative.

— *The degree of mechanization of labour :* by using small machines in various jobs (winnowing and husking paddy, irrigation and drainage by means of pumps, processing of fodder for cattle, etc.) tractors or motorcultivators for transport and ploughing, a small-scale production brigade can do a lot of work over a large area and can diversify its activities.

— *The natural environment:* in regions of great concentration of population and arable lands, where favourable conditions include fertile soil, water conservancy installations, good climate and communications..., large-scale production brigades may be set up, of various sizes depending on the region.

— *The management ability of cadres:* improving the management of the co-operatives will help raise this ability and the cadres will be able to manage large-scale production brigades.

In view of the present state of the co-operative movement, of management of the co-operatives, and of the political and cultural level of cadres, it has been decided that in general "*the most suitable size for a fixed production brigade is from 40 to 60 workers* (excerpt in mountain region)."

These considerations are justified for the following reasons:

— The scale of the majority of co-operatives in the delta and the middle region is fixed for the time being at 150-200 households because of the cadres' low level of leadership and management and the weak material and technical basis of agriculture.

— Since the majority of tools and equipment are rudimentary or modernized old ones, only a certain degree of co-operation among the workers can be achieved, that necessary for raising labour productivity. These workers, who have just left small-scale production on tiny bits of land, are not able to give up their deep-rooted working habits and ideas. A production brigade which is too large will lose its dynamism; if it is too small, it will not be able to intensify its activities.

— The organizational and managerial ability, the cultural level, and the guidance given by the co-operative leaders are still weak; the regulations governing the economic management of the co-operatives



are not yet completely worked out; the co-op members' socialist consciousness is not yet very high.

As a result, "in a co-operative of 150 to 200 households, in the delta, production brigades of 50 to 70 households cultivating 15 to 20 hectares each" meet the present requirements. In mountain regions, both the co-operatives and their production brigades are smaller.

The scale of the co-operatives and their production brigades are in proportion to the development of production, and will be adjusted as the co-operatives passes from lower to higher levels and small co-operatives are merged into larger ones.

**Forms of the Fixed Production Brigade**

Depending on the specific conditions of each co-operative, the fixed production brigades may be organized differently into:

1. — *Specialized brigades,* responsible for a particular activity. They can specialize their members and, as a result, raise their technical, management levels and ensure better labour productivity. However, specialized brigades are not suited to the seasonal character of agriculture production and cannot make efficient and rational use of their labour and equipment. In general, they are created to cope with work that is not seasonal in character and brigade in general agriculture is the commonest form of organization of work.

— *animal husbandry brigades* for large-scale rearing of pigs, fish and poultry...;

— *irrigation brigades* for the setting out of rice fields, the maintenance and the construction of water conservancy installations.

— *small mechanical brigades* for the operation of small machines.

— *subsidiary occupation brigades* for basket-making, carpentry, brick-making, masonry, etc.

2. — *General agricultural brigades* with diversified activities; their principal tasks remain crops grown alongside animal husbandry or subsidiary occupations. In a general brigade, specialized work is always done by professional workers; but when need be, for instance when the crops must be brought in very quickly or submersion coped with, all the effectives can be mobilized at any time. It is fully possible to co-ordinate all the activities for which the brigade is responsible, making it possible to reduce the seasonal character of production and to ensure the total and rational use of labour, land, equipment, natural resources, and secondary products. Second rate sweet potatoes can be used as pigfeed; practising fish-breeding and the cultivation of aquatic plants in ponds can be done during idle periods; making baskets, producing food powders and sauces, weaving... All such work calls for some specialization and are entrusted either to the co-op members individually or to brigades trained for this purpose. The specialization of work is achieved gradually, and the brigades which are trained in this manner form the embryo of future independent brigades. The fixed in general agriculture is the commonest form of organization of work.

**Organization of Work in a Fixed Production Brigade**

Each fixed production brigade is divided into a certain number of groups:

— *The provisional labour groups:* They are found in nearly all the brigades; over a rather long period (15-20 days) they are required to carry out a great volume of temporary projects, for instance the preparation of beds for the cultivation of sweet potatoes or the sowing of maize, the struggle against rice parasites... These groups are dissolved when the



work is accomplished. The brigade leaders receive tasks from the group and distribute them to the members according to the fixed norms and the capabilities of each.

When there are major pieces of work calling for large groups, sub-groups may be formed and the division of work is made by them.

Satisfactory division of a brigade into groups can be done only on the basis of a concrete plan of work for each period of the year. The choice of the members of the groups and sub-groups depends on the character of their activities. For instance, for the cultivation of sweet potatoes, which involves different types of work, the group may be composed of heterogeneous workers: sturdy men for ploughing, children of 10-12 years of age for gathering the tubers, women for transport. A team may be composed entirely of workers of the same category, for instance women with infants only, so that at pause-time, work may be interrupted without prejudice for mothers to suckle their children.

Organization of work in a fixed production brigade with the formation of intermediary units (teams, subteams) has many advantages: the leaders can follow the situation of their group very closely; the management, organization and control of work are more efficient; the remuneration of work is simplified; labour productivity can be raised more easily.

— *The professional groups* are often set up as permanent work-groups with a fixed character, and require a certain technical level. They are composed of a fixed type of worker and are provided with the equipment necessary for certain tasks. For instance, in an animal husbandry brigade, we can set up a pig group, a poultry group and a fish group...; an agricultural group may have one team for market-gardening, and one for the tea crop etc. A professional group may also be divided into sub-

groups which do separate but linked aspects of the work: the pig team may be composed of three sub-groups, for the preparation of feed, for the actual care of the pigs, and for the treatment of manure.

As long as the seasonal character of agriculture dominates production, the brigade can shift its labour from one group to another for different periods of time.

Unlike a provisional labour group, a professional group works for further specialization among its workers, makes it possible for them to rapidly raise their qualifications, and thereby raise labour productivity and product quality. The creation of professional groups and sub-groups is based, not on the working conditions, but on the character of the work and the ability of the workers.

Experience has shown that the formation of groups and sub-groups within a brigade constitutes a significant factor in increasing yield. In a number of specific jobs the organization in sub-teams has given satisfactory results: ploughing by sub-group is 1,5 — 2 times more efficient than individual ploughing: for harvesting, productivity of a 4 to 6 person sub-group is 1,4-2 times higher than that of a 15 to 18-person group: when it comes to transplanting in straight lines, a two-person sub-group transplants an average 1,1 *sao* (390 $m^2$) a day per person, as against 0.8 *sao* (240 $m^2$) when the sub-group has four persons. The Tan Hung Hoa co-operative in Thai Binh province provides the following convincing example:

(unit: $m^2$/person/day)

| | *Work done individually* | *Work done by sub-group* |
|---|---|---|
| *Transplantation* | | |
| Brigade 1 | 206 | 284 |
| Brigade 2 | 180 | 234 |
| Brigade 3 | 180 | 284 |



| | *Work done* individually | *Work done* by sub-group |
|---|---|---|
| *Weeding* | | |
| Brigade 2 | 360 | 540 |
| Brigade 3 | 648 | 1,260 |
| *Harvesting* | | |
| Brigade 2 | 324 | 396 |
| Brigade 3 | 324 | 432 |

The use of draught animals also makes work in sub-groups more productive: a pair of buffaloes in harness (steered by only one person) can plough one *mau* (0,36 ha) per day and make 12cm deep furrows, whereas a single buffalo can plough only one third as much (0,12 ha), with 8-10cm deep furrows.

**The distribution of the labour force and means of production in fixed production brigade**

It is important to take the following points into consideration:

— A very diversified labour force includes workers of different ages, sex, qualifications, strength and working capacity. On the other hand, the diversification of agricultural activities (cultivation and animal husbandry) and subsidiary handicraft occupations make it fully possible to make full use of this labour force, a significant factor in intensified production.

This situation calls for rational organization of work if all potential working capacities are to be put to use.

— The cultivable land in most of the co-operatives is not only scanty but also very varied in soil-type and terrain. The herterogeneous character of the land necessitates diversity of crops; and the cost of labour on a unit of cultivated area and a unit of product vary from one type of soil to another. But labour is abundant, under-employment chronic and incomes very low. This state of affairs is an initial hindrance to purely rational organization of

work as the distribution of cultivable land and workers in production brigades has a direct effect on production and the incomes of the brigade members, who are on the look-out for any inequality between co-op members.

For all these reasons, the workers in co-operatives with little land always demand a more or less equal division of land among the brigades so as to avoid too great discrepancies in incomes : each brigades must have an equal number of workers of various categories (men and women, young and old, strong and weak, qualified and non-qualified workers) and an equal area of land of all categories. In these conditions, it is very difficult for a production brigade to specialize in one activity or one crop and to have lands, all in one place. During the first years of co-operation when production is still weak, and the management level not high, this balance between labour force, land and even mouths to be fed in a co-operative is indispensable to its functioning and to some extent for its survival. It will become less important as progress is made in modernizing techniques, improving management, building the material and technical basis for agricultural development, and above all in *re-organizing agricultural production.*

— Agricultural work has a seasonal character ; good organization of labour must not only ensure sufficient labour during the months of intensive work (ploughing, transplanting, harvesting) but must also keep the workers employed during the idle periods. Fixing the size of a production brigade at 40-60 workers and forming general production brigades meet both requirements. And in many co-operatives, the farming brigade and the subsidiary occupation brigades (or groups) have areas in which they co-operate with a view to rational and effective utilization of the labour force: thus, during the



months of intensive work, subsidiary occupation brigades (or groups) can be mobilized to help the farming brigades : and during the dead season, the development of non-agricultural activities absorbs this unemployed labour

The imperative task of the fixed production brigade consists in exceeding as far as possible their production targets which have been worked out by the management in the framework of the co-operative production plan.

This obligation, which has the force of law for the co-operative leaders, the production brigades and the co-op members, implies the appropriate strengthening of the fixed production groups so that they become vanguard detachments on the agricultural front :

— Labour discipline and production regulations must be strictly observed by correctly reacting all the plan targets, particularly the technical targets and measures.

— Rational and appropriate use of the labour force can be made through a judicious division of work : work of varying length, that lasting only a few days, a crop duration or even one year can be assigned either to each co-op member individually (e.g. preparation of seedbeds, care of animals...), or to a brigade (e.g. plouging, transplanting, weeding, harvesting).

— Remuneration "according to the work done" must be combined with political and ideological education to raise the co-op members' socialist consciousness, enthusiasm for their work, and labour discipline.

— Both the management and technical level as well as the political and cultural standards of the leaders of production brigades must be raised.

— The leadership of the production brigades provided by co-operative authorities must be improv-

ed through close and constant control of the implementation of the plan, strict application of the work norms and remuneration, and the use of techno-economic measures.

### Making Use of the Full Potential of the Labour Force

Although collectivized, agriculture in northern Viet Nam still has many weaknesses: scantiness of cultivable land in the face of high demographic growth, rice monoculture, rural under-employment, few mechanized tools and equipment, low crop yields, and imbalance between different branches. In consequence, *raising labour productivity,* which is still very low, is an imperative and urgent task.

However, too much *unilateral* emphasis has been put on this aspect without paying sufficient attention to bringing all the labour possibilities into play. Sometimes productivity has been made out to be in contradiction to abundance of labour; but practice has shown that in present conditions, effective and rational use of all labour potential by no means hinders the raising of labour productivity.

The implication of this must be intensification of production, and, first of all, the diversification of agricultural activities, which is necessary for the co-operatives, allotment of labour to its various branches and to implementing division of labour in agriculture. But to be effective, the greater part of the labour force must be concentrated on the productive sector, chiefly to crop-growing; and this division can be rational and efficient, only when it is carried out in accordance with the orientation of production.

The changing needs with regard to labour will entail, on the one hand, a gradual shift from the crops sector, chiefly of food crops, to animal husbandry, subsidiary handicraft occupations and specialized occupations (water conservancy work, selection and choice of seeds, small-scale enginnering); and on the other, the transfer of the active agricultural population to other economic sectors, to national defence or to the clearing of new land. These measures can be put into effect only when intensive farming is practised on a large scale.



At present, agricultural labour productivity is still very low: the production of a quintal of paddy requires an average 10-15 workdays/person, that is to say 80-120 hours of work (in the USSR, 2-3 hours; in the U.S.A., about 0.9 hour). A farmer produces enough to feed only one person in Viet Nam (in the USSR six persons; in the USA eleven persons). Labour is very concentrated: there are 3 workers per cultivated hectare on average in the whole country; 3.6 workers in the delta; 4.1 workers in Thai Binh province...

In order to raise labour productivity in a country where under-employment is chronic and rudimentary labour instruments are in general use, there must be in intense *human investment, by increasing the number of workdays* spent on the same area, This is a rational and judicious way of bringing all potential in the labour force into play.

The increase of the number of work-days on a unit of cultivated area is not in contradiction with the reduction of the number of workers on the same unit. It is necessary and possible to apply these two apparently contradictory measures simultaneously. However the second measure is dependent on the first one, because one can reduce the number of workers on a unit of area to furnish labour for to other activities and economic sectors only by increasing the number of work-days on that unit with a view to raising labour productivity. The objective consists therefore in reducing the average number

of workers per hectare under cultivation from 2,5-3 to 2, and in increasing the number of workdays to 600 so as to obtain "five tons per hectare per year" (for two rice crops). Implementation will vary according to each category of crop, the state of the soil, the labour force and the tools and equipment in use, and the kind of work being done. For some work, modernizing farming techniques or equipment can replace the increase of workdays.

It is expected that each farmer of working age (16-60 for men, 16-55 for women) will work an average *200 workdays* annually on co-operative work (earning 10 points a day).

— sturdy worker :
250 workdays for men,
230 — for women ;
— worker of middle strength :
220 workdays for men
200 — for women
— nursing mother : 150 wrokdays,
— weak worker : 100 workdays.

With an active agricultural population of 7 to 8 million and a cultivable area of 2 million hectares, agriculture in the North holds great promise when it comes to intensification of production and the diversification of activities. However this potential is not yet effectively utilized. Strong co-op workers work only an average 210 workdays a year instead of 250 as legally fixed, and each workday counts only 5 or 6 hours oo average. In vanguard co-operatives, members work at most 300 workdays per year, and a good production brigade works with only 83.8% of its effectives. This rate of labour mobilization is considered high for an agriculture of rice monoculture and chronic under-employment. Even so, Thai Binh, the first rice-growing province of the country which has harvested "five tons per hectare" in the whole province, still has an excess of



60,000 agricultural workers. This under-employment is one of the main reasons for the slow increase in production.

Many co-operatives have now put in an average of 250 workdays or more per year per active member, and a rate of labour mobilization of 90-95%, by applying the following appropriate measures :

— Once they had worked out and implemented, a rational *orientation of production* which facilitates the diversification of activities-*rice + hog rearing + subsidiary food crops*, the seasonal character of agricultural activity and employment as a whole was reduced :

INTERDEPENDENCE BETWEEN THE UTILIZATION OF THE LABOUR FORCE AND THE ORIENTATION OF PRODUCTION (Thai Binh province)

| | I | II | III |
|---|---|---|---|
| Area under different crops as a percentage of total cultivated area | | | |
| + rice | 70.5 | 84.2 | 89.9 |
| + subsidiary food crops | 21.3 | 10.1 | 8. |
| + subsidiary crops for animals reared | 6.2 | 3.8 | 2.1 |
| Coefficient of utilization of labour force (a) | 1.8 | 2.9 | 7.5 |
| Annual average number of workdays per active person | 260.0 | 198.0 | 164.0 |
| Labour productivity per active person (*dong*/year) | 415.0 | 308.0 | 250.0 |

(a) ration of the number of workdays spent during the months of great intensity of labour, to that during the month of less intensity.

With correct orientation of production, the utilization of the labour force is more rational and more

efficient than in the case of rice monoculture. The number of workdays spent by each worker and his production (expressed in *dong*) are also higher. The development of production has made it possible to bring all the potential of the labour force into play.

— Work is allotted according to the adopted orientation of production, and according to the principle "work suitable to one's age, qualifications, speciality, and strength." Men are given strenuous jobs (ploughing, harrowing, rooting out seedlings), women are entrusted with transplanting and weeding... Young co-op members who have attended technical courses are enrolled in specialized brigades or groups (water conservancy work, cultivation of azolla, hog-rearing, mechanical assistance and maintenance, selection and choice of seeds). The fixing of work and remuneration norms and the classification of work have made it possible not only to reduce the tendency to abandon difficult tasks and to accept only light and easy work, but also to utilize workers who have reached pension-age (e.g., aged persons tend fruit trees) and children from 10 or 12 years of age for tending the cattle or for weeding: with good labour management, these secondary workers (10 to 20% of the total labour force) can furnish 130-150 workdays each per year on the average.

— Women workers are organized in a more rational and effective way. They form the most important and the largest agricultural labour force, particularly in the specialized production brigades or groups. During the 1965-1972 air war, women workers faced the test of replacing men who went to the front, not only in agricultural work but also in leading the co-operatives, the administration and the Party. Vanguard co-operatives have succeeded in gradually liberating women from housework, particularly during the cultivation periods, by organizing nurseries, infant classes, canteens..., and by



intensifying the use of small machines in various tasks (husking, winnowing...)

The country's agricultural labour potential is considerable. The utilization of all sources of labour involves the application of organizational measures which allow each worker to furnish the maximum number of workdays per year and of hours per day.

This task is greatly facilitated by the organization of labour in the co-operatives in fixed production brigades, groups, and sub-groups.

# DRAWING UP WORK NORMS

Work norms are central to labour management: they have a direct bearing on the rational organization and deployment of labour and the labour force, on the improvement of the quality of work done, and the raising of labour productivity and on the eradication of out-moded and paralyzing habits and methods of work which derive from small-scale, scattered production.

In place where this management method is put into effect, each co-op member is assigned work according to his strength and capabilities: robust or specialized workers are given heavy or complex jobs, and others lighter or simpler ones; and remuneration is made according to this principle: "From each according to his ability, to each according to his work."

