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Summary

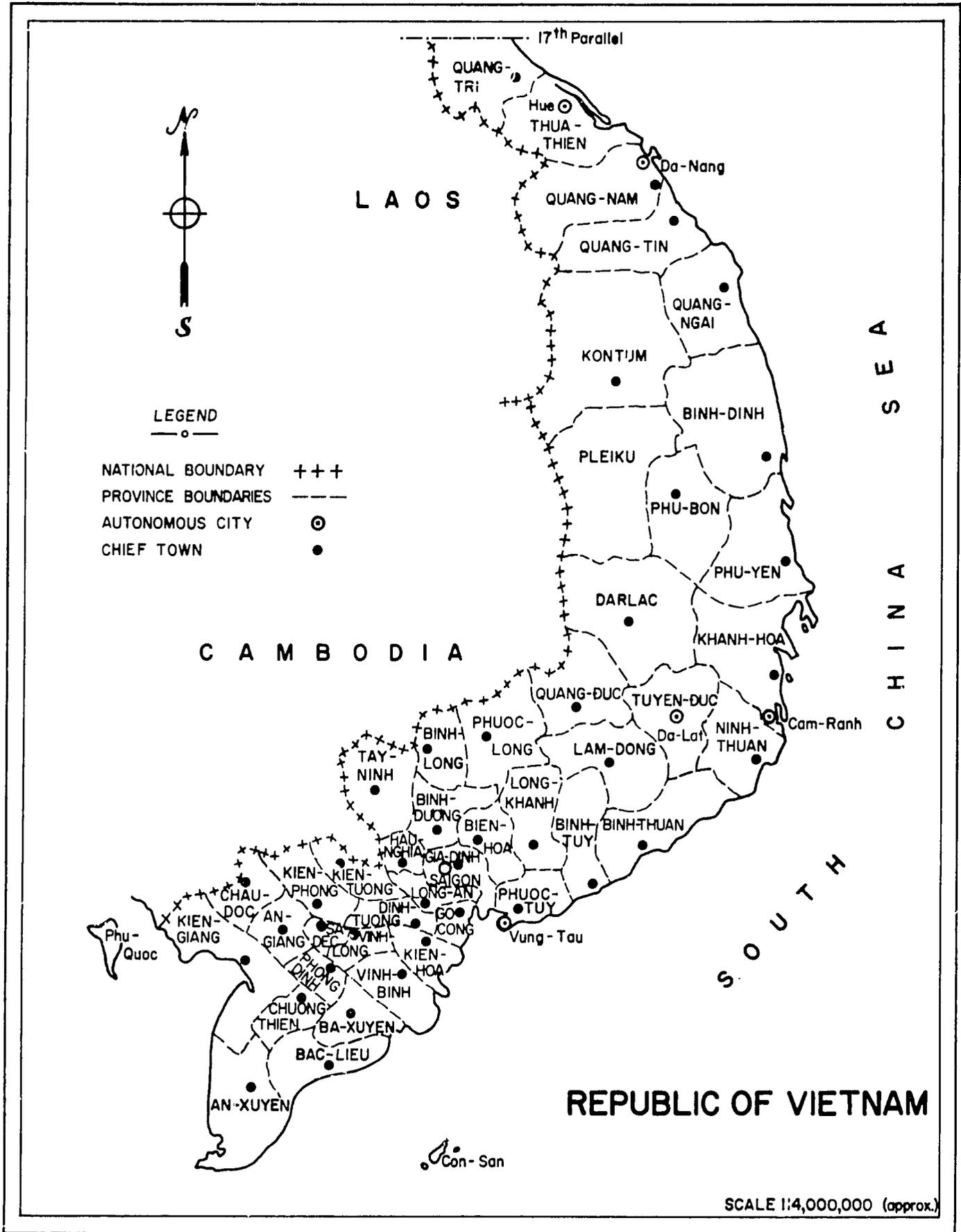
JOINT DEVELOPMENT GROUP

POSTWAR PLANNING GROUP • DEVELOPMENT AND RESOURCES CORPORATION
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LEGEND

- NATIONAL BOUNDARY +++
- PROVINCE BOUNDARIES - - -
- AUTONOMOUS CITY ⊙
- CHIEF TOWN ●

LAOS

CAMBODIA

CHINA SEA

SOUTH

REPUBLIC OF VIETNAM

SCALE 1:4,000,000 (approx.)