Work norms are drawn up and calculated on the basis of the characteristics of the different jobs (whether they are heavy or light, difficult or easy, complex or simple), of the quality of the livestock used as draught power and the tools and equipment (i.e., how strong the buffaloes are, whether the agricultural implements are primitive, modernized or mechanized) and of conditions of production (whether the soil is clayey or sandy, whether the weather is rainy or sunny, whether it is winter or summer, etc.) The key to any calculation of work norms lies in the appraisal of socio-economic and natural conditions and of each co-op member's management and technical ability.



Agricultural production includes a great variety of work: tilling for rice growing differs from tilling for growing subsidiary food crops, tending pigs is not the same as tending draught animals, etc.

However, these conditions in production and these technical requirements will not remain the same always: they change constantly as a result of atmospheric variations, of measure taken to improve management, of technological, scientific, cultural and ideological progress.

Work norms have to be calculated, revised, adjusted and finalized taking these modifications into account: thus norms for tilling will differ according to what kind of plough is used, the quality of the soil, the buffaloes' draught capacity, and the depth of the furrow to be ploughed; norms for transplanting differ with the kinds of ricefields, and with the techniques applied: whether transplanting is done in straight lines or in zigzags, in thick tufts or thin, in patches or in stretches of ricefields, in ten-person or two-person groups; harvesting norms vary depending on whether sickles or scythes are used, flooded or dry, whether the rice plants are wind-bent or straight; weeding done by hand is not governed by the same norms as weeding by hoe, and for the latter norms change with the kinds of hoes used; norms for transportation vary with the transport means used.

The calculation of work norms should be done on the basis of a correct appraisal of actual conditions and techniques: norms for tilling done with the same buffalo and the same plough vary with the category of soil tilled for instance 4 *sao* (1,440 square metres) per workday, per capital on a light soil, 3 *sao* (1,080 square metres) on a clayey soil,

5 *sao* (1,800 square metres) on a sandy soil ; norms for second tilling are higher than for first tilling ; norms for tilling made difficult by great heat or by torrential rains should be revised. There can only be one norm for any one job which is done in different production conditions by average workers, (with a ten per cent variation either way).

In short, all work norms are established on the basis of detailed calculations and by applying concrete methods which have been tested by practice. All egalitarianism, sophistication or over simplification (too many norms with insignificant differences between them or with too much detailed definition) only complicate the work.

Work norms define the *quantity* and *quality* of work that should be done by a worker of average ability, qualifications and strength in a normal 8-*hours* workday, in well-defined conditions and with a correct attitude to labour. During periods of intensive cultivation, the workday may last 10-12 hours (and even more) but norms are always calculated in 8-hour stints. They are average norms which a great number of workers can fulfil or overfulfil. Norms based on what outstanding workers fulfil cannot be maintained by the broad masses of workers conversely, too low norms that can be accomplished by nearly all workers — the diligent as well as the lazy ones — restrain work zeal and inventiveness, encourage laziness and hamper technological progress. In present conditions norms that are too low lead to worse results than the absence of norms.

Correct work norms define both the quality and quantity of work to be done give the degree of intensive cultivation and the level of productivity to



be achieved in the work of a co-operative and act as a basis for technical control and for the rapid detection of shortcomings in the work. Quality, or the technical criterium is defined by the specifications and characteristics of each job, while quantity is calculated in different measurement units (hectares, quintals, animals, quantity of products) and varies from one job to another. In defining these two imperative requirements of a work norm, priority should be given to quality as the first requirement ; for the same work done in similar production conditions norms will vary with the quality required (for instance, the norm for preparing soil for growing potatoes is 3 *sao* or 1,080 square metres per workday per man, as against 5 *sao* or 1,850 square metres — in the case of sweet potatoes).

Working out norms is the business of labouring masses, since it is they who are to carry them out, they are the main persons concerned. Norms of all kinds should be worked out by the workers themselves who have full knowledge of the facts, and settled in co-operative members' general assemblies. Only in these conditions can norms have a real basis and be approved by the masses, who will then apply them willingly. Without the assistance of the masses any such measure taken would be groundless and doomed to failure.

## Methods for Arriving at Norms

The calculation of norms has developed as the management of co-operatives has improved.

In the first, piece-work payment was applied ; norms were calculated from *points* paid for each piece of work, instead of doing things the other way wound, i.e. calculating payments from norms, from

the classification of work and of payment norms[1]. This method is purely formal and has no effect whatsoever upon payments defined independently of work norms.

Towards 1965, a new method called the "experimental" method was introduced. It consisted in working out norms *from memory*, starting with the results obtained in previous harvests. Norms defined by cadres entrusted with this work, or in meetings of officials in charge of the co-operative or of production teams assisted by experienced co-operators, were *approximate estimates* which were so often improvement on old norms obtained by co-op members. Some co-operatives improved this method by using statistics, but results were useless as documents lacked precision, and the norms arrived at were no better, although they were termed "vanguard average norms."

In 1968, 1969 and 1970, the so-called "experimental method co-ordinated with on-the-spot observation" was applied, making it possible to work out 8-hour (actual worktime + rest + time to prepare and finish work) workday norms on the basis of *actual work time* and the volume of *work done*. This was progress but there were still shortcomings.

Bad management reduced the prescribed effective work time from 3 to 4 or 5 hours. The "experimental" method was thus no use as norms were set too low : for instance norms for tilling were only from 2 *sao* to 2.5 *sao* (720 sq.m. to 900 sq.m.) per workday while on-the-spot observations show that they could be raised by from 20 to 50 per cent ; norms for tilling were consequently set at from 2-2.5 *sao* to 3.5-4 *sao* (1,260 sq.m to 1,440 sq.m) and those for transplanting at from 0.6 to 9.9 *sao* (216 to 324 sq.m.). Although norms set through on-the-spot observations are much higher than those obtained in the "experimental" method, they are always calculated on the basis of the latter, with actual worktime maintained at 7 or 8 hours per day, differences between the two norms being very small.

1. which amounts to dividing payment norms by work norms, giving the points to be attributed to each job, payment norms being defined by a classification of work based on the calculation of work norms.



Along with technical modernization the method was improved by "practical tests accompanied by an analysis of factors exerting a direct influence upon the volume of work, namely the improvement of organization and execution of work, the rational use of instruments and of worktime". This revised method is called method of "organized practical tests" based on "relatively well-grounded technical criteria."

However, since the management level of co-operatives is still low, one-cannot "distinguish the trials from the experiments," which are complementary and give mutual confirmation. In other words, for work already proved by experiments but not yet tried out, new norms can be set on the basis of former ones provided they are to be adjusted on the basis of tests, work that comes under these norms must be tested and co-ordinated with experiments for the calculation of norms which will be progressively adjusted through practical experience.

Good organization is called for, and norms already obtained by workers of average qualifications, ability and strength should be used as a base. When, as a result of bad organization of work, so-called vanguard average norms are lower than norms obtained in the same conditions by individual workers, the latter will serve as reference-point. In short, good experiments can and should be used in working out the preliminary norms that will be confirmed and adjusted in subsequent tests.

Trials are recorded [1], they are carried out in a well-organized way for two or three days by a group of 3 or 4 co-op members who have maintained average norms for several successive years depending on the importance of the work. In the course of trials, there will be an analysis of factors exerting a direct influence upon the work, with a view to making initial improvements in the organization of work, the use of draught animals and tools and equipment, work time and methods, while improving performance. For certain jobs movements should be measured with a chronometer.

The trial involves the observation and analysis of the process of work on the one hand, and of the structure of work time on the other.

The *work process* is the sum of movements done by a worker or group of workers [2]. A good observation (with analysis) of the methods of work, of the array of implements, of the movements of execution will make it possible to discover weaknesses and highlight strong points, finally to raise labour productivity.

1. Here is a sample of a test :
— Date of trial : . . . . . .
— Place of trial : field No . . . .
— Quality of soil : clayey or sandy. . . . .
— Category of work : tilling of replanting . . . .
— Instruments used : primitive or modernized . . . .
— State of draught animal : draught capacity : A, B or C.
— Technique used : deep tilling . . .
— Workers doing the trial : A, B, C . . .
— Officials responsible for the trial : an official of the co-operative
— Weather : sunny, rainy . . . .
— Length of transportation : in kilometers
— Duration of the trial : in workdays
— Results : norms obtained by the worker
— Trial participants : cadre in charge.
(sign.) (sign.)

2. For instance, transplanting includes a number of movements made in succession : pulling the seedling out of the bunch, carrying the seedling to the field from the bunch ; the transplanting proper. Each movement, in its turn, can be divided into smaller movements : to pull up seedlings, first they must be taken out of the soil, then weeded, then bundled into tufts' to carry seedlings to the field, tufts must be put on a shoulder pole or a hand-cart, then carried to the field where they are distributed to transplanters ; to transplant one must hold the tuft of seedlings, then take saplings out of the tufts and drive them into mud.



Rational use of work time leads to maximum results in a workday and is of paramount importance. Observaiion and analysis of the structure of this time — divided into *necessary work time* (or time for the realization of the work) and *wasted work time,* constitutes an imperative requirement.

The *necessary work time* is subdivided into :

— *Principal time* (or work time) : time spent on getting the main work. It is central to how each norm is defined : labour productivity is directly proportional to the duration of necessary work time, and *vice versa.*

— *Supplementary time :* time necessary for the work process, defined by the characteristics of the work and repeated several times during the principal time ; for instance, the time taken to turn draught animals at the end of each furrow is in inverse ratio to the principal work time and to productivity.

— *Service time* : spent on the maintenance or preparation of instruments. This time, mainly spent at the beginning and the end of the work process, depends upon the state of instruments, organization and the style of work... As it is reduced, the principal work time will be increased, and *vice versa.*

— *Necessary rest time :* time allowed during the work, whose duration varies with the state of the work.

— *Wasted work time,* or time spent uselessly, should not be included into the calculation of norms.

It is generated by bad organization of work, the workers' lack of responsibility and discipline, etc.

A synthetical analysis of work time, done at the end of the trial, will make it possible to reduce useless time to the utmost and to increase the principal work time: a rational structure of work time for each activity and an efficient use of time will be obtained.

At the end of the trial, individual results are added up and their average will provide the basis for the calculation of average norms and their higher or lower variants.

In some co-operatives, the members of the Norms Commission or one of the officials in charge of the co-operative (in this case the vice-chairman of the co-operative) themselves do the work on trial at the end of the trial so as to compare their own results with those obtained through the trial.

Co-ordination between experiments and trials is essential to define representative norms, since the trial always constitutes the main link without which no improvement of methods and style of work, and no development of labour capacity is conceivable in these efforts to increase productivity.

The method now in use is already based on technical grounds: it opens the way to another method which is directly based upon techno-economic norms brought about by technical renovation.

With the application of "on-the-spot trials" better based norms have been worked out which are much higher than the previous ones: by replacing the old transplanting method (by group of several persons) with the new one (rows of two persons or even patches), norms are raised by 50 per cent, sometimes by 100 per cent in many co-operatives, and other norms are raised by from 20 to 50 per cent... These encouraging results testify to the high quality of



the new method which answers to the present management level of co-operatives and is conducive to noticeably raising productivity.

To sum up, work norms are arrived at in three stages:

1. Classification of work trial sessions.
2. Calculation of norms on the basis of the results of these trials.
3. Approval by co-op members.

*Work norms in practice*

Application of norms is governed by the following principles: "To each job a norm" and "Different norms for different conditions in production and for different jobs."

**Crop-Growing**

Food production is an imperative and urgent task, the calculation of work norms in this branch is influenced by rice monoculture still dominating in this branch.

As the jobs involved in crop-growing are of a great variety and conditions of production differ from one job to another, it is necessary when working out norms to take different concrete conditions into account: non-differentiated norms would lead people to choose lighter and easier work instead of heavy and complex ones.

Concretely speaking, here is how things are done:

*Tilling:*

— Classify various categories of buffaloes or oxen, ploughs, soils, tillings,...

— Define criteria for tilling: depth of the furrows, regularity of clods.

— On the basis of experiments, calculate norms for first tilling in ricefields occupying the biggest percentage of arable lands (representative or indi-

cative norms), then in other kinds of ricefields (with differentiation in norms). For instance, norm for first tilling including pick work in the corners, on light clayey soil (i.e., the majority of ricefields), with grade buffaloes and modernized ploughs, is 4 *sao* (1,440 sq.m.) per 8 hour workday for a worker of average ability, qualification and strength.

Once preparatory work is over, three-day trials are made by three active co-op members of average qualification.

The following results are obtained:

1st day: 1 *mau* 2.2 *sao* (4,392 sq.m.)

2nd day: 1 *mau* 2 *sao* (4,320 sq.m.)

3rd day: 1 *mau* 1.8 *sao* (4,248 sq.m.)

Average norm per day work for one man:

$$\frac{3 \text{ mau } 6 \text{ sao } (12{,}960 \text{ sq.m})}{9 \text{ work-days}} = 0 \text{ mau } 4 \text{ sao } (1{,}440 \text{ sq.m.}) \text{ per workday/man.}$$

Thus norms for this kind of tilling can be fixed at 4 *sao*, the first calculation or at 4 *sao* 05 or (1,458 sq.m.), a little higher than the average norms or a little lower than the highest norms produced during the trials.

*Harrowing*

Up to now harrowing has been done collectively by groups of 5 or 6 persons, with buffaloes of greater draught force preceding weaker ones, and subsequent harrowings are progressively less heavy. Norms have been calculated on the basis of the average draught force of the buffaloes. Norms can thus be assigned to each category of buffalo working separately or in groups in accordance with this draught capacity and decreasing norms can be assigned for each harrowing.

*Transplanting*

Norms are defined by the quality of the mud and the level of water in the ricefields, which transplanting technique is to be used, and the qualification of the women transplanters. Ricefields should be classified and technical norms for transplanting in each of the ricefields should be defined (number of rice seedlings in each tuft, number of tufts per square metre, transplanting in straight lines, deep transplanting, etc.): 2 *sao* (720 sq.m.) per workday for one woman transplanter who transplants in small tufts in an average depth of water in ricefields with heavy and muddy soil.



*Pulling seedlings*

Instead of norms calculated by number of tufts regardless of size, norms are now worked out on the basis of the classification of seedlings (flooded or dry seedling area; early, normal or late seedlings), and by area unit (per *sao*, or 360 sq.m.).

*Transportation of fertilizers* (animal manure included).

Norms are defined by the distance covered (quality of roads, length of transportation), the means of transportation, the categories of fertilizers, the manuring technique (spraying or digging in) used for each category of plants (rice or subsidiary crops) and in period of cultivation (after tilling or after transplanting).

*Harvesting*

The following criteria are the basis of calculations: implements used, bundling (size of tufts), quality of rice, quality of ricefields.

Some co-operatives also include the transportation of paddy.

Besides norms for each separate job, there are also norms for combined jobs: for instance sowing of maize and first manuring, preparation of beds and planting out of sweet potato plants...

(In the appendix a concrete example of crop norms worked out can be found).

*Animal husbandry*

The nature of this activity differs entirely from crop growing. From one co-operative to another, the size and composition of the herd, the material and technical basis for animal husbandry, the qualifications of the personnel, the organization and management of animal husbandry, etc., vary.

The working out of norms should take account of these characteristics, specific conditions of production in this branch, and specific technical requirements for breeding each species of animal (pig, milch cow, poultry).

This work varies with the size of the herd, and in practice two distinct methods are resorted to:

*General method:*

This is applied to small herds whose maintenance is dependent on various jobs that can (and must) be done by ore person in an 8-hour workday: production and preparation of feed for animals, care and upkeep of pigsty (or stable); and including preparation of fertilizers.

This method is suitable for the breeding of from 50 to 100 pigs (10-15 per cent of them breeding sows) looked after by two or three people.

Productivity is rather low, but this method is well-suited to the present conditions of animal husbandry in most co-operatives.

*Method of proceeding "by category of specialized work."* This method is applied to herds of several hundred (even one thousand) pigs tended by specialized groups:

— one group in charge of growing water plants used as feed for pigs: norms here are similar to those for crop growing.

— one group in charge of the preparation (including the cooking) of pig feed: norms are fixed for each category of fodder.



— one group in charge of caring for the pigs: norms are fixed for each member of the group, who has to tend a certain number of pigs (this number varies with the category of pig) and to do a number of specific jobs such as: feeding the pigs, seeing to their hygienic conditions (and health); keeping pigsty in good condition...

— one group in charge of removing and preparing manure: for instance 6 quintals per day/person removal and 10 quintals preparation.

This method based on technical norms marks progress in management and a clear rise in productivity (from 20 to 25 per cent compared with the general method).

**Subsidiary Handicraft Occupations**

This activity is of an industrial character and is therefore almost unaffected by climatic changes; it is carried in production conditions very different from those in crop growing and animal husbandry.

Work norms are fixed as the *quantity of products* either finished or semi-finished (according to well-defined technical specifications) which a worker must turn out in an 8-hour workday.

To ensure more precision in working out norms, "on-the-spot trials" method has been introduced, these trials being based on the study of experience drawn from handicraft co-operatives uroper or from individual handicraftsmen.

Practice has shown that this is not only techno-economic, but ideological and political work as well.

In the course of discussions in general assemblies, disagreements or misunderstandings crop up between co-op members concerning the relative importance of various activities of the co-operative: which — of agricultural activities and handicraft professions —

are the most important, most difficult and most arduous.

The role of each activity in the co-operative must be correctly defined.

Handicraft professions supply everyday consumer goods, make rational use of the labour force (especcially when arable land is scarce and demographic growth is high) and raises the co-op members' income (to make up for low crop yields: consequently their development is vital. Moreover, the price of an 8-hour workday in handicrafts is much higher than that of an agricultural workday (sometimes twice as much).