THE POSTWAR DEVELOPMENT OF THE
REPUBLIC OF VIETNAM: POLICIES AND
PROGRAMS

PART I

INTRODUCTION: THE GROWTH PATTERN OF THE ECONOMY

This is a summarized version of the Report submitted by the Joint Development Group to the Governments of Vietnam and the United States in March, 1969. It is intended to convey the principal findings contained in that Report in a concise way, but it does not generally repeat any of the descriptive material of the Report, nor, to any great extent, any analytical discussion of the problems which will face the economy at the end of the war. Those who want more details are advised to consult the appropriate passages of the main Report.

The Joint Development Group was established and has been supported by the Governments of Vietnam and the United States since February, 1967, but it has operated outside the regular structure of the two governments, though obviously in close association with them and with the agencies within them principally concerned with long-term economic development. The assignment of the Group was not to prepare detailed operational plans, but to examine the problems and opportunities likely to confront Vietnam when the war ends, and to suggest policies and strategies for development on which operational plans could be constructed, and the restoration of the economy could proceed with a view to the achievement of economic independence in as short a space of time as possible. At the start this term requires definition: by economic independence we imply not an isolated and stagnating self-sufficiency, but a situation in which, in the context of its relations with southeast Asia and the rest of the world, the Vietnamese economy will continue to grow and its people to prosper on the strength of their own skills and resources without continuing dependence on concessionary aid from overseas. This

objective is a realizable one, which can be achieved within a period of approximately ten years after the war comes to an end.

Although the Joint Development Group does not discount the problems - which are many and serious - it is optimistic about the prospects. Vietnam has not been destroyed by the war. Indeed, in some respects it has been strengthened: it is true that large numbers of its citizens have been displaced from their homes, but others have acquired new skills which will be valuable to the growing economy in the postwar period; it is true that serious damage has been done to some parts of the country's infrastructure, notably the roads, railroads, and a major power installation, but none of this is irreparable, it is in fact being repaired, and other infrastructural facilities, particularly posts and airfields, have been expanded during the war to an extent which will be more than adequate for peacetime use. Vietnam has practically no foreign debt, and does have substantial reserves of foreign exchange. There are grounds for encouragement in these circumstances. Provided a satisfactory and lasting peace is secured, and the right public policies are chosen and efficiently applied, there is no reason to suppose that, in the decade immediately following the war, the performance of the economy will be anything less than satisfactory.

THE PHASING OF DEVELOPMENT

The next ten years are seen in terms of an initial period of reconstruction and rehabilitation, lasting perhaps from two to three years, followed by a period of development and growth which will continue to the end of the decade and, indeed, into the next one. Reconstruction and development are not, of course, completely separate and distinguishable, either in time or in substance, and the basic aim in one phase will be to lay solid foundations for the other.

In the early years the emphasis is bound to be on the restoration of a society which has been distorted and abused by years of war. One obvious and immediate task is the resettlement of those people who have been displaced by the fighting from their homes in the countryside, so

that large areas of abandoned land can be brought back into production, and the predominantly rural economy of Vietnam can be restored. Agricultural recovery in this phase implies first the rapid achievement of self-sufficiency in basic foodstuffs, especially rice, and then the resumption of the export trade in agricultural produce. Another obvious and immediate task is to redeploy the labor force so as to maintain high employment levels and avoid social instability, particularly in the cities, and to reconcile this desirable objective with the need to limit and control inflation. A third is to introduce educational programs, both to equip the existing labor force with the skills required by a growing economy, and to improve the productive capacity and quality of the labor force of the future. A fourth urgency is to restore and expand the transportation and communications networks and other parts of the infrastructure equally essential to a vigorous economy. A final task in the phase of reconstruction will be to repair the damage done to the nation's industries, to increase the production of industries which have declined during the war, and to lay the foundations for new ones.

THE OBJECTIVES OF DEVELOPMENT

Objectives for the economy over the entire decade are to increase per capita income and consumption, while ensuring that the rewards of increasing production shall not be devoted entirely to consumption; and that a substantial proportion of them will be saved and invested in economic growth: to maintain a high rate of employment and relative price stability; to reduce by taxation and expenditure policies, the disparity in standards of living and wealth between regions and social classes; to improve rural standards of living by a variety of programs, principally, however, by increasing productivity; to provide adequately for social services, especially education; and to end the country's dependence on concessionary foreign aid.