However, priority should be given to crops and to animal husbandry, priority regarding manpower, work implements and capital, and subsidiary handicrafts should first of all ensure the production of primitive and modernized implements, means of transport and building materials, especially when the system of unified management requires that the functioning of handicraft professions be subordinated to that of agricultural activities.

A clear distinction should therefore be made between the conditinos of production and the techniques used in agricultural activities on the one hand, and in handicraft professions (and between different profession) on the other. The calculation of work norms in handicraft professions can be done only when it has already been done correctly for agricultural work, thus providing a sound basis for comparison and making it possible to establish a rational relationship between these two sectors.

### Adjustment of Work Norms

Whether norms are good or not has to be checked in their application; if the majority of workers fulfil them while some workers go beyond the norms and



a minority fall below, norms are correct and rational; if almost all the workers either fulfill or do not fulfill the norms they are either two high or too low. Adjustments have to be made, taking into account changes in conditions of production and technique: for instance, for the pulling of seedlings norms should be lowered in times of drought for this makes the work much more arduous, or where a new transplanting technique is aplied, for this makes an increase of previously set norms possible.

As application of norms is directly related to the protection of the co-op members' interests and the raising of labour productivity, "any modification have to be decided by the general assembly of co-operative members (or their delegates), leaders of the co-operative or of production brigades only have the right to amend norms already approved by co-op members each for a growing period or to suit the conditions of each brigade" (directive of the Central Committee for agricultural management), provided these amendments are approved later by the general assembly of co-op members. Overfulfilment of norms resulting from individual efforts which improve the execution of work or the use of time should be rewarded, but should not be taken as the sole basis for raising norms.

### Manipulation of Work Norms

Once work norms are set, their manipulation is of great importance.

Up to now, work norms have been calculated in "payment points." For instance: 4 points for tilling a *sao* (360 sq.m.) or 6 points for transplanting a *sao*. But this means that no distinction is made between the following two notions: time norms for instance for tilling, are constituted by the worktime necessary to till a given area; as for payment points they are obtained by dividing payment norms by the

tilling norms for one workday, these points being the expression not of time and amount of work but of payment for a work unit.

Concentrating on the question of payment of work norms, that is being more interested in payment than in the work it implies, is the result of bab management of co-operatives, where all activity is motivated by one thing: *earning points*. Co-operative members think only of payments, officials in charge of the co-operative and production brigades consider payments solely as incentives and consequently increase payment groundlessly. As a result the total number of workdays may be much higher than piece workdays and solar days and the value of a workday may decrease considerably: often the total number of workdays is from 30 to 40 per cent higher than these fixed in the "three-point contract," and the yearly average of workdays of a co-operative member is 300 or 400, as against the prescribed minimum of 200.

Good management requires that payment for work done be fixed and adjusted according to work and payment norms, in the same way that the calculation of investments is done in terms of workdays for each period of production and each area unit, with a view to determining the total need of work force and adjusting it on the basis of existing potential, and therefrom setting the date of completion of the work... Careful preparing of work norms enables officials in charge of the co-operative and production brigades to discover shortcomings in the organization of work.

Good use of norms stimulates work zeal, generates better organization of work, and rationalizes the work process. This leads to a reduction in damage and waste, a heightening of discipline and, first and foremost, to strict adherence to the 8-hour workday rule.



Shortcomings in management, the most serious being a generalized reduction of the length of the workday (4 to 5 hours instead of the regulation 8 hours) and a decrease in labour efficiency must be traced to many causes, among them bad management and bad use of norms.

Calculating work norms is a task of major importance, and is the business not only of co-operatives, but also of specialized departments of the State.

In the present state of co-operative management, the work norm system is not entirely efficient. Improvements must be made: perfecting its method, training specialized cadres (for the co-operatives' Norm Commission), creation of specialized departments, supply means of supervision (mainly statistical equipment), working out regulations (in particular model formulae of unified norms for each district, each region...), strengthening of ideological and political work, improvement of techno-economic management of co-operatives, etc.

## Classification of Work and Working out Payment Norms

Each agricultural job has its own characteristics, and must be paid for in conformity with the quantity and quality of the work force spent during a given space of time by a worker. In other words, this worker should be paid according to the results of his work, measured by the quantity of products obtained from him.

All payment of work, calculated in cash, in workdays, or else as a certain number of points, should be made on the basis of a classification of work and the amount of necessary work force spent, which quantity varies from one job to another.

Each work-scale has corresponding given payment norms.

*Classification* consists in grouping work that requires a similar amount of labour spent on it in the same bracket and consequently in preparing a unified payment norm for each work-scale. It operates in co-ordination with the preparation of work norms — work-scales remain unchanged while norms vary — and in its turn determines the calculation of payment norms: any classification of work without work norms is an indication of egalitarianism, an incorrect classification of work (even with correct and detailed work norms) would result in incorrect payment norms.

Prior evaluation of the quantity of the work force spent on each job is necessary, as is the definition of the main general characteristics and the condition for all categories of work, for a necessary analysis and synthesis:

— *Heavy work* is work measured by how much muscular force is spent in a given space of time. As work is still done mainly with primitive instruments, the *heavy* (or *light*) character constitutes the main critirium: the work-scale assigned to a job, and consequently to its payment, depends upon it in this way.

— *Complexity of work* indicates the degree of qualification, experience and skill of the worker, as well as the technical nature of the work and the implements used: choice, selection and treatment of seeds, grafting of plants, breeding of animals, artificial insemination, spawning of fish, driving or repairing agricultural machines. Since the degree of technicality has a direct and decisive effect on the yields in cultivation and animal husbandry as well as on labour productivity, a technically complex job should be classified on a higher work-scale. The more complex work becomes the more this character grows in importance.



— *Importance* of the work: is a question of the responsibility of the worker even if his work does not often require high qualification or any considerable spending of muscular force: like maintenance of work implements, storing of agricultural products... Of two equally heavy or complex works, the most *important* one is classified on the higher scale.

As regards the *conditions* the work is to be done in, they are defined mainly by the state of the location and the weather: hot, humid or rainy weather; icy water: poisonous air, absence of light or ventilation...; factors exerting a harmful effect on the worker's health (pounding insecticide, disinfecting seeds, maintenance of kilns, baking bricks, cleaning pigsty drains...)

Working out the labour force needed, as a basis for the classification of work, is a very difficult process depending as it does on technical criteria and implying an improvement of co-operative management, the existence of scientific means of investigation, and co-operation between various branches and specialized departments.

As a result of the low scientific and technical level, one of two methods of classification is used depending on the managerial level of the co-operative:

*Analytical method*

Each of the three above-mentioned categories may have a different number of *points* which are *coefficients* used to calculate payment norms.

This method is based on technical criteria and requires that a definite number of scales for each category be established first.

There are five scales of *heaviness* and *complexity*, and four of *importance*.

— 1 point for the 1st scale ;

— 2 points for the 2nd scale ; and so on.

For instance, heavy or light work is classified as follows :

| | |
|---|---|
| — very light work | 1 point |
| — ordinary (light) work | 2 points |
| — comparatively heavy work | 3 points |
| — heavy work | 4 points |
| — very heavy work | 5 points |

COMPOSITE TABLE OF CATEGORIES

| Category and conditions of work | Scales | | | | |
|---|---|---|---|---|---|
| | I | II | III | IV | V |
| Heaviness | 1 | 2 | 3 | 4 | 5 +... |
| Complexity | 1 | 2 | 3 | 4 | 5 +... |
| Importance | 1 | 2 | 3 | 4 +.. | ..... |
| Conditions | 1 | 2 | 3 | 4 +.. | .... |
| Number of points | 4 | 8 | 12 | 16 | 18 |

This table gives a minimum of 4 points for some work and a maximum of 18 points, all depending on effort spent.

On the basis of the classification of category, work is classified thus :



*Classification of work*

| Category of work | Heavines | | | | | Complexity | | | | | Importance | | | | Conditions | | | | Composite point |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | I | II | III | IV | V | I | II | III | IV | I | II | III | IV | |
| 1. . . . . | 1 | | | | | 1 | | | | | 1 | | | | 1 | | | | 4 |
| 8. . . . . | 1 | | | | | 1 | | | | | 1 | | | | 1 | | | | 4 |
| 1. . . . . | | 2 | | | | 1 | | | | | 1 | | | | 1 | | | | 5 |
| 12. . . . . | | 2 | | | | 1 | | | | | 1 | | | | 1 | | | | 5 |
| 1. . . . . | | 2 | | | | | 2 | | | | 1 | | | | 1 | | | | 6 |
| 40. . . . . | | 2 | | | | | 2 | | | | 1 | | | | 1 | | | | 6 |
| 1. . . . . | | | 3 | | | | 2 | | | | 1 | | | | 1 | | | | 7 |
| 30. . . . . | | | 3 | | | | 2 | | | | 1 | | | | 1 | | | | 7 |
| 1. . . . . | | | | 4 | | | 2 | | | | 1 | | | | 1 | | | | 8 |
| 16. . . . . | | | 3 | | | | 2 | | | | 1 | | | | | 2 | | | 8 |
| 1. . . . . | | | 3 | | | | 2 | | | | 1 | | | | | | 3 | | 9 |
| 8. . . . . | | 2 | | | | | 2 | | | | 1 | | | | | | | 4 | 9 |

After points are assigned for each categorisation a *composite point* is obtained, which is the sum of the points given for all the different aspects of a job, reflecting the total amount of labour necessary for the realization of norms fixed for a clearly defined piece of work.

It remains to group in the same scale all the work with about the same *composite points*, that is, requiring a similar amount of labour to be spent. For instance, taking the above table as our basis

| | | | | | |
|---|---|---|---|---|---|
| 8 | jobs with | 4 | composite points | : scale | I |
| 12 | » | 5 | » | : | II |
| 40 | » | 6 | » | : | III |
| 30 | » | 7 | » | : | IV |
| 16 | » | 8 | » | : | V |
| 8 | » | 9 | » | : | VI |

For co-operatives where activities are very varied or technical modernization is well advanced the composite points may be well above '9' and the number of scales will be much bigger: some scales are grouped so as to facilitate the application.

*Synthetical comparative method*

This method is simpler than the first and has been adopted by the majority of co-operatives. It consists first in listing all jobs and the nature of them, then in making a synthetical comparison of the nature of the various jobs, and finally in grouping all work with the same character in the same scale, that is work requiring a same amount of labour spent on it.

The heaviest and most complex work are classified in the highest scales. Conversely, similar jobs done in different conditions of production and with different techniques, requiring a very different amount of labour spent on it, should be classified in different scales depending on each case.



In practice, jobs with similar characters, i.e., main agricultural jobs done in normal regional conditions, are usually classified mainly into scales so as to serve as points of reference for the remaining jobs:

| Scale | Work |
|---|---|
| I | Sowing maize, drying paddy |
| II | Weeding, pulling of dry seedlings... |
| III | Ploughing or harrowing on light soil, manual irrigation |
| IV | Ploughing or harrowing on semi-heavy soil, normal harvesting |
| V | Ploughing or harrowing on heavy soil, harvesting in very hot weather, transplanting in very cold weather |
| VI | Preparing manure; pounding insecticides. |

Whatever method is used, the main problem is to arrive at a rational and appropriate classification which the broad masses approve of. In same co-operatives the two methods are applied concurrently: the first one for officials in charge of leadership work, and the second one for the co-operative members' work.

With the current diversification of agricultural activities and technical modernization and mechanization in particular a new category of workers has emerged in the co-operatives: crop techniciens, water conservancy and animal husbandry technicians, skilled workers, co-op members specialized in various handicraft professions. Classification must therefore be based, not only on the amount of labour spent but also on the qualification of the workers: work can be classified either according to each specialization, or grouped and classified in already well defined scales (especially for agricultural work). In some professions (for instance production of bricks or lime). Certain jobs are selected and

classified in different scales already established for agricultural work: and work that require some technical ability are classified in other suitable scales.

Specialized workers classified according to their qualifications receive both normal payments and allowances calculated according to their qualification and the technical characteristics of their specialization (allowances for social security, climate, night work, travel, work time, etc...).

How many scales there are depend upon the scope of activities and more particularly upon the managerial and technical level of each co-operative. So long as rice monoculture and handicrafts dominate work in co-operatives, classification is generally limited to 5 or 6 scales, and for areas of market gardening, subsidiary crops or industrial crops, and for co-operatives with very varied activities or with large-scale mechanization, 7 to 10 scales, excluding special ones.

**Working Out Payment Norms**

This is the last stage of a three-stage calculation coming after the calculation of work norms and classification of work.

Two methods are in use:

*Method No. 1.*

On the basis of the number of scales already established, the lowest scales is assigned for instance 7 points. For scales assigned less than ten points, the difference will be from 1 to 2 points, and 2 points for those with more than 10 points, the number of points assigned to the highest scale will not be greater than 18 points (and especially not for handicraf work), i.e., 2.5 times higher than the lowest scale.



*Method No. 2*

Payment of 10 points is given for a workday spent on number of jobs of average category. This serves as a *reference* scale, and the other scales are worked out on the basis of this.

Let us take an example from the above table, scale III with "6" *composite points* (or 6 units of labour spent), and a payment norm of 10 points. The points awarded for each unit of labour spent are thus $\frac{10}{6} = 1.66$. This is taken as a calculation coefficient for other scales, whose payment norms (in round figures) will be:

— scale I : $1.66 \times 4 = 6.5$ points

— scale II : $1.66 \times 5 = 8.0$ points.

and so on.

Just as for work norms, the classification of work and working out of payment norms is done in three stages, the most important being the approval by the general assembly of co-operative members.

# APPENDIX

## EXAMPLE OF THE QUANG BA MARKET-GARDENING CO-OPERATIVE
(Hanoi suburban area)

The co-operative has divided its fields into 8 zones, and defined the system of production for each zone:

— *Banks of the Red River: 6 zones:*

— Zones 3, 4 and 5 with medium soil: green cabbage, caulifluwer and Kohlrabi.

— Zones 3, 4 and 5 with medium soil: tomato and bean.

— *Areas between river dykes:*

Zone 7: spinach;

Zone 8: water plants for pig feed.

Strict observation of the growing schedules is vital in market-gardening, and calculating work norms constitutes the key to the realization of production plans.

The following principles are applied: "To each job its norms," and "To different conditions of production and to different jobs, different norms".

The production process is first listed in various categories: preparation of the soil, sowing, care of growing plants, harvesting.

Each category is then divided into various jobs.



— *preparation of soil.*

— *sowing.*

— *care of growing plants.*

— *harvesting.*

Each job is finally classified:

— *tilling.*

— *cutting.*

— *picking.*

— *pulling up.*

On the basis of this classification, work norms are prepared according to:

— *the work implements;*

— *the draught animals;*

— *the soil;*

— *the work;*

— *the distance to be travelled.*

Harvest norms are set according to the quality of the vegetables or the picking operation:

— Spinach of good or average quality:

90 kilograms for category I.

60 kilograms for category II.

40 kilograms for category III.

*Picking tomato:*

Early tomatoes: 25 kilograms for the first two pickings; 50 kilograms for the third picking; 30 kilograms for the fourth picking; 25 kilograms for the last picking.

For some work, technical criteria are indispensable:

— Breaking up clods:

+ 1st time: regular fist-size crumbs, on clay soil: 0.4 *sao* (144 sq.m.)

+ 2nd time: regular thumb-size bits (on the same soil): 0.7 sao (252 sq.m.)

+ 3rd time: crumbs (on the same soil) 1 *sao* (360 sq. m.).

In the course of the work, prompt adjustments are made of norms found too high. For instance, for cabbage cutting.

— 1st quality cabbage: initial norms, 400 kilograms; adjusted norms, 300 kilograms.

On the basis of the norms, the co-operative will classify work according to the following criteria:

— *Labour spent:* this criterion is basic, as most work is still done manually and in a handicraft manner and the strict growing schedules require great intensify of work.

— Category I: weeding the cabbage fields; picking beans, pulling up young plants.

— Category II: preparation of beds...

— Category III: ploughing, harrowing, transportation of manure...

— *Technical requirements:* market-gardening needs meticulous and appropriate care, for it has a great influence on the quality of products:

— Category I: breaking up clods, pulling up onions and carrots.

— Category II: weeding; picking aubergines, tomatees, beans; pulling up turnips, potatoes; ploughing, harrowing, preparation of beds; watering, manuring. These works are very different but very regular and occupy the bulk of the work time in the season.

— Category III: spraying nitrogenous or liquid fertilizers, preparation of beds for the sowing of "noble" varieties of vegetables (asparagus, carrots).

— *The importance of work* is determined by the characteristics of market-gardening and by growing traditions in the area:



— Category I: picking aubergines, pulling up onions, kohlrabi... jobs whose timing has little influence upon production.

— Category II: watering, manuring, pounding of insecticides, transporting vegetables; these jobs have to be done very quickly have a direct influence on the quality of cultivation.

All these jobs are classified in 5 scales:

Scale I: 3 jobs (4 composite points; 8 payment points) weeding cabbage, aubergine and gourd fields; pulling up bulb onions, carrots...

Scale II: 10 jobs (5 composite points, 9 payment points) weeding carrot, turnip, and celery fields; picking aubergines, tomatoes, beans; breaking up clods, etc.

Scale III: 13 jobs (6 composite points; 10 payment points) pulling up turnips and stalk onions; cutting cauliflowers, green cabbages, kohlrabi; ploughing; preparation of beds; sowing, packing grains; bundling spinach; spraying nitrogenous fertilizers; pick work in ricefield corners, etc...

Scale IV: 5 jobs (7 composite points; 11 payment points): harrowing; watering (with watering-cans); pounding insecticides; manuring (with pigsty manure) etc.

Scale V: 4 jobs (8 composite points; 12 payment points, transportation: watering (by spraying) etc.

Only when the calculation of work norms and the classification of work are complete can the co-operative present the clauses of the "three-point contract" to the production brigades.

The most important clause concerns *production* and crop *schedules*.