It must be recognized at the start that there may be conflicts between two or more of these objectives, so that some compromises will be inevitable, and achievements in one direction may be partially offset by slower progress than is desirable in another.

The achievement of such objectives will depend in any case upon three major economic factors. The first is the ability of the economy to mobilize domestic and foreign capital to finance the plan of reconstruction; and the second is the extent to which inflationary pressures can be modulated so that large public expenditures on reconstruction projects will not accentuate them; and the third is the expansion of exports.

Within the full ten-year period of reconstruction and development the systematic exploitation of the nation's economic potential may increase per capita income by one-third and the gross national product by about half. Precise development paths over this period cannot, however, be predicted with accuracy. Although per capita income should increase, the rate at which it will increase will be affected adversely, if it continues, by a population growth rate now estimated to be 2.6% per annum. In ten years the overall standard of living will certainly improve, but the nation will need to forego consumption of a portion of the fruits of economic progress and development in order to provide for increased savings and capital investment, to facilitate the self-financing of the national budget, and to meet the need for expansion of exports.

We have assumed "minimum" and "maximum" paths for the economy. These are not to be taken as extreme values in the usual sense of that term. The minimum path assumes that there will be some growth in the economy, though it is clear that it might actually decline if no steps whatever are taken to initiate development. Similarly, if appropriate policies are applied and there is a determined effort to increase investment and exports, then the maximum figure may well be exceeded.

If the minimum growth path is achieved, Gross National Product will increase at a rate of 4% per annum in the reconstruction period and at 5% per annum in the period of development, or by 52% over the entire decade following the war. The origin of this growth will lie in increased agricultural and industrial production (with industrial production growing at a higher rate, but agricultural production remaining the largest component of GNP) and in the early expansion of exports. If population continues to increase at an annual rate of 2.6%, this minimum growth path would permit per capita income to increase at an annual rate of only 1% in the first three years and at 2% in the next seven, or by about 20% over the entire period.

On a maximum growth path, per capita income will rise over ten years by about 36%, and GNP will grow at an annual rate of 6% in the first three years and 7% in the following seven years of the period. Growth rates of this order should not cause serious inflation. If they are to be achieved, present agricultural production will have to be doubled over ten years, with, importantly, reasonably favorable world markets and high and stable prices for agricultural commodities; and there must also be a considerable upsurge in the industrial sector of the economy. Whether the economy can perform in this way will depend essentially upon two major changes from its present situation: 1) a relative decrease in consumption as a percentage of GNP, and increases in savings and in public and private investment; and 2) an increase in exports, so as to provide a growing volume of foreign exchange, and, in ten years, permit the economy to continue to expand without concessionary external aid.

By the end of the decade, exports presently valued at US \$20 to \$30 million, ought to reach at least US \$250 to \$300 million and might reach US \$400 million a year. Over the same period, imports in recent years about US \$600 to \$700 million (and likely to continue at a similar level for the two or three years of the reconstruction period) should decline to about US \$450 to \$550 million (from 20% to 25% to about 15% of GNP), but with a substantially increased percentage of capital goods and a reduced percentage of consumer goods.

In the tenth year after the war, the deficit in Vietnam's balance of payments may not be completely eliminated, but it should be at a level capable of being financed by capital inflows, supplier loans, and other similar revenues. In the area of foreign trade, economic independence must be understood as an ability to finance a deficit by long-term loans rather than by grants or other concessionary aid. It does not imply the exclusion of all capital movements.

INVESTMENT REQUIREMENTS

To reach a healthy economic situation of this sort in the next ten years will require the investment of approximately VN \$600 billion,

the equivalent of US \$5 billion. Approximately half of this may be derived from external sources, public and private, but the rest must come from local sources, and heavy public expenditures are envisaged in such areas as agricultural development, water resource development, and education, for which private investment is unlikely to be forthcoming. Furthermore, defense costs, at least in the reconstruction period and probably into the development period, will continue to be high. Yet it is necessary to bring about in these ten years a relative reduction (in terms of GNP) in public expenditures and simultaneously to achieve a substantial shift from consumption into public investment.

Fiscal, monetary, and other policies which will help to make this possible are described in Part II of this Summary Report. Investment programs are set out in Part III.