For instance, for *green cabbage:*

— early cabbage: 900 kilograms per *sao* (360 sq.m.) cut before December 9.

— in-season cabbage: 1,200 kilograms per *sao* (360 sq.m.) cut before January 10.

Strict observance of the dates for cutting cabbage will free fields in time for growing gourd and taro; picking spinach in time will make possible to grow a new crop of kohlrabi, tomatoes and beans, etc.

Strict execution of this clause will make it possible to have from 5 to 7 annual harvests.

Production is fixed in accordance with the quality of soil, crop schedules and the varieties of crops grown:

— *Spinach:* 580 kilograms per *sao* (360 sq. m.) on fertile soils; 400 kilograms per *sao* on soils of average quality; 300 kilograms per *sao* on poor soils.

— *Kohlrabi*: 650 kilograms per *sao* for early harvests, and 700 kilograms per *sao* for in-season harvests.

With increasing technical modernization, the co-operative is able to calculate work norms better mainly thanks to improvements in the organization of work, and of statistical work; working out calculation coefficients for various classifications; strengthening work discipline (strict observation of the regulation on an 8-hour workday); strict application of rules pertaining not only to the calculation but also to the manipulation and use of work norms.

## PAYMENT OF CO-OP MEMBERS' WORK

This is a very difficult and complex matter, especially in Northern Vietnam, where co-operation in agriculture is carried out on the basis of scattered small-scale production.

At the beginning the system of a fixed daily payment was applied irrespective of the work done. This system is simple and is easily administered; but it has an egalitarian character and does not encourage co-op members' enthusiasm for work, their desire to improve their qualifications or their technical and cultural level.

As the co-operatives are further consolidated, management and techniques improved, making intensive production possible, piece-work payment has replaced payment at a fixed daily rate. This system of payment is based on the quality and amount of work done, concretizinz the principle "to each according to his work." However, although this form of payment is progressive, fair and rational, it cannot be applied until there are fixed norms for work, for payment for each job, and a fixed classification of work.

There are often urgend and unexpected jobs to be done, for example gathering in crops threatened by typhoons or floods, or saving rice from being submerged: in such cases a special system of payment is applied, the system of *piece-work payment with progressive rewards*. The more the norms are exceeded, the higher the payment: for example, if

a co-op member outstrips the fixed norms by 20 per cent, payment for those extra 20 per cent will be 10 per cent higher than normal rate of payment, but if he or she outstrips the norm by another 30 per cent (that is 50 per cent altogether), payment for the last 30 per cent outstripped will be 20 per cent higher ; and so on...

Piece-rate payment is applied both to the worker for each piece of work that can be done individually, and to the group for work requiring the co-operation of several workers. Workers are paid according to the quality and amount of work done.

Unlike state farms which have funds to pay wages with allocated through their budget, the agricultural co-operative, which is based on collective property, has only its own income with which to pay its members ; and this cannot be calculated until the end of the year. There are thus no fixed wages, and the co-operative uses a different unit to measure the quality and amount of the work done by its members : the *work day*.

The *workday* is not a form of value and in no way plays the role of money ; nor is it a unit of measure of the value of the products. It is used only to measure the contribution in terms of labour made by a co-op member, providing the basis on which to calculate income in kind and in cash which the co-operative has to pay its members.

As matters stand now in the co-operatives, the workday is the most appropriate and most easily applicable unit of payment. As production increases as a result of improved management, modern techniques and the building of a new material and technical basis for agriculture, the activities of the co-operative and its income will increase accordingly. Then payment on the basis of workdays will be replaced by wages.



## Method of Payment

To ensure fair and accurate calculation these conditions should be fulfilled : the co-op members' political and ideological consciousness must be raised ; techno-economic norms and tehnical work norms should be fixed, and the different jobs in the co-operative should be classified. This is possible only on the basis of modernizing techniques, improving management, and raising the management, technical and cultural level of the co-operative leadership.

Many different ways of calculating payment have been tried, the following being the main ones :

### Fixed Payment for a Workday

This method was used during the first years of co-operation : all the co-op members received a payment of *10 work-points* after a work-day (theoretically 8 hours, whatever work was done).

### Fixed Payment for Each Category of Worker

The labour force was classified into many categories : strong worker, auxiliary worker, qualified worker, unqualified worker... A fixed numbers of *work-points* for a work-day was ascribed to each category, and points deducted when the total 8 hours were not worked.

This was a step forward, for this method of calculation made a clear-cut difference between working capacity and working time. However it did not take into account the actual results of work by each category of worker after a certain period of work. Thus a strong worker doing light work was better paid than an auxiliary worker doing heavy work. This system of payment has been replaced by another.

**Fixed Payment for Work Appraised After Completion**

A certain number of points for a workday for each category of worker was fixed *beforehand*, and it was up to the workers doing the same job together to appraise the results of the work each of them did. On the basis of this, they ascribe a certain number of points as the other half of the workday points fixed beforehand.

This method of payment makes for enthusiasm among the co-op members and heightens their sense of workdiscipline. It represents *progress* as long as the workers do not fix worknorms and classify the different kinds of work; but this system makes no difference between the characteristics of the various kinds of work and does not take into account the disparity between the different amounts of labour spent.

**Payment According to the Work Done**

This system is based on the characteristics, not of the worker, but of the work done: the greater the amount of work done, the more difficult and painstaking the work; the higher the qualifications it requires, the greater the number of points it will be awarded, whatever category the worker may belong to. This method of calculation requires both that *there be fixed worknorms* and that the *different kinds of work be classified.*

The production brigade divides the tasks among the co-op members on the basis of these norms and workcategories. For example: if the job in hand is Category IV work (12 points per day) and the work norm is 3 *sao* (0.1080 ha) per day per average worker, the production brigade assigns 6 *mau* (2,1600 ha) to 4 workers to be done in 5 days, for a total of 240 *points*. There are thus three clauses in the contract: regarding the quality and amount of work; the time



required; the number of points to be awarded. If the quality of the work is not up to specifications, the contractors either have to do the work again or are penalized: the brigade keeps back a certain number of points to pay other workers who do the tilling anew. If the workers do not receive all the 240 time-limit, the workers do not receive all the 240 points stipulated in the contract.

As it is aimed at making the best use of the whole labour force and increasing productivity, this form of payment can be applied either to the co-op member individually for small jobs, or to the group for work requiring the co-operation of many workers.

Compared with the previous methods of calculation, *payment according to the work done* is more rational. The workers are paid according to the quality and amount of work they do. Still, this method of calculation does not take into account the actual results of the work and does not encourage workers to take any further interest in the results of their work, and do the tasks assigned to them well.

Material incentives combined with political and ideological education lead to an improvement on *payment according to the work done* by a vanguard form of payment: this new system is 'the three-point contract' with rewards and penalties, which will be elaborately dealt with (page 133)

**Paying the Co-operative and Production Brigade Leaders**

— *chairman:* 70 per cent, *deputy-chairman* and chief-accountant: 65 per cent of the highest number of workdays of the best co-op member;

— *head of production brigade* : 25 per cent and *deputy-head of production brigade* : 15 per cent of the highest number of workdays of any brigade member.

These allowances aim, on the one hand, at ensuring the leading cadres adequate means of subsistence and on the other, at interesting them more in the balance-sheet of the co-operative, so that they are able to fully devote themselves to their tasks.

In order to fulfil their tasks of leadership well, the leading cadres of the co-operative as well as of the brigades, must take part in production: the chairman is therefore obliged to work 30 per cent, and the deputy-chairman and chief-accountant 35 per cent of the highest number of workdays of the best worker in the co-operative, plus maximum 15 supplementary days compared with the fixed norm. As for the heads and deputy-heads of production brigades, they must supply 75 per cent and 85 per cent respectively of the highest number of workdays of the brigade, and maximum 20 workdays to be outstripped.

In many co-operatives, if the leading cadres do not work all their compulsory workdays, it is the practice to reduce their allowances by the proportion the missing days represent of their obligations. To avoid misuse of material incentives, allowances of all kinds have been limited to 1 per cent of the total remunerable workdays.

The other members of the management committee, the members of the commission for control and checking, the technical leaders etc., receive allowances according to the work done.

## THE THREE-POINT CONTRACT SYSTEM

*(with rewards and penalties)*

This is the contract that is signed between the production brigade and the co-operative's management committee, and it covers three points :

— the products or production the brigade assumes responsibility for ;
— production costs that may be incurred during the contracted work ;
— the workdays and the points that will be paid to the brigade.

A system of rewards (for overfulfilment) and penalties (for non-fulfilment), to be applied in relation to the standards set in the contract, is appended to the three clauses.

### I. Production

The main clause concerns the production agreed on.

The production plan and the financial means of the co-operative, and the economic and natural conditions of each brigade are the basic points of reference of the management committee in setting production targets that also are within the brigade's long-term (3-5 years) capacity and ability to implement the contract. For its part, the brigade agrees to not only implement the clause but also overfulfil the production targets as far as possible. Rewards or penalties will be awarded accordingly. All

products of all brigades (crops, animals, products of subsidiary occupations) must be delivered to the co-operative, which apportions incomes in accordance with the regulations stipulated by the co-operative's statutes.

There must be *clear* production targets for each branch, each activity, each crop and each animal bred,... *Targets set in terms of the value* of production are not acceptable because this might allow the brigade to alter its actual production in its own interests, and to the detriment of the co-operative.

The production of each branch is easily calculated, because while working out the overall plan of the co-operative, the management committee has already worked out the yield of each crop on each category of land and the number of animals to be reared, and these are the basis for the calculation of what products are to be delivered. Detailed target yields for each category of land worked out on the basis of the fertility and economic and natural conditions of that land, as opposed to the average yield of all categories of land, are indispensable to the plan. For produce whose prices fluctuate and which are difficult to store, one can express the delivery target in value rather than volume.

Beside their being of prime importance in working out a realistic contract, the targets also serve as the basis for the calculation of rewards and penalties.

**Production Costs**

This is an important clause, for expenses are in direct inverse relation to the size of the profit.

Production costs (for seed, fertilizer, insecticide, production materials, fodder for draught animals, work implements, etc.) are calculated on the basis of the techno-economic norms for the use of materials for each production process.



The brigade must apply whatever technical measures available that favour economization, unless it has the authorization of the management committee to incur extra expenses in order to overfulfil the set production targets. In this case, it will be rewarded according to production total only. Conversely, non-observances of production cost limits which leads to non-observance targets may lead to both penalties and fines.

The production cost limits not only are the targets of the contract, but also binding targets: the contracting production brigade is obliged to make all the expenditures indicated, particularly those which have a decisive effect on production like fertilizer, seed, insecticide, fodder for the draught animals.

Due to their importance, working out the norms for production costs consists not in limiting expenses but using what is spent more rationally in order to stimulate and increase production of better quality and more cheaply produced products, while cutting down indirect expenses. To this end, production cost limits must be *balanced* against production targets, if production plans both of the brigade and the co-operative are to be realizable.

It is very often only in the general plan that the balance between the various factors is maintained (production, yield, production costs, which consist mainly of fertilizers and workdays). In practice, when it comes to concretizing the targets, lack of balance is revealed between the yields and the measures aimed at realizing them. Production costs, of which expenditure on fertilizers and fodder for draught animals are still the most important items, are still seriously out of balance with production of both crops and breeding.

Let us take Viet-Trieu co-operative as an example :

| 5th-lunar month crop (spring-summer rice | 1969 | | 1970 | | 1971 | | 1972 | |
|---|---|---|---|---|---|---|---|---|
| | Yield: 100kg/ha | Fertilizer (tons) | Yield: 100kg/ha | Fertilizer (tons) | Yield: 100kg/ha | Fertilizer (tons) | Yield: 100kg/ha | Fertilizer (tons) |
| Figures for 1969-71 | 32 | 15 | 31.34 | 12.10 | 26.21 | 10.8 | — | — |
| 1972 targets | — | — | — | — | — | — | 28.62 | — |
| 1972 plan | — | — | — | — | — | — | 28.62 | 9.45 |
| 1972 plan for brigade under brigade under | — | — | — | — | — | — | 28.62 | 9.45 |
| 1972 crop and fertilizer figures | — | — | — | — | — | — | 22.22 | 6.75 |

These figures show a great difference between the targets and the fulfilment of the 1972 plan. This is even more striking when we consider that the 2.222 tons per hectare yield is made possible by other factors besides the use of 6.75 tons of fertilizer per hectare: for example by the relative fertility of the land due to manuring in previous years; otherwise the 1972 yields would have been lower.

The reduction of fertilizers led automatically to lower yields:

| 5th-lunar-month crop | 1969 | 1970 | 1971 | 1972 |
|---|---|---|---|---|
| Investment in fertilizers for one hectare *(dong)* | 150 | 121 | 108 | 67 |
| Target | 100 | 80.6 | 78.6 | 44.6 |
| Value of production per one hectare *(dong)* | 704 | 689.4 | 576.6 | 488.8 |
| Target | 100 | 97.8 | 81.8 | 69.4 |

The rate of yield increase closely follows that of production costs, if other conditions remain unchanged:

(5th-lunar-month crop — 1972)



| Brigades in Tan Hung co-operative, Ha Bac province | Production costs for one *sao* (360 sq. m.) | | Yields per *sao* (kilos) |
|---|---|---|---|
| | Production costs as percentage of the planned total production value | Production costs per *sao* (in terms of paddy kilos) | |
| 1 | 16 | 13.44 | 59.0 |
| 2 | 17 | 14.28 | 60.5 |
| 3 | 21 | 17.60 | 66.0 |
| 4 | 23 | 19.32 | 68.6 |

Production costs vary according to the economic and natural conditions, the scale, the level of management and intensive cultivation of co-operatives, and relations of production governing them.

| Co-operatives | 10th-lunar-month crop 1970 | | 5th-lunar-month crop 1971 | |
|---|---|---|---|---|
| | Production costs in relation to total production (per cent) | Average yield (100kg/ha) | Production costs in relation to total production (per cent) | Average yields (100kg/ha) |
| 1. *All socialist co-operatives* | 25.94 | 22.86 | 23.84 | 18.90 |
| — Mountain areas | 14.81 | 23.90 | 15.32 | 15.95 |
| — Midlands | 19.88 | 20.84 | 14.97 | 20.60 |
| — Delta | 28.08 | 23.36 | 25.17 | 18.65 |
| 2. *All semi-socialist co-operatives* | 25.89 | 19.87 | 26.20 | 18.71 |
| — Mountain areas | 16.89 | 18.16 | 14.72 | 12.85 |
| — Midlands | 20.80 | 20.77 | 18.81 | 19.00 |
| — Delta | 28.87 | 19.85 | 28.94 | 19.18 |
| 3. *Total* | 25.90 | 20.59 | 24.95 | 18.81 |

| Co-ops | Classification of soil: Total area | Category I | Category II | Category III | Category IV | Category V | Category VI | Yield (100kg/ha) | Production cost in relation to total production (%) |
|---|---|---|---|---|---|---|---|---|---|
| Viet Trieu | 56 *mau* 4 *sao* 100 | 10 *mau* 4 *sao* 18.61 | 10 *mau* 5 *sao* 18.63 | 25 *mau* 7 *sao* 45.47 | 3 *mau* 4 *sao* 6.03 | 1 *mau* 7 *sao* 3.01 | 4 *mau* 6 *sao* 8.25 | 22.2 | 28.50 |
| Toan Thang | 56 *mau* 7 *sao* 100 | 2 *mau* 6 *sao* 4.93 | 9 *mau* 3 *sao* 16.40 | 12 *mau* 4 *sao* 21.86 | 20 *mau* 8 *sao* 36.78 | 6 *mau* 3 *sao* 10.60 | 5 *mau* 3 *sao* 9.43 | 22.1 | 36.04 |

Categories I, II, III : fertile soil
Categories IV, V, VI: less fertile soil
*Mau*: 3,600 sq. metres, *sao*: 360 sq. metres

As the soil is not equally fertile everywhere, the co-operatives working bad land have higher production costs.



Production costs vary according to the importance of each crop and each animal:

**CROPS**

| Crop (Hanoi-Hue-Saigon Co-operative) | Percentage of production costs in relation to the value of the total production of each crop (%) | |
|---|---|---|
| | (a) | (b) |
| 5th-lunar-month rice | 44.00 | 22.90 |
| 10th-lunar-month rice | 28.00 | 15.40 |
| Potato | 68.00 | 42.90 |
| Tomato | 21.86 | 13.58 |
| Aubergine | 54.33 | 18.11 |
| Sweet potato | 33.12 | 16.71 |
| Green bean | 48.86 | 24.44 |

(a) calculated according to collection prices
(b) calculated according to average free-market prices.

Prices directly influence the ratio of production costs to production value. If collection prices are used as the basis of pigsty manure which account for a very high proportion of the production costs, vary from one co-operative to another, whereas the collection prices used as a basis for the calculation of the value of the total production are the same for all co-operatives.

**ANIMAL HUSBANDRY**

| Animal (Viet Trieu Co-operative) | Rate of production costs in relation to the value of the total production (%) |
|---|---|
| 1. Goose for meat | 67.50 |
| Laying goose | 61.58 |
| 2. Drake | 44.41 |
| Duck | 54.50 |
| 3. Porkers | 84.00 |
| Sow | 44.20 |
| 4. Fish | 3.46 |

Thus production costs vary from one co-operative (or one area) to another, and when the orientation of production changes, production costs alter :

| Viet Trieu Co-operative | 1970 | 1971 | 1972 |
|---|---|---|---|
| 1. Value of total production of which : | 100.0 | 100.0 | 100.0 |
| — Crops (%) | 83.2 | 74.62 | 55.1 |
| — Animal Husbandry (%) | 16.1 | 19.36 | 36.7 |
| — Subsidiary occupations (%) | — | 6.02 | 8.2 |
| 2. Percentage of production costs in relation to the value of total production (%) | | | |
| 3. Percentage of production costs in relation to the value of production of each branch (%) | 20,1 | 24,0 | 30,25 |
| — Crops (%) | — | — | 20.00 |
| — Animal Husbandry (%) | — | — | 37.50 |
| — Subsidiary occupations (%) | — | — | 65.20 |

In any one co-operative, production conditions vary from one brigade to another, and production costs vary with the specialization of the brigades :

| Brigades (Viet Trieu Co-operative) | Specialization | Percentage of production costs in relation to the value of the total production of each brigade |
|---|---|---|
| 1 | Food crops (rice) | 34.09 |
| 2 | Food crops (rice) | 36.30 |
| 3 | Food crops (rice) | 36.06 |
| 4 | Food crops (rice) | 36.01 |
| 5 | Market-gardening | 20.40 |
| 6 | Animal husbandry (pigs) | 67.50 |



It seems clear that one cannot arbitrarily fix a uniform rate of production costs for all co-operatives, even for all the brigades in one co-operative. However, there is a common denominator for determining that rate.

The ultimate goal of the system of three-point contract is to encourage steady and all-sided development of production, not at any price but with appropriate production costs. Therefore, in every set of conditions of production, every hectare of land cultivated requires a certain quantity of seed, fertilizer, insecticide, etc., for each crop, each kind of animal requires a definite number of food units daily at every period of growth, for a bumper crop at low cost price, high value for the workday and progression in incomes for both the co-op members and the co-operative. The setting of concrete norms for production costs for each crop and each kind of animal bred is done on the basis of practice in experimental cultivation and breeding.

### Workdays and Work Points

They are calculated on the basis of production targets, work norms and norms of payment set by the plan, in accordance with the need for labour force in various processes of production, and the existing classification of work. These must be clearly defined in the contract for each piece of work : tilling, harrowing, transplanting, weeding and harvesting.

The contracting brigade is in charge of dividing tasks up and using its manpower as best it can while observing the terms of cultivation in order to promote better quality work. Besides, with the permission of the management committee, it can also use a definite number of 'extra-contractual' workdays for unforeseen tasks, particularly the fight against natural calamities. In order to ensure that the number

of work days and work-points stipulated in the contract is not exceeded, the brigade must apply rational organization measures and bring their work implements up to date. Increased production resulting from increased productivity will bring a brigade rewards. If work is wasted, the brigade will bear the cost (in the form of supplementary workdays) and will incur penalties for decrease of production.

Each co-operative includes many different branches, especially when it is able to diversify its activities. Each branch diversifies itself and develops in different natural and economic conditions. The contract must take account of this diversity according to different principles, namely :

— the establishment of production targets must be based on the production plan of the co-operative, on the brigade's capacity to develop production over several years, on the latter's real situation during the current year, and particularly on the techno-economic measures taken ;

— the establishment of production costs and workdays and work points must aim not only at reaching the production targets, but also at saving materials and labour ;

— the targets set in the contract must vary according to the activities and specialization of each brigade.

The three principles, like the three targets — the production targets being the essential link — are interdependent, and we must be careful not to upset the balance of them.

Two things are imperative for success :

— The fulfilment and overfulfilment of the production targets ;

— Saving of materials and time.

Rewards and penalties encourage the contracting brigade to observe these two requirements with a



view to increasing production, achieving better quality and keeping cost price to a minimum.

The working out of this contract is based on the yields of different soils, the norms of expenditure in materials and labour for specific production processes (with detailed quantity and quality) provided for in the plan of the co-operative. The fulfilment of the contract requires that premises be well defined :

— a production and financial plan on the basis of precise norms and techno-economic measures must be worked out, for the contract targets are established on the basis of those of the plan ;

— work norms must be established and work classified as a basis on which norms of expenditure in labour can be defined, which in turn are necessary for the calculation of the workdays and work points to be given to the brigade ;

— stability of the production brigade and the raising of the technical and management level of the leaders of the brigade ; fulfilment of the contract is also based on specific conditions of production ;

— the cadastral survey of the land and classification according to the pedological characteristics, serves as a basis on which to set production and production cost targets ;

— norms for expenditure on materials for each category of production, and regular supplies of materials to the contracting brigade ;

— adequate regulations concerning responsibilities at every level, and rewards and penalties.

These conditions make up the technical bases on which to work out the contract. They are interdependent, and each co-operative must do the work on them carefully, especially the most vital conditions : experience shows that co-operatives which fail to work out proper production plans, set up work norms

and classify work find it difficult to work out a payment scheme.

## Practical Application

Let us see how this three-point contract system is applied to different agricultural branches.

### Crop growing

*Production*

The production target in the plan of each co-operative is a synthetic target which can only be taken as a basis for calculating actual production. The assessment in the contract worked out for each brigade must be *concrete*, that is to say it must based on the real situation with regard to land, the possibilities of investment in materials and the availability of labour.

We must start with the classification of land with regard to area, pedological characteristics, degree of fertility, degree of water control, yields, manuring, etc.

*As far as crop yields* are concerned, we take the average of actual harvests over several years (at least three years). At the same time, to set a realistic target for production in the contract, we base ourselves on an average of the production of the best year, of an average year and a year with natural calamities, with a view to allowing a margin for materials and workdays necessary in the event of drought or submersion. The decisive factor to be considered in the working out of production targets in the contract is the application of the existing norms for technical and scientific measures.

In short, the clause concerning production must be precise and concrete regarding the area and



yields of the land reserved for each crop, each field, each lot, each plot.

Besides, with regard to the land and crops for which production is difficult to define, targets in the contract must be based on concrete and specific conditions of production.

— *land with habitually irregular crops :* only *production cost* and the *workdays* (and work points) are fixed in the contract. Norms for *production* will be the harvests brought in by average brigades in the co-operative working on the same conditions of production.

— *on land where crops have only recently been multiplied* (land which formerly yielded two crops of rice a year, and which now yield three crops ; land where only subsidiary food crops were grown formerly, but which is used now for one-year industrial crops) and the *land newly put under cultivation,* only the *production costs* and *work-days* are counted during the first two or three crops ; production targets will be fixed as of the second and third year, when it has stabilized.

— for *fruit trees* and *industrial crops ;* which took several years to mature and which have great export value, the increase of their production (taken over many successive years) must be based on the crop-growing traditions and experience of each region, on the process of production and adapted cultivation techniques ; production targets stipulated in the contract are established in terms of value (quantity and value of products)

— *Market — garden crop* production is calculated according to the collecting price with "mortgages" on the losses. This can be adjusted in the event of

price fluctuations. The value of losses vary according to the vegetable in question.

*Subsidiary food crop* production is calculated according to area and yield, on the basis of the harvest of an average year, on average plots and the most fertile parts of each field.

*Production costs*

One takes brigade production targets as the basis for calculation as well as the techno-economic norms of expenditure on materials for each category of land. The targets stipulated in the contract must be precise, concrete, and in conformity with the state of the land worked by each brigade:

*Manure:* more phosphate fertilizer must be allotted to land where the cultivated rice is less resistant to heavy rain; for aluminous land with high phosphorous content, pig manure and lime are supplied in large quantities; poor soil, land assigned for industrial or market-garden crops, receives more fertilizer than ricefields.

— *Seed:* brigades which adopt new methods of transplanting (in tufts and in rows) are allotted larger quantities of seeds.

— *Work implements:* brigades which have more new implements or better quality implements have less repair costs.

Besides, expenditure on insecticides, water conservancy, etc., and sundry expenses, must be established according to precise norms.

Once the production cost targets are fixed, the management committee takes the tasks of each brigade as its basis for setting up a composite table in accordance with suggested models.



*Workdays*

On the basis of work and payment norms, and the classification of work, the management committee assigns to the contracting brigade:

— the amount of work to be done;

— the workdays for each category of land, each crop, each job, according to the norms established beforehand for the whole process of production.

Only after having worked out precise definitions of the different targets does the management committee make out the final contract for each brigade, in the form of a table of rates:

TARGET TABLE OF THE 1972 SPRING RICE CONTRACT OF BRIGADE No. 1 IN GIAO AN (HA-NAM-NINH PROVINCE) CO-OPERATIVE

| | |
|---|---|
| *1. Production* | |
| Area (ha) | 20 |
| Yield (100kg/ha) | 39 |
| Production (100kg) | 780 |
| Unit price (*dong*/100kg) | 30 |
| Total value (*dong*) | 23,400 |
| *2. Production costs (dong)* | |
| Seed | 437 |
| Fertilizer | 5,860 |
| Insecticide | 240 |

| | |
|---|---|
| Ordinary materials | 180 |
| Repairs of work implements | 180 |
| Sundry expenses | 60 |
| Total *(dong)* | 6957 |

*3. Workdays*

| | |
|---|---|
| Total workdays | 6210 |
| Value of a workdays *(dong)* | 1 |
| Total payments *(dong)* | 6210 |

Expenditure in materials and workdays assisgned to contracting Brigade No 1 for the production of 100kg of paddy :

| | |
|---|---|
| — Materials used (in *dong)* | 8.92 |
| — Workdays (directly used for production) | 8 |

This table is accompanied by two *supplementary tables* for each crop. One shows the details of the interdependence between the different targets (for example, how many kilos of chemical fertilizers, pigsty manure, seeds and insecticides, and how many workdays are involved in producing 100 kg of paddy, etc.). The other shows the process of production in detail (amount of repeated ploughing and harrowing, of tufts of rice per square metre transplanted, of repeated weeding...) These supplementary tables serve as a basis for the distribution of work to the various groups and co-op members, for the control and checking of how tasks are carried out, and for the analysis of how profitable each crop is.

**Animal Husbandry**

The management committee establishes targets on the basis of each kind of animal, of the working



conditions of each brigade and chiefly of the production process.

*Production*

The number of animals and the rate at which each kind, each breed and each group of animals puts on weight and fattens up serve as the basis for working out targets. For example, targets for breeding sows are based on the quality of the breed, the speed of growth and the size of the litters of the sows, the weight of piglets at birth, of weaned piglets, and the survival rate of piglets in the litters :

I — PIG-BREEDING AT THE DONG PHONG CO-OPERATIVE (THAI BINH PROVINCE) IN 1971

| Breeds of pig | Weight of breeding sows after 2 or 3 droppings (kgs.) | Number of piglets per litter | Number of piglets per year | Weight of piglets at birth (gms) | Weight of weaned piglets (kgs) | Survival of piglets (%) |
|---|---|---|---|---|---|---|
| — local 'I' breed | 40-48 | 1.88 | 12 | 420-500 | 4.2-4.9 | 73 |
| — Kien Xuong *'Lang'* breed | 55-57 | 2.00 | 8 — 9 | 550-620 | 5.4-6.1 | 90 |
| — *Monkay* | 62-70 | 2.00 | 7 — 8 | 620-840 | 6.8-7.3 | 94 |
| — *Large White Yorkshire* × *Monkay* | 65-79 | 2.2 | 6 — 8 | 750-850 | 7.4-7.7 | 99 |

Agreed production will include both the main and cecondary products.

Production of the main products is set in accordance with each category : porkers, breeding sows,

poultry (meat, dairy products), sucking pigs..., while the secondary products are calculated basically in terms of the amount of fertilizer to be delivered by the brigade.

II — PORKERS' WEIGHT GAIN IN DONG PHONG CO-OPERATIVE (THAI BINH PROVINCE) IN 1971 (kgs)

| Breed \ Age in month | 3 — 4 | 5 — 6 | 7 — 8 | 9 — 10 | 11—12 | 13 | Monthly Average (kgs) |
|---|---|---|---|---|---|---|---|
| — local 'i' breed | 3.0-3.2 | 4.3-4.5 | 5.5-6.0 | 6.2-6.5 | 4.7-5.2 | — | 4.7-5.1 |
| — Kien Xuong pink 'Lang' | 3.5-4.2 | 5.0-5.5 | 6.3-7.0 | 7.5-8.0 | 6.1-6.4 | — | 6.2-6.4 |
| — *Monkay* | 4.5-5.5 | 5.8-6.4 | 7.4-8.7 | 9.5-10 | 7.3-7.6 | — | 6.8-7.3 |
| — *Large White Yorkshire* × *Monkay* | 5.5-6.0 | 7.5-8.0 | 10-12 | 13-15 | 18-19 | 11-12 | 12-13 |

*Production costs*

The bases for calculations of the targets are :

— The size of the herd and the weight of the animals.

— The norms and fodder rations for each kind of animal :

— Expenses for repairs (for example of pigsties), expenses on artificial insemination, on veterinary care, on preparation of fodder for the animals, on the purchase of implements.

The most important clause is that concerning feeding expenses for each category, each kind of animal, and each period of growth : —



1. FEEDING EXPENSES (FOOD UNITS) PER KILO OF INCREASED WEIGHT OF PORKERS ON DONG PHONG CO-OPERATIVE
(Thai Binh province)

| Breed \ Age in month | 3-4 | 5-6 | 7-8 | 9-10 | 11—12 | 13 | Average number of food units per kilo of increased weight |
|---|---|---|---|---|---|---|---|
| — local 'I' breed | 6.3 | 6.1 | 5.9 | 5.7 | 6.1 | — | 6.1 |
| Kien Xuong pink 'Lang' | 6.3 | 5.9 | 5.7 | 5.5 | 5.9 | — | 6.0 |
| — *Monkay* | 6.0 | 5.7 | 5.4 | 5.2 | 5.7 | — | 5.6 |
| — *Large White Yorkshire Monkay* | 5.6 | 5.4 | 5.3 | 5.0 | 4.8 | 5.7 | 5.2 |

2. FOOD RATIONS FOR BREEDING SOWS OF LOCAL BREED ON THE VIET TRIEU CO-OPERATIVE

| Category of food | Daily ration (kgs) | Daily norm of food units | Number of days | Total amount of food (kgs) |
|---|---|---|---|---|
| 1. *For gestating sows* | — | — | 230 | — |
| — Rice or maize bran | 0.3 | 0.3 | — | 69 |
| — Tubers | 2.0 | 0.5 | — | 460 |
| Oil-cakes | 0.1 | 0.1 | — | 23 |
| — Distilleries' by-products | 0.2 | — | — | 46 |
| — Green plants | 5.0 | 0.5 | — | 1,150 |
| *Food units per day* | | 1.4 | | |
| 2. *For suckling sows* | — | — | 135 | — |
| — Rice or maize bran | 0.6 | 0.6 | — | 81 |
| — Tubers | 2.0 | 0.5 | — | 270 |
| — Oil-cakes | 0.1 | 0.1 | — | 23 |
| — Green plants | 5.0 | 0.5 | — | 675 |
| — Fish bone meal | 0.02 | — | — | 2.7 |
| *Food units per day* | | 1.7 | | |

*Workdays*

Still on the basis of the classification of work, norms for work and payment for each job are established by the management committee as targets for the various jobs of the breeding brigade: tending the animals, preparation of feed, production of raw materials for feed (mainly the cultivation of green plants) maintenance of installations (pigsties, stables...).

After having established the targets the management committee works out the contract for a period of one year, in the form of a composite table:

1. COMPOSITE TABLE OF TARGETS FOR BREEDING-SOW AND PORKER PRODUCTION IN 1972 ON GIAO AN CO-OPERATIVE
(Ha Nam Ninh province)

Animals: Porkers
Products: Meat — Pigsty manure
Herd: 1,000 pigs.

*1. Production*

| | |
|---|---|
| Main products: | |
| — Meat (tons) | 65 |
| — Value *(dong)* | 145,200 |
| *Secondary products:* | |
| — Fertilizer (tons) | 2,000 |
| — Value *(dong)* | 30,000 |
| Value of total production *(dong)* | 175,200 |

*2. Production costs*

| | |
|---|---|
| — Feed for pigs *(dong)* | 129,130 |
| — Sucking-pigs | 17,000 |



| | |
|---|---|
| — Sundry expenses *(dong)* | 5,800 |
| — Management expenses *(dong)* | 500 |
| Total *(dong)* | 152,430 |

*3. Workdays*

| | |
|---|---|
| — Total workdays | 9,450 |
| — Value of a workdays according to the plan *(dong)* | 1 |
| — Total payment *(dong)* | 9,450 |

2. COMPOSITE TABLE OF PRODUCTION TARGETS FOR THE LOCAL BREED BREEDING-SOWS ON THE VIET TRIEU CO-OPERATIVE

*1. Production*

| | |
|---|---|
| — A sow has two litters a year, 7 piglets per litter, weighing 6—7 kilos per weaned piglet | 14 piglets |
| — Manure supplied by a sow per year (tons) | 3.4 |

*2. Production costs*

*Total feed*

| | | | |
|---|---|---|---|
| — Rice or maize bran | 150 | kilos × | 0d15 |
| — Tubers | 730 | — × | 0, 05 |
| — Oil-cakes | 46 | — × | 0, 25 |
| — Green plants | 1,825 | — × | 0, 015 |
| — Fish bone meal | 2,7 | — × | . . . |
| — Distilleries' by-products | 4.6 | — × | 0, 01 |

*Other expenses*

| | |
|---|---|
| — Mortgage payable on the sow | 10.00 dong |
| — Work implements | 2.00 — |
| — Artificial insemination | 3.80 — |
| — Veterinary care | 0.60 — |

| | |
|---|---|
| — Feed preparation | 1.85 — |
| — General expenses | 1.75 — |
| *Total* | 20.00 dong |

*3. Workdays*

— Per sow 33.3 days

**Handicrafts as Subsidiary Occupations**

Handicrafts depend less on natural conditions than crop growing and animal husbandry and more on the regular supply of raw materials and qualifications of the workers. They require technical accuracy.

If factors of production and techniques remain unchanged, increased output involves a corresponding augmentation of raw materials, manpower and work implements. As the necessary production expenditure and workdays can be calculated for each unit, it is possible to make payment by piece-work. Rewards and penalties are calculated on the basis of the difference between cost price (fixed in the plan) and sale price.

*Production*

Targets are fixed on the basis of targets in the plan (in terms of both quality and quantity) and on the availability of raw materials and work implements.

*Production costs*

The norms for these expenses (calculated per unit product) are established on the basis of the technical process of the production of each article. Also included in the production cost per unit product are sales and management expenses.

*Workdays*

In the contract, these expenses are calculated on the basis of work expenditures either for each piece of work or for a unit product, according to the work norms, classification of work and norms for remuneration of each job.



**Rewards and penalties**

These are aimed at raising the sense of responsibility of each co-op member, stimulating them to boost production and to save on production expenses.

The meting out of rewards or penalties to production brigades by the management committee must comply with the following principles:

— Rewards are granted where production targets are exceeded, and targets for production expenditures and workdays have been held, on the other hand, failure to achieve production targets and those for production expenditure and workdays, without valid reasons, is penalised.

— Production up to norm with savings on production expenses and workdays is rewarded; on the other hand, reaching production cost norms and workdays without valid reasons is penalised:

— The overfulfilment of the production plan and savings made on production costs and workdays is rewarded with rates directly proportionate to the extra production and savings made, the penalties are calculated proportionately to the unaccomplished part of production and how great the negligence of production charges and workdays is.

Rewards and penalties must be calculated on the basis of adjusted targets in the contract, for agricultural activities are constantly subjected to the hazards of an unpredicable climate. Relevant adjustment in the contract should consequently be made promptly.

The rates fixed for rewards or penalties must also take into account the specific conditions of each

production brigade or branch. For activities involving complex techniques, or activities to be stimulated, rewards are relatively greater than penalties. It is this system that is the most common, in order to stimulate production; however excessive differences between these two indices may be prejudicial.

The rates fixed must be concrete, clear, appropriate and fair. This is a very complex matter for the conditions of fulfilment of the 3-point contract vary from one brigade to another.

To facilitate the work of the co-operative in the application of this system of remuneration, it has been suggested that "the rates of rewards for work with food crops should be nearly equal to penalty rates. A brigade exceeding its targets will be rewarded at the rate of 60 — 80% of the overfulfilled norms. From 5 to 10% of these rewards will go to the leading cadres and elite workers of the brigade. The remainder will be distributed among the brigade proportionately to the workdays spent. A brigade which does not fulfil its production norms will be penalised at the rate of 50 — 70% of unfulfilled norms. These penalties will be divided either equally among the workers, or proportionately to the number of workdays (indemnified workdays of the leading cadres of the brigade included); the "elite," and less sturdy workers are exempted and the indemnified workdays of leading cadres are to be deducted proportionately to the unfulfilled norms of production" (Directives of the central committee on agricultural management.)

Regarding work on industrial crops and food crops, in fruit trees, animal husbandry, and subsidiary crafts, the reward and penalty rates are fixed according to specific local conditions, first and foremost the degree of organization of each brigade. In general, penalty rates are lower than those for rewards.



The detailed fixing of the reward and penalty rates for each activity, of the proportion of cash and kind, and of the norms according to which rewards and penalties will be meted out to the workers, must be discussed by the brigade members and be decided on by the co-op members' general assembly.

At present, there exist two ways of doing these calculations for a permanent production brigade.

The method most frequently used is to incorporate rewards or penalties in the remuneration of workdays: the value of all production, minus the total production costs, plus rewards or minus penalties, divided by the total number of workdays the brigade is to be paid for, equals the value of a work day incorporating rewards or penalties. This method of calculations is simple and easy as it corresponds to the present level of co-operatives management. But it is not entirely fair: the lazy workers are paid as much as the zealous ones, and conversely in a penalised brigade, the worker with the greatest number of workdays is the hardest hit.

In some co-operatives, the rewards or penalties are halved, one half is divided equally among all the workers, and the other half only among those who do the most (in the case of rewards) or the least (in the case of penalties) part of the work. This method is more equitable as it tallies better with the principle "to each according to his work."

Working out the three-point contract must be done very carefully, in three successive stages, after the yearly or half-yearly production and financial plan of the co-operative has been mapped out. The draft contract is prepared by the management committee, under the auspices of the chairman and assisted by specialists or leading cadres of production brigades. It is then submitted for discussion at the brigade members' meeting. Finally the revised and amended document must be approved by the general assembly

of co-op members (or their delegates) before it becomes legally binding as the definitive version. Once in the hands of the various brigades, the contract is put into practice by a well-synchronized organization under a strict supervision. This decisive task is carried out jointly by the management committee of the co-operative and the brigades, which share the responsibility for the fulfilment of the contract.

**The Responsibilities of the Management Committee Are:**

— to supply the brigades in time and without fail with raw materials, other materials, work implements and other means of production; all infraction being regarded as violation of the contract.

— to provide leadership for production in all circumstances;

— to promptly overcome difficulties and infraction in execution of the plans;

— to adjust the targets, if need be;

— to help the brigades to work out a detailed work programme;

— to distribute manpower rationally between various brigades in emergencies while taking into account that they must help each other so that they may all fulfil their contracts;

— to supervise checking and sum up the work done at the end of each harvest.

**The Responsibilities of the Leaders of a Production Brigade Are:**

— to present the contracts to the brigade members and to organize discussion of it in order to stimulate initiative;

— to work out the brigade's production plan and work schedule, giving special attention to measures aimed at ensuring satisfactory execution of the



contract; and to ensure manufacture of work implements, materials and raw materials in the quantity and at the time needed by the groups and subgroups;

— to divide the tasks among the groups and subgroups (according to an internal contract signed between the latter and the brigade) and to the co-op members on an individual basis, and to organize this work;

— to provide leadership for this work according to the regulations and norms fixed in the contract while stimulating the zeal and initiative of the workers and mobilizing all the potential abilities in the brigade;

— to adjust the norms of work to be done on each job in a workday as defined by the contract, with a view to keeping strictly intact with the growing periods;

— to detect weak points and difficulties during work quickly.

The leading cadres of the co-operative and of each brigade must be immersed on the work and must "cling" to the workers, that is they must always be in the fields and must rely on the masses in leading the work in order to discover the least defects quickly.

At the end of each crop and each year, the production brigade gives an account of the work done at a members' meeting, and remunerations are fixed and rewards or penalties are meted out according to the results obtained during the year.

The three-point contract system with rewards and penalties makes it possible to:

— mobilize the whole work force for production,

— improve farming techniques, introduce scientific and technical innovation,

— heighten both leading cadres' and co-op members' sense of responsibility and discipline, and their managerial and technical level,

— strictly observe the growing schedule,

— specialize agricultural activities,

— improve the leadership work of the co-op executives and production brigades,

— improve the management of the co-operative in all respects: production, labour, finance and planning.

On the whole, the co-operatives have applied this payment system correctly. Nevertheless, they did commit some errors: during the war years 1965-1968, instead of applying the contract to production brigades, *some of them applied it to the co-op members' households*, contrary to the principles of socialist management of co-operatives and to the agricultural co-operation policy.

This infringement mainly affected subsidiary crops, industrial crops, market gardening, pig-rearing, and in some regions, rice cultivation.

The three-paint contract was applied to co-op members' households in various forms:

— for specific jobs in a definite short time,

— for specific products: land, seeds, fertilizers, draught animals, work implements, and working capital, were handed to the co-op farmers' households by the production brigade, and the former farmed them for their account and "paying" part of the crop at harvest according to rates fixed in advance: this is pure *rental*.

— redistribution of land without compensation, under which co-op farmers' households simply farm land for their account, reaping the whole crop and paying nothing to the production brigade or to the co-operative, which, however, pays agricultural tax



to the State for the households benefiting from this arrangement. *This is re-distribution of lands at the expense of the co-operative economy.*

The damage is incalculable: the work management deteriorates for the farmers work as they please; technical maintenance falls in obeyance, the gap in income between the households widens, resulting in dissension within the production brigade; the co-operative is no longer in charge of production management, and this has a negative influence on price stabilization and market control, the co-op members' qualifications and efforts at specialization, their sense of organization, responsibility, and discipline, are all seriously affected; the spirit of private ownership flourishes once more; the leading role of the production brigade cadres as well as of the co-operative's leading cadres is belittled and gradually loses impact now that the co-op members rule the roost.

In substance, the application of the contract to co-op members' households *is a return to small-scale individual farming* which is anathema to the idea of agricultural co-operation and reduces the co-operative to a formal structure.

This error is due to many causes:

— Many co-op members and cadres have not realised that co-operation is a long and complex struggle;

— The strengthening and improvement of socialist relations of production in the countryside, and the improvement of the management of co-operatives have been somewhat neglected, particularly during the war years.

— Some cadres have thought that the form of production *matters little provided that production*

*increases, or that the application of the contract to the co-op members' households is a material incentive for intensification of production.*

— The importance of work co-operition in a situation where work is predominated by rudimentary tools and co-operitives are not mechanized has been underestimated by some cadres.

— Difficulties in work management caused by the war, low management ability of the cadres, and the weak political stand of some executive cadres of the co-operatives have revived small-scale individual production habits in some of them.

— There is a lack of experienced cadres following the departure of ex-servicemen of the people's army and veterans of agricultural co-operation to the front.

Timely correction of these tendences was made by the Party in 1968.

## NEW MODE OF MANAGEMENT AT MY THO CO-OPERATIVE

In September 1973, My Tho commune (Ha Nam Ninh province) had three village-size co-operatives with :

| | |
|---|---|
| households : | 718 |
| total population : | 2,938 persons |
| working population : | 1,036 persons |
| farm-hands : | 768 persons |
| total cultivable area : | 455 hectares. |

of which

— 116 hectares yielded two crops a year,

— 252 hectares planted with 10th-lunar-month rice, and

— 400 hectares planted with 5th-lunar-month rice,

— cultivable area per inhabitant : 1,476 sq. metres (average for northern Viet Nam : 800 sq. m.),

— cultivable area per farm-hand : 5 925 sq. metres.

Binh Loc district, where My Tho commune is located, is one of the largest hollows along the Red River — and as in all other low-lying regions — rice predominates in My Tho, particularly fifth-lunar-month rice, with its two agricultural corollaries, fish and ducks.

During the years 1966 — 1973 high per capita cultivable acreage gave an average yearly output of

paddy in My Tho of 945 tons, among the better averages in the North. However, this output varied considerably, between 900 and 1,056 tons p.a., because of water-logging, which affected up to 50% of the cultivated areas during the 10th-lunar-month rice season in 1968 and 1973; production and annual yield were reduced to only two-thirds of those normal in a good year and three-fourths of an average year. Average yield was about three tons per hectare, varying between 3.6 and 2.8 tons/ha.

Intensive farming and soil utilization in My Tho were thus at a low level in spite of great potential (relatively high labour productivity and large cultivated area).

Two positive measures were taken during these years:

— Extension of the areas under 10th-lunar-month rice was made possible by water conservancy: work affecting 261 hectares, 65% of the cultivated area. But water-logging remained a serious handicap affective measures required equipment not available to the three village-scale co-operatives. This crop (10-lunar-month) continued unstable:

| *Year* | *Yield* | *Output* |
|---|---|---|
| 1969 | 2.44 tons/ha | 502 tons |
| 1970 | 2.52 - - | 460 — |
| 1971 | 1.58 - - | 332 — |
| 1972 | 1.41 - - | 313 — |
| 1973 | 1.77 - - | 196 — |

— Extension of Spring or 5th-lunar-month rice areas (as a percentage of areas under crops in the Winter-Spring growing season):

| | |
|---|---|
| 1968 — 69 | 4.6% |
| 1969 — 70 | 34.0% |
| 1970 — 71 | 40.0% |
| 1971 — 72 | 44.7% |
| 1972 — 73 | 39.1% |



Nonetheless, yield from this rice crop remained low: 2 to 2.2 tons per hectare on average, as against 1.8 to 2 tons/ha for all Winter-Spring crops, the output of which nevertheless increased while remaining unstable:

| | |
|---|---|
| 1968 — 69 | 554 tons |
| 1969 — 70 | 571 tons |
| 1970 — 71 | 684 tons |
| 1971 — 72 | 724 tons |
| 1972 — 73 | 648 tons |

Thus during the years in which the area under Spring rice was extended, 1970-73, the yield and output of the 10th-lunar-month rice crop dropped. By raising the proportion of Spring rice in the Winter-Spring crop total, we obtained an increase, though still weak, in both yield and output of this crop. However, the total yearly output in these years of extension did not surpass that of 1969. When Spring rice was grown on only 4.6% of the crop area:

| | *Total yearly output* |
|---|---|
| 1969 | 1,056 tons |
| 1970 | 1,031 — |
| 1971 | 1,016 — |
| 1972 | 1,037 — |
| 1973 | 844 — |

The extension of areas under Spring rice and 10th-lunar-month-rice was done with a view to stepping up intensive cultivation, more efficient utilization of the soil and increased output, — but although this was a correct measure to take, it did not bring the expected result.

Production determined the financial situation and the distribution of products. In 1973, the various funds totalled only 383,000 *dong*: 270,000 *dong* in loans from the National Bank, 15,600 *dong* contributed by co-operative members, and 97,000 *dong*

(or 25% of the total) of accumulated funds. The value of the fixed funds did not exceed 317,000 *dong*, an indication of the weak level of the material and technical basis of the three co-operatives, which were seriously out of balance with the needs of production and the large cultivated areas. To get the funds necessary for the Winter-Spring crop, the peasants had to borrow 292,880 *dong* from the National Bank and to postpone payment of 250,000 *dong* worth of pig dung and remuneration of the co-op members.

The compulsory yearly deliveries of foods to the State had been fixed at 310 tons, but actual deliveries averaged only 252 tons (163 tons in the lowest year). The average food consumption (essentially of rice, ensured by the co-operative) was 16.6 kilograms per month per capita varying from 18.6 kilos for the best year and 14.5 kilos for years when crops were bad. The State had to reduce compulsory deliveries and grant a yearly aid of 30 to 35 tons of rice, and the National Bank granted delays in payment.

This situation was due to many factors, both *technical* and *managerial.*

Until recently we had been thinking only of reducing soil acidity, and had neglected a latent potential — *the high percentage of humus* in the soil: despite large quantities of quicklime being used, the pH of the soil persisted in falling; the new strains of Spring rice gave low yields and began to degenerate.

We had not managed to take advantage of the experience in intensive cultivation gained by co-operative farmers whose family fields had much higher yields than those of collectivized fields; but now modernisation of techniques was more imperative than ever if intensification of production was to



become a reality in the immediate future with the improvement of management.

The utilization and wastage of land, labour, force, farm implements and capital was bad. Cadres in charge did not know how to remedy these shortcomings and gaps and correct the imbalance between the different factors of production.

The utilization and wastage of land, labour force, they were ill-founded, and had little relation to the actual tasks to be done in crop, each month, either in the co-operatives as a whole or in the production brigades or by each co-op member. They were made up with one sole objective in mind: to get the approval of the district so as to get materials and loans. The figures given for crop yields and outputs were adjusted and inflated to fit those suggested by the administration.

The production brigades had complete freedom in the execution of the plans and in organizing production. They were not checked upon by the management committee, and the three-point contract received no more than lip-service, with the result that they developed the economic base according to production plans of their own devising and distributed the income at will, in flagrant violation of the principle of unified management. In these conditions planning could play no central role in the functioning of the co-operative.

Regulations on management of fixed funds, materials, cash and other property were not applied. This led to waste, thefts and embezzlement, which was either unknown to or ignered by the cadres responsible, who made no effort to remedy this state of things. Individual or group misappropriation of collective property was common, so much so that a good number of co-op members lost all confidence in the co-operative, neglected their work there and

took to hawking. Regulations in force relating to financial management were not observed: all outlays were incorporated into the production expenses, the value of workdays constituting the regulator for compensating for waste, thefts, embezzlement and various other losses Production expanses thus increased, while labour remuneration dropped; almost all the funds necessary for the functioning of the co-op were supplied by the bank loans following the massive reduction of the accumulation funds, and the co-operatives worked at a loss.

The non-observance of these regulations was due to bad organization which prevented the chairman of the management committee from fulfilling his role as "overseer" of the co-operative: all decisions of whatever nature were formally collective decisions, and this stifled all spirit of both individual responsibility and initiative.

The distribution of incomes was not done according to the principle "to each according to his work," work-points were lavished on workers without justification, provided the work went ahead. No work was done on figuring out and adjusting work and remuneration norms, or on the classification of work, due to the absence of the organization and management necessary for their application. Remuneration was not according to the norms set for each job but according to the whims of the brigade leaders whose favoritism in assigning tasks to the co-op members was evident. The insufficient remuneration of cadres of the management committee and the production brigades did not ensure them their minimum living requirements, and they had to put in as many workdays as they could, to assure their incomes, thus neglecting their role of leadership.

The organization of work was largely improvised, and was done not by groups or sub-groups, but by individuals and co-operative members' households,



a system which gave rise to animosity and dissension among them.

The managing apparatus — the management committee — was cumbersome and inefficient, and was incapable of leading, regulating, organizing the production units; it did no more than just represent the production brigades in their relations with the management, the State trade services, and the National Bank, in connection with getting supplies of materials, loans of funds, and making compulsory deliveries of foods... and made vague appeals to the masses to intensify production, give advice on the use of new rice strains, the observance of the growing-schedules, and so on. There was a prevailing spirit of self-seeking, which turned each production brigade into an almost autonomous "co-op in miniature."

The water conservancy and small mehanical engineering brigades worked as they pleased, making their own arrangements with the planting brigades, without any control by the management committee. The fields assigned to each brigade were not contiguous, but consisted of "leopard spots," allotments of all kinds of soil and all shapes and sizes, which made shaping fields and improving the soil, management of the land and intensive cultivation, difficult. The fixed funds, the farming implements and the cattle became the "private property" of each brigade, which used "its" own capital for its own expenses, except for the guaranteed supplies of materials by the State which were distributed by the management committee.

The relations between the leading Party committee of the commune and the management committees of the co-operatives were confused, with no clear-cut demarcation between the role of each of these two bodies, the former replacing the latter in the management of the co-operative.

In short, until the end of 1973, the management system of the three co-operatives of My Tho failed to ensure a strict application of the principles relating to the socialist management of co-operatives: "The Party assumes the political and ideological leadership; the co-operative is responsible for the management of its activities; the State gives the co-op the guarantees necessary to its functioning; the co-op members are the collective masters of production and the distribution of incomes."

*Re-organization of production and improvement of management* became imperative, requiring radical measures which in turn implied the extension of the scale of the co-operative.

On September 20, 1973, it was decided to merge the three small (village-scale) co-operatives into a single, commune-scale co-operative.

This measure was aimed at enabling:

— the Party and the State to fulfil their obligations to the co-operative;

— the co-operative to assume managerial tasks according to the principles of freedom of operational action, financial autonomy, unified management (of production and distribution of products), equal rights before the law toward State and co-operitive economic organs with regard to the bilateral contracts arrived at;

— the co-op members to be "the real collective masters" of production and distribution of products.

Most important is the difinition of a *system of organizational management* as a constant factor that will co-ordinate *individual responsibility* with *collective responsibility* in the co-operative.

## Re-organization of Production

This is a very big question, covering the following essential points:



— Rational orientation and structure for production;

— Rational arrangement of crops and animal husbandry, of the material bases of production, in balance with the orientation and structure of production;

— Re-organization of the production units for greater labour productivity on the basis of the use of existing labour means. Definition of the tasks of production brigades and specialized brigades, the effective size of each brigade with regard to the available production factors;

— Rationalization of the work processes in each production unit and each activity on the basis of the what norms and remuneration and classification of work are worked out.

— Re-organization of the system of production and the material and technical basis indispensable to production and management, with a view to ensuring balance between the various units and the process of production so as to achieve high labour productivity.

### Orientation of Production

In connection with tackling its first crop, the Winter 1973 — Spring 1974 crop, the new co-operative defined its orientation for production on the basis of the technical advances made, chiefly the pedological surveys conducted over the past years which revealed a very high percentage of humus (nitrogen) in the soil of My Tho.

This discovery made it possible to determine the main causes of the degeneration of the new strains of Spring rice (the NN5, NN8 and 661): *the imbalance between the percentage of nitrogen (N) and phosphorus (P) in the soil;* and hence; to take measures to fight this degeneration. We did this by work-

ing out the definite quantity of phosphorous to be put on each field to ensure balance between the two elements N and P, in accordance with the physiology of the new rice strains able to stand pH above the 4.5 level (the use of quicklime being indispensable only when the pH level is below 4.5).

A sufficient supply of phosphorous made it possible to extend the area under the new rice strains which easily assimilated a high percentage of humus (N) and to re-organize where the crops were sown on all the cultivated areas.

Thus a radical transformation in the structure of the crops was undertaken, with limited but most efficient investment.

The restructuring of the new rice strains and more intensive cultivation led to a qualitative change in the orientation of food production with the Winter-Spring crop becoming the main crop of the year. Spring rice is now the main harvest and the new NN5 rice strain has begun to be sown as a fifth-lunar-month crop: the food grown from this new crop will constitute between two-thirds and three-fourths of the total annual output.

STRUCTURE OF THE WINTER 1973 — SPRING 1974 CROP

| Rice strains | Areas (ha) | Structure of areas (%) | Yield (ha) | Output (tons) | Structure of production (%) |
|---|---|---|---|---|---|
| Total rice | 310 | 100 | 4.12 | 1,278 | 100 |
| 1. « 314 » 5th month rice | 124 | 40 | 3.04 | 377 | 30 |
| 5th month rice | 186 | 60 | 4.85 | 901 | 70 |
| — Spring rice | 30 | 10 | 4.53 | 136 | 10.6 |
| | 156 | 50 | 4.90 | 765 | 59.4 |



This structure marks a leap forward both in area as well as in output:

— the new rice strains, chiefly Spring rice, predominate;

— production rises to 121 % of the total yearly output of 1969 (the best annual output between 1968-1973), and to 176.5% of that of Winter 1971-Spring 1972 (when Spring rice reached 44.7% of the total output for the year, the highest annual percentage between 1968-1973);

— the yields increase from 14.5 % to 63.5 % compared to those of the best crop and the best year of 1968-1973;

— the degeneration of the new rice strains is stopped, and from now on the latter adapt themselves to low-lying fields.

The favourable meteorological conditions of 1973-1974 had a beneficial effect on crops, but it is undeniable that the difficulties inherited from the past meant that the new co-operative still had to make tremendous efforts, especially in the technical field, to obtain these results.

The new structure and the rational lay-out of crops permitted by the new technical measures have made it possible to remove the contradiction between the relative abundance of the cultivable areas and the instability of production.

As a result of the inadequate drainage, the tenth-lunar-month-rice crop is first grown in places where water-logging has been eliminated, that is, on 50 to 60% of the cultivated areas, the immersed areas being reserved for fish-breeding.

The traditional breeding of ducks and fish in low-lying regions and the raising of pigs has been reorganized, and the new *orientation for production* in My Tho has been defined thus:

— *Rice, fish, ducks,* and *pigs* (not counting subsidiary handicraft trades).

The first results are encouraging and prove that the road chosen is right.

However, much still remains to be done to improve the soil and restructure crops: improving the balance of chemical properties of the soil (the nitrogen-phosphorous N/P balance, that is by adding P at the rate of 35 to 40 mg of P for every 100 grammes of soil; transforming mechanical proprieties of the soil; arranging the fields and completing conservancy work with a view to controlling water (chiefly drainage); and mechanizing tilling...

All these new technical measures will create favourable conditions for planting 10th-lunar-month rice on the whole area, the introduction of a third yearly crop (the Winter rice crop), the intensification of dry crop growing for the development of animal husbandry, and the increase of crop yields.

**Re-organization of Production Units**

The co-operative assigns specific tasks to each production unit with a view to the full realization of all the points listed in the plans which concretize the orientation of production.

The organization of the different production units reflects the division of labour within the co-operative, and this is determined by:

— The division of the work process into three distinct stages: *production proper: materials supply; distribution and exchange of products.* Each is taken on by a different category of production unit, and the whole placed under the leadership and charge of the chairman of the management committee;

— The division of the work process into *direct work* and *managerial work:* those doing direct work are materially responsible for each concrete job they



do during a short period of time, while the material responsibility of the managerial workers lasts a long period and covers production, distribution and exchange of products. Only in these conditions can the management committee and its chairman fulfil their managerial role: organization, control and checking, command and so on... for *unified management* of production, distribution and exchange of products under the sole learship of the management committee and its chairman.

*The farming sector*

Rice monoculture and the use of rudimentary or modernized work tools were not conducive to My Tho achieving any considerable word specialization. That was why the co-op set up *specialized brigades* and cultivation brigades proper in the farming sector.

The specialized brigades (or "service brigades"), which were directly responsible to the management committee (in fact to a vice-chairman responsible for the farming sector), ensure operations which require "rigorous, precise and prompt leadership because of their technicality; and a well-knit organization and a strict management to make it possible for the cultivation brigades to work. Besides, those operations which were too big for, or which could be done with equipment on a bigger scale than was normal for a single brigade to cope with, are identical for all cultivation brigades; if entrusted separately to each brigade, they lead to an enormous waste of manpower and equipment.

These specialized brigades are:

— the *labour brigade;*

— the *water conservancy brigade;*

— the *mechanical brigade.*

— the *technical brigade,* which selects and prepares seeds; detects diseases, parasites and crop pests;

sprays insecticide and herbicide ; and grows azolla. It also introduces new rice strains, oversees the strict observance of the cultivation time-table and the structure of crops, the application of new ways of working, sowing, transplanting, manuring and weeding.

During the major growing periods, the chairman and vice-chairman responsible for these brigades can decide to put them at the disposal of cultivation brigades to help them meet their deadlines for transplanting, harvesting, etc., and to wage the battle against drought and water-logging.

Precise regulations define their tasks, their relationship with the management committee and the other production units, in terms of work and remuneration norms, rewards and penalties.

The *cultivation brigades* proper are organized on the basis or a re-distribution of land and a fresh evaluation of the scale of each brigade in keeping with the seasonal character of the work, tools, with the area involved in the works, and the managerial capacity of the brigade leaders and deputy leaders.

Each brigade now has contiguous tracts of land not split up into more than two or three plots.

This new mode of distribution of land is also consistent with the characteristics of the low-lying regions where some fields are left uncultivated during the 10th-lunar-month rice crop : each brigade thus has a percentage of single-crop fields corresponding to its labour force and tools. It also permits the simultaneous use of modernized (or rudimentary) and mechanical work tools : one field divided between two brigades can be transplanted and harvested and freed in time for mechanized tilling. But when the same field is worked by a single brigade, the mechanization of labour is often hindered by the work not meeting the deadline set for the use



of machines, because of the utilization of low-efficiency rudimentary or renovated work tools.

The co-operative has estabilished *8 cultivation brigades* proper, each with *60 to 90 labourers* and responsible for an area of *30 to 40 — 45 hectares ;* the work implements made available for each brigade are divided up proportionately to the number of cultivable hectares and of workers.

The cultivation brigades proper are responsible to and led by a vice-chairman responsible for the farming sector. Modifications concerning organization and size are referred to the co-op chairman, by the management committee.

*Animal husbandry*

This comprises three brigades (led by a vice-chairman) : *fish, ducks* and *pigs.*

*The subsidiary handicraft trades*

There are two brigades for this co-op activity also responsible to and led by a vice-chairman : *bricks, masonry* and *carpentry.*

*The supply sector :*

The transport brigade,

The team in charge of store management,

The external relations team (chiefly with the State trade services and organs).

All these brigades and teams function according to the internal regulations of each production unit and the general regulations of the co-operative. The latter forms a managerial and organizational whole, and defines the role and nature of each unit and each person through a system of work and remuneration

norms set for each job, and of rewards and penalties for each concrete case.

### Re-organization of the Management Apparatus

My Tho has re-organized its management apparatus according to the following principles:

— The State exerts its right of control, checking and inspection at all times; it ensures freedom of operation to the co-operative, the leadership of production by the cadres in charge and the co-operative members' right to be the "real collective masters."

— The leadership principle is that of *sole responsibility*: the chairman of the management committee is the sole responsible leader of the co-operative, and the chief of the production brigade is the sole responsible leader of this production unit.

— A clear distinction is made between the administrators and the administered, and between the various links of the managerial apparatus, permitting the co-op to define concretely the role, type and obligations of each member and each link of the apparatus, and their inter-dependence in the execution of their tasks.

— Planning constitutes the main means by which management guides the co-op to optimal economic efficiency.

— The operational results of each branch, each product, each work, each individual... must be noted in the co-op's system of book-keeping.

— The inter-dependent control between the units, between units and individuals, among the individuals, permits the co-op to reduce to the maximum the negative effects of the outmoded methods and habits of work and crippling routines engendered by small-scale production, and to safeguard the co-operative's fruits of its labour and its property.



— The realization of unified production management, the distribution and exchange of products, made possible by the re-organization of production and the managerial apparatus, by working out new managerial regulations, enables the co-operative to combat disorder and anarchy in production, waste and embezzlement, to ensure the unified and all-round leadership of activities at the co-operative.

In the managerial apparatus of the unified co-operative, each of the component links is distinct, defined and guaranteed by law.

#### General Assembly of Co-Operative Members

The general assembly of co-operative members is an expression of democratic centralism and is the highest organ of the co-operative. Its main tasks are:

— to approve internal regulations, in keeping with the economic and financial management legislation promulgated by the State and with the specific concrete conditions of the region.

— to approve the co-operative's and each production brigade's yearly plans and the plan for each crop production, capital construction, distribution of products, investments, living standards, accumulation, remuneration of the cadres in charge. To recommend execution of the plans to the chairman, chief accountant and management committee, first of all with regard to the norms prescribed by law on the compulsory and voluntary deliveries of foods and foodstuffs to the State, the application of internal regulations and of regulations concerning economic and financial management.

— to examine and approve the main techno-economic and work norm; the year-end balance sheets of activities and execution of the plans presented by the co-operative and by each brigade;

the remuneration, rewards and penalties meted out to the management committee, the chairman and vice-chairman, the chief accountant, the brigade leaders and deputy leaders, the chairman and vice-chairman of the people's control commission; and the co-op report on the distribution of incomes and remuneration of the co-op members.

Decisions of the general assembly of the co-operative members relating to the implementation of plans, remunerations, rewards and penalties to the different cadres in charge, must finally be examined and approved by the whole management apparatus which has been recognised by the district administration.

**The Administration Committee**

The management committee, elected by the general assembly of co-op members by a majority and secret ballot, is responsible for the management of the co-operative between general assemblies:

— The co-op chairman is elected and recognized by the district administration, and has sole responsibility to the general assembly of co-operative members for managing the co-op according to this system of "sole director": safeguarding co-op property; executing obligations on economic and financial management; the implementation of plans, and application of laws promulgated by the State. He or she personally leads the planning, accounting services and working out of work and techno-economic norms, and co-ordinates the activities of the vice-chairmen and the different branches of the co-op.

Each vice-chairman is made responsible by the chairman for the leadership of a sector.



**Production-brigade Leaders and Deputy Leaders**

Each of these is elected by the members of his or her brigade on the chairman's recommendation and they are responsible to the management committee for the management of the brigade.

The brigade leaders and deputy leaders have no responsibility for and no right to decide what materials are supplied or how products are distributed. However, because of the present shortage of materials, the brigades can produce them for their own needs, with the permission of the vice-chairman responsible for supply and under supervision of the chief accountant.

Remunerations, rewards and penalties are made in accordance with the results of the implementations of plans.

**The Chief Accountant**

The chief accountant is recommended by the district administration for election at the general assembly of co-op members. He has a double task: on the one hand, as *assistant manager* of both the management committee and of the brigade leaders in the organization and application of financial autonomy; on the other hand, as *supervisor* of co-op activities handled by the district administration and the general assembly of co-op members where safeguarding co-op property and the strict observance of regulations on economic and financial management are involved.

**The Control Commission**

The control commission is elected by the general assembly of co-op members, and supervises all activities of the chairmen and vice-chairmen, chief accountant, brigade leaders and deputy leaders, and

co-op members. It examines and decides on all requests from production units and co-op members, protects the right to leadership of the responsible cadres, and the co-op members' right to be "the real collective masters" and other legitimate interests.

This new organization has enabled the co-operative to apply management regulations and to completely abolish the *independent functioning of the production brigades*.

The co-op members' right to be "the real collective masters" is now much more in evidence. The general assembly of co-op members has involved close discussions on plans, internal regulations, management regulations, techno-economic and work norms, total yearly output, remuneration of workdays, distribution of food supplies, remuneration of cadres in charge and the structure of the management apparatus, before approving them. The co-op members openly criticize harmful activity of leading cadres, involving waste, embezzlement, and so on.

The chief accountant and his service detect and promptly stop all excessive or unnecessary expenditure of cash or materials.

Stocks of materials and starch-foods are now inventoried in keeping with the regulations.

The chairman and vice-chairman attend to their own assignments, first and foremost questions of income and expenditure, remuneration, and distribution of food...

The management committee promptly acts to limit damage or losses, for example, by mobilizing the whole co-op in a case of natural calamity.

The brigade leaders and deputy leaders show their sense of responsibility in leading production and protecting the co-op's property.

Although it has been functioning for only three years, the new management apparatus has proved effective : each member of the co-op, from the chairman to the brigade deputy leader, puts effort into



fulfilling his/her role, and each has seen the results of his/her activities in the intensification of production and the increase of incomes.

**Building the New System of Management**

Right from the start, the new co-op realized that the new, difficult and complex task of building a new system of management is of paramount importance.

The new system consists of a body of associated and inter-dependent regulations.

**Planning**

Plans (yearly, monthly, and for each crop), which are the vital link of the new managerial system, are worked out on the basis of the following main points :

— Total output of the different branches (total output value reckoned both in prices as per internal consumption, and in prices as per the compulsory and average income per inhabitant ;

— Cost prices (of production and home consumption) of the different products of the co-op ;

— Total remuneration of the managerial apparatus ;

— Value of the workday (in cash and in kind) and average income per inhabitant ;

— Value of capital construction (reckoned in terms of cost prices) ;

— Profits and financial distribution thereof.

Once these compulsory targets have been discussed and approved by the general assembly of co-op members, they have force of law for the chairman and management committee of the co-op.

The chairman entrusts the vice-chairmen with leading the execution of the plans of each branch.

Reaching the targets fixed in the plans is the responsibility of the brigade leaders, who must do his/her own accounting for the following: production; specific production costs of the brigade; value of the main and secondary product (reckoned in terms of specific production costs); average number of workdays (or average incomes).

The vice-chairmen responsible for the different branches, and the brigade leaders and deputy leaders take part in working out the plans, concentrating on the following points: structure of production, working out technical, cultural and techno-economic norms.

Thus, a whole system of detailed and binding targets render the plans concrete for each production unit and each co-op member (who each receives his assignments for a specified period), and decide what tools and equipment will be made available to fulfil them. Such targets favour co-operation among the different production units through inter-brigade contracts (for example, among planting, water conservancy and technical brigades); facilitate the leadership tasks of the management committee, so that they may meet the three imperative requirements: fulfilment of their obligations to the State by increasing the compulsory and voluntary deliveries of foods; increasing fund accumulation and food reserves and bringing about financial autonomy; improvement of the living standards of the co-op members and stabilization of their incomes (in cash and in kind) as a basis on which to consolidate the reserve funds.

Planning commits:

— the co-op chairman to fully assume his responsibilities;

— the brigade leaders and deputy leaders to strictly observe the work, remuneration and techno-economic norms, to realize the total output and production cost targets; and

— the co-op members to "run" the co-operative as its "real collective masters."

The co-op can achieve financial autonomy and the operational accounting (thanks to the system of accounting statistics worked out), and settle running expenses on the basis of planned norms.



**Unified Accounting**

As a result of working out files and basic scales for all operations and the opening of various accounts and the keeping of account books, the co-op has succeeded in accounting for all receipts and expenditures.

The application of this management system has permitted the co-op to reckon the production costs for each product and each job, and the profit and loss of each production unit, to follow the execution of plans step by step, and to determine the responsibility of each production unit and each co-op member for the implementation of plans, and hence to strictly apply the system of rewards and penalties.

The immediate result has been the central accounting every ten days of all workdays spent and organizing the settlement of remuneration directly to the farm workers without going through the production brigades. Thus, the co-op has succeeded in abolishing the distribution of products by the brigade and in implementing the unified distribution of products under the auspices of the management committee, eliminating favouritism and embezzlement. The co-op members can reckon every ten days what they have earned and what they have to do in the following weeks, and can make sure that their work is remunerated at its true value, in keeping with definite norms.

**Financial Management**

This managerial regulation consists in:

— planning the financial operations;

— working out production plans in keeping with the financial plans;

— rationally distributing funds to the different branches and production sectors;

— recording the sources of income;

— creating various funds (for development of production, rewards, social projects, and reserves) and ensuring a rational flow in and out of them and appropriate utilization; and

— making savings.

The strict application of financial management permits: simple reproduction of funds; financial autonomy; differentiation between accumulated funds and loans; the accumulation necessary for enlarged reproduction and reserves; the stability in the price of the workday; the gradual replacement of remuneration in food by cash.

**Management of property**

This is subject to laws in force. The management of property bears essentially on fixed funds, materials and cash.

Almost all arable land except for family enclosures is collective property run by the co-operative.

Work implements which can be used outside the brigade responsible for them, or the upkeep and use of which requires advanced techniques, are managed for the management committee by specialized brigades. Only rudimentary or modernized farm implements and means of transport are managed by the farming, transport or animal husbandry brigades. The tending of buffaloes is individually entrusted to the co-op members and is remunerated according to the state of the animals.



The rewards given or penalties meted out amount to between 20% of the newly created value, or of the losses incurred.

All delivery of materials or other products made without a written order signed by the chairman or vice-chairman of the co-operative and endorsed by the chief accountant, constitutes an infringement and is liable to severe punishment.

Rewards and expenses in cash must be approved by the co-op chairman in his capacity as "director of accounts" and endorsed by the chief accountant. The book-keeper, the cashier and the person concerned, as co-responsible for the operations.

**Technical Management**

This regulation has a legal character and has a bearing on the promulgation and application of technical measures for production as well as on the inter-dependence of responsibilities.

The responsible vice-chairman and the chief engineer in the farming sector have the task of working out the technical process to be used for each strain in each field, on the basis of pedological surveys and the classification of soils. In other words, they must work out the structure of crops in detail for each brigade, measures which the brigade leaders and deputy leaders must observe strictly. Only the chief engineer may modify these technical plans.

The non-observance of these technical measures leads to punishments, which vary according to the amount of damage caused to production.

The brigade leaders and deputy leaders are from now on obliged to weigh pig dung (or of quick lime) themselves as it is put on the fields (and not at the co-op members' houses as before, thereby en-

suring each rice strain and each plot of land the required standard quantity of manure (or of lime). They must strictly observe the structuring of crops and the technical process set for each rice strain. They must supervise and check the technical measures used in their brigade.

**Labour Management**

My Tho has endeavoured to provide this system with tangible content, which consists in defining :

— the number of able-bodied workers in each production unit ;

— the right of the co-op chairman and deputy chairmen, and leaders and deputy leaders of brigades to mobilize the manpower in normal times as well as during the major growing periods ;

— the prohibition of transfers of manpower of one production unit or of one sector to another, without the consent of the leader (or deputy leader) of the brigade concerned and the authorization of the co-op chairman (or vice-chairman) ;

— the elaboration of a new and complete system of work norms, of classification of farm works and remuneration norms for all branches, thus permitting the co-op to establish a rational relationship between the different categories of labour, to stimulate the co-op members, and to account for the number of workdays spent and for remunerations ;

— the classification of categories of workers : on the basis of compulsory medical examinations for co-op members of working age (from 16 to 60), the co-op has classified the worker into three categories and set each category a definite number of compulsory workdays per year (eight-hour days) :

| | | |
|---|---|---|
| A | 288 | workdays |
| B | 264 | — |
| C | 240 | — |



During the major growing periods when work is intensive, each worker may work a maximum of 28 ten-to-twelve-hour workdays (or 40 eight-hour workdays) per month.

In fact, as a result of the relative shortage of manpower and large cultivable areas, each co-op member of working age puts in an annual average of 26 workdays per month.

Compulsory deliveries of pig dung are imposed on each household, which implies they must raise a certain number of pigs, and this is reckoned on the basis of the area of the family enclosures and of the quantity of paddy received yearly as remuneration : 4 tons for 100 kilos of collected meat.

**Distribution of food**

In view of the fluctations in food production as a result of unpredictable climatic conditions, the low technical level and the shortcomings in management, the big gaps between supply and demand, between collection (State purchase), prices and market prices; the rational distribution of food constitutes an important economic lever and an effective tool of management.

The practice of unified management means that the co-operative, and not the brigades, concretely the management committee and its chairman, is in exclusive control of the distribution of food directly to each category of worker according to need, according to the following principles :

— Harmony of interests : of the State, the co-operative and the co-operative members.

— Co-ordination of cash and kind distribution of products ; ensuring simple reproduction of assets, total recuperation of the material expenses and of labour invested during the past year, and the accumulation of funds indispensable to enlarged repro-

duction; instituting financial autonomy; creating sufficient necessary reserves to provide against natural calamities and to stabilize the prices of the workday.

— Implementation of the principle "to each according to his work" while ensuring stable quotas of indispensable foods to workers' families. Ensuring a stable minimum norm of food supplied to needy families or those less able to work, and to the aged and invalids...

Total food production is distributed to the different funds ensuring:

— Compulsory and voluntary deliveries of food to the State;

— Accumulation, seeds, collective and family breeding of pigs;

— The amassing of reserves necessary for the stability of the set quotas of foods and of the price of the work-day.

— Payment for work, consumption by co-operative farmers' households and assistance to disadvantaged families and individuals.

The monthly quota of food (paddy) has been stable for three years at an average *22.6 kilos per inhabitant* at the fixed price of 0.30 *dong* a kilo (collection price); the actual amount received varying according to the category of worker and his/her age:

| | |
|---|---|
| — Category A | 42.0 kilos |
| — B | 37.0 — |
| — C | 32.0 — |
| — Child one year old | 5.5 — |
| — two — | 7.0 — |
| — three — | 8.5 — |
| — four — | 10.0 — |
| — Person above 60 years of age | 19.5 — |

Upon presentation of a medical certificate, sick workers receive a minimum quota of 19.5 kilos.



**Payment of work**

The value of a workday has been fixed, and has remained stable for a long period, at *10 work-points = 1 dong,* to be paid directly in cash and not in food as before, food being supplied by the co-op according to a regulation for internal distribution.

Thus, the average payment for an effective workday is *1.57 dong* and the average monthly wages earned by the three categories of worker are:

41.20 *dong* for category A
34.60 *dong* for category B
28.60 *dong* for category C

The average monthly income of a worker is 33.66 *dong,* equivalent to 112 kilos of paddy (at the price of 0.30 *dong*/kilo): this can be improved on, not by raising the value of the workday, but by increasing the number of workdays (consequently of work-points, which is a practical possibility for My Tho with its great potential.

The payment of the co-op leaders depends on how and when the different targets in the plans are reached: total output value; compulsory and voluntary deliveries of food to the State; value of the workdays; average income of the co-op members; production costs; and profit. Thus, their interests are closely bound to those of the co-operative as a whole and its members.

The co-op chairman receives a monthly salary of 70 to 80 *dong* (at most double the average income of a co-op member) which serves as the basis on which to reckon the salaries of other leaders of the co-op, in keeping with the principle that they are jointly responsible:

— vice-chairman: 80 to 85% of the chairman's wage, or 60 to 68 *dong.*
— brigade leader: 95% (maximum) of the vice-chairman's wage, or 58 to 65 *dong.*

— deputy brigade leader : 85 to 90% of the brigade leader's wage, or 52 to 58 *dong*.

— chairman of the control commission : 80% of the co-op chairman's wage, or 56 to 64 *dong*.

— chief accountant : 75% of the chairman's wage, or 53 to 60 *dong*.

— cadres of the accounting and planning services : 65% of the chairman's wage, or 46 to 52 *dong*.

Food is supplied to them by the co-operative (at the price of 0.30 *dong*/kilo), in proportion to their wages.

Apart from this, the members of the management apparatus, from the co-op chairman to the rank and file must work a certain number of compulsory, unpaid workdays each year, and can be mobilized during the major growing periods for the farming brigades.

**Rewards and Penalties**

Are applied to workers as well as to members of the management apparatus.

With regard to the labourers, rewards and penalties only concern their obligations in workdays : the rate is 1/1 for defaulting on a workday (except in case of illness, and then medical certificate is required) or for working a supplementary day during normal periods. But the rate does not exceed 1/3 for working extra time during the major growing periods, to be paid in cash (at the rate of 10 workpoints = 1 *dong)* and in kind (in case of reward, the person concerned is entitled to a supplementary supply of paddy proportionate to the rewarded days, at the price of 0.30 *dong*/kilo). On the other hand, a penalty involves paying paddy from one's own quota, proportinately to the penalized days, at the price of 1 *dong*/kilo. For the compulsory delivery of pig dung paid at the price fixed by the management committee, surplus quantities sold give the right to purchase paddy at the rate of 1 *dong*/kilo (which is considerably lower than the free-market price).



Rewards and penalties for the members of the managing apparatus correspond to how well or badly the targets of the plans have been met and how strict observance of the management regulations has been : the overfulfilment of production norms (valued in prices for internal consumption, at the rate of 0.30 *dong*/kilo for paddy) give them the right to rewards equivalent to 70% of the overfulfilled norms, while penalties are set at 50% of the unfulfilled norms.

Waste, embezzlement, thefts, and other harmful acts, are vigorously combated and severely punished, and serious cases are brought to book.

Rewards and penalties — particularly the latter — are a major command lever and great incentive for the intensification of production. They have been instrumental in re-establishing order at the co-operative, persuading the cadres to adopt a new style of work and to show a greater sense of responsibility in their tasks.

However, whatever their role and importance, they can only be fully effective when they are coordinated with ideological, political and cultural education for the new, socialist peasants.

The new mode of management will only be applied strictly if there is interdependent supervision between the leading cadres, and between the masses and the cadres.

Supervision by the masses is the engine driving the co-op forward over all infringements of regulations.

### The Party, the Administration, and the Co-operative

A clear distinction has been made between the role and function of the Party and that of the administration in the functioning of the co-operative.

The Party executive committee of the commune is responsible for leading the general progress of the co-operative, for supervising the application of the Party's economic and agricultural policies, the economic and financial management measures of the State, and the internal regulations, and for political and ideological education at the co-op.

The district administration sees to the application of the management regulations set by the management committee and its chairman, arbitrates in disputes, and makes good infringements, while ensuring the material means necessary for the co-operative to run smoothly.

From now on, the management committee, concretely its chairman, will be able to fully play its role as manager.

### Preliminary results

It remains to be seen what results the new mode of management has brought since the merger in 1974 :

*Income*

(In thousands of *dong*)

| | |
|---|---|
| 1971 | 313 |
| 1972 | 441 |
| 1973 | 392 |
| 1974 | 813 |
| 1975 | 612 |
| (much of the 10th-lunar-month crop lost) | |
| 1976 | 1,088 |
| 1977 | 1,200 (estimate) |



*Production* (in tons)

| | Total output | Winter-Spring crop | 10th-lunar month crop |
|---|---|---|---|
| 1971 | 1,016 | 684 | 332 |
| 1972 | 1,037 | 724 | 313 |
| 1973 | 844 | 648 | 196 |
| 1974 | 1,798 | 1,278 | 520 |
| 1975 | 1,348 | 1,216 | 132 * |
| 1976 | 1,974 | 1,274 | 700 |
| 1977 | 2,000 (estimate) | 1,050 | 950 (estimate) |

* Great losses due to widespread flooding.

*Yields*
(in tons/ha)

| | 2 crops per year | Winter-Spring crop | 10th-lunar month crop |
|---|---|---|---|
| 1971 | 3.60 | 2.22 | 1.58 |
| 1972 | 3.13 | 1.72 | 1.41 |
| 1973 | 3.42 | 1.65 | 1.77 |
| 1974 | 7.00 | 4.12 | 2.88 |
| 1975 | 6.20 | 3.60 | 2.60 |
| 1976 | 6.77 | 3.75 | 3.02 |
| 1977 | | 3.60 | — |

*Area of Winter-Spring crop planted with new rice strains (in %)*

| | |
|---|---|
| Average of the three crops (1970-71 ; 1971-72 ; 1972-73) | 41.3 |
| 1973-74 crop | 60.0 |
| As from the 1974-75 crop | 100.0 |

*Mechanization of farm work*

70% of the cultivated areas in 1976 and 1977

*Compulsory and voluntary deliveries of foods to the State* (in tons)

| | *Total* | *Per farm hand* |
|---|---|---|
| 1971 | 226 | 0.270 |
| 1972 | 338 | 0.330 |
| 1973 | 291 | 0.290 |
| 1974 | 667 | 0.660 |
| 1975 | 520 | 0.520 |
| 1976 | 783 | 0.785 |
| 1977 | 1.000 * | 1.000 * |

* 550 tons were delivered following the Winter 1976-Spring 1977 crop.

*Newly created values (v + m) by each worker* (*) (in tons)

| | |
|---|---|
| 1971 | 0.33 |
| 1972 | 0.35 |
| 1973 | 0.28 |
| 1974 | 0.6 |
| 1975 | 0.42 |
| 1976 | 0.681 |
| 1977 | 0.8 (estimate) |

* Or effective productivity of each farm hand.

*Total yearly number of workdays*

| | |
|---|---|
| 1971-1973 | 335,000 (average) |
| 1974 | 374,000 |
| 1975 | 303,000 |
| 1976 | 405,000 |

*Payment for each workday*

| | |
|---|---|
| 1971-1973 | 10 work-points = 0.34 *dong* |
| 1974-1977 | 10 work-points = 1.00 *dong* |



*Average monthly consumption of paddy per inhabitant*

| | |
|---|---|
| 1971 | 16.6 kilos |
| 1973 | 14.5 — |
| 1974-1977 | 22.5 — * |

* This quota has remained stable since 1974.

*Reserves for the stability of consumption by co-op members*

| | |
|---|---|
| 1971-1973 | nil |
| 1974 | 53 tons (paddy) |
| 1976 | 90 — * |

* Not counting the 100 tons lent by the State.

*Accumulation*

| | |
|---|---|
| 1971-1973 | nil |
| 1974 | 33,400 *dong* |
| 1976 | 130,800 — |

*Net profit* *

(accumulations deducted)

| | |
|---|---|
| 1971-1973 | nil |
| 1974 | 113,600 *dong* |
| 1976 | 116,200 — |
| 1977 | 300,000 (estimate) |

* Divided between the social funds and reserve funds for the stability and increased payment of the workday.

*Payment of bank loans*

1974: 170,000 *dong* borrowed by the three co-operatives before their merger.
From 1975, not only all the yearly bank loans have been completely paid off, but the co-operative also has bank accounts for turn-over

funds: 54,000 *dong* at the end of 1975 and 100,000 *dong* at the end of 1976.

All the debts owed by the co-op members to the co-operative (93,000 *dong*) have been paid during the years 1974 and 1975.

* * *

Switching from small-scale production to large-scale socialist production, My Tho has made a decisive step. But the results obtained in the past three years are not yet really steady: one major natural calamity (like that of 1975 which caused enormous losses to the 10th-lunar-month rice crop) would suffice to create new difficulties.

The various objectives set for 1980 (end of the second (1976-1980) five-year plan) are as follows:

— 1.7 to 2 million *dong* of business;
— 10 tons of paddy per hectare for two crops a year;
— 1,200 to 1,500 tons of paddy to be delivered to the State;
— 10 work-points = 1.20 *dong*;
— 200 tons of reserve paddy for three months' consumption;
— 1,000 pigs for co-operative breeding (500 at present);
— 10th-lunar-month rice planted on all of the cultivated area, and entirely new strains, and Winter rice grown on one hundred hectares (30 hectares at present)...

**Much remains to be done:**

— Completing the lay-out of fields and the water conservancy system, improving communications,



improving the soil... with a view to gaining control of the water, essentially potential flood waters, and water-logging, and totally machanize farm work;

— Building a new material and technical basis for agricultural development to meet the demands of the re-organization of production; drying yards; stores for grain and materials; pigsties; pumping stations; moto-cultivators; mechanical installations; semi-mechanized means of transport.

— Further diversifying production activities by developing subsidiary food crops and animal husbandry, creating new handicraft trades to absorb the manpower which will be freed by further mechanization and that resulting from population growth;

— Strengthening and improving the new mode of management by organizational, administrative and techno-economic measures, while combating regionalism, individualism, lack of discipline, and individual and collective irresponsibility both among leading cadres and as co-op members;

— Heightening the socialist consciousness of the masses by improving their political and ideological education, democratizing and strictly observing collective mastery; and heightening the management and technical ability of cadres;

— Strengthening the leadership of the Party executive committee of the commune and of the district administration;

— Increasing State assistance in the supply of materials and modernized and rudimentary work implements; revising the procedures of food collec-

tion, prices, the granting of loans, the observance of bilaterial contracts (by the State trade services)...

Of course weaknesses and shortcomings still exist, but profound changes have been taking place at My Tho ; My Tho has blazed a trail which is being followed by all co-operatives in northern Vietnam one after another.

*August 1977*

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