PART II ECONOMIC POLICIES

ECONOMIC POLICIES FOR GROWTH

Given peace and stability there can be little doubt that the economy will resume its interrupted development. How fast it will develop, and how rapidly the desire of the Vietnamese people for better living standards can be satisfied, will depend substantially upon the choices made from among a variety of alternative strategies.

Should Vietnam, for instance, favor agriculture or should it favor industry in the allocation of the resources available for development? Will it be sufficient for the public authorities to limit themselves to establishing an environment in which private initiative can operate successfully, or should they do more than this? What should be the respective roles of the public and private sectors? Should the economy be an "open" one, in which the private sector will decide for itself where resources can best be invested, or should it be a controlled one, with the Government making those decisions? Should the economy concentrate upon types of production which will replace imports, or should it emphasize the promotion of exports?

Few of these questions lend themselves to simple and straightforward answers, and our approach to them has been practical and pragmatic rather than ideological. The interests of agriculture and industry are not antagonistic (as they are sometimes represented to be) but complementary, and the adoption of policies which would favor the growth of one at the expense of the other would surely be in error. Vietnam is primarily an agricultural country and it will continue to be one, at least in the foreseeable future, with its agricultural sector making the largest single contribution to Gross National Product and providing the great majority of the population with their livelihoods. However, investment in the development of agriculture need not place constraints upon the development of industry; the right policy is to avoid any excessive disparity in their respective rates of growth. In fact, the probability is

that industry will grow at a more rapid rate than agriculture, both to supply the products required for agricultural development and to satisfy the needs of a farming population which, as the years go by, will find itself with substantially increased purchasing power. In absolute terms, however, agriculture will continue for some time to dominate the national economy, and there must be a deliberate program to increase agricultural production if the objectives set forth for a ten-year development program are to be achieved.

Similarly complementary are the roles of the public and the private sectors. Complete dominance of the former, arising from a centrally directed and controlled economy, will almost certainly be harmful to growth, while an open economy will permit the most rapid and efficient development of resources and the most equitable distribution of the benefits of those resources. The fact is that both the public and the private sectors have their parts to play and these parts are mutually supporting. Generally, the Government is advised not to enter the area of manufacturing industry, and its present intention to divest itself of its investments is a sensible one which should be pursued. In divesting itself of these interests, depreciated historical cost is not an appropriate criterion for the valuation of assets. In some specific cases - the production of chemical fertilizer, for example - mixed public and private ventures might well be appropriate.

If private industry is to play an effective role in the development of the economy, it is absolutely essential that it should be freed from unnecessary controls and bureaucratic procedures. The participation in development of Vietnamese of Chinese descent who are already active in business and industry is equally essential; and discriminatory controls upon this particular group would be against the interests of the country as a whole.

Import Substitution and Export Expansion

Substitution of domestic production for imports is an appropriate policy for Vietnam, but prudence is required in the planning and implementation of this policy. Present limitations on resources and industrial skills, the need to import capital goods during the period of

development, and increasing demands, as incomes rise, for greater varieties of consumer goods all suggest that imports will continue at high levels, and the heaviest emphasis must be placed on exports in order to earn the foreign exchange to pay for them.

Emphasis on import substitution is frequently the expression of a desire to industrialize the economy and to avoid undue reliance on exports of agricultural and other raw materials as a source of foreign exchange to finance development. Lack of confidence in agricultural exports is not necessarily justified, for it has not been conclusively demonstrated that the terms of trade move inevitably against the producers and exporters of these goods. In any event, Vietnam has opportunities to diversify its agricultural production and thus to reduce its vulnerability to price fluctuations and to the deterioration of particular export markets. The highest priority must be given to the development of exports after the war if economic growth is to be achieved without undue dependence on external aid. Broad projections of export potential suggest that within ten years, if market conditions are favorable, Vietnam may be earning possibly half-a-billion dollars a year from its exports. six times as much as it earned in its most prosperous year before the war.

As far as import substitution is concerned, a basic rule is that the domestic market should be sufficiently large to support at least one plant capable of producing at costs competitive with import prices without duty. Some care should be taken to avoid over-protection of local industry. Some commodity groups which appear to lend themselves to an import substitution policy are motorcycles, textiles, chemical fertilizers, petroleum products and some metal industries, and there will probably be opportunities, based on adequate domestic markets, for a considerable range of other commodities and products. Where cost comparisons are favorable, import-substitution obviously should be encouraged, since, for a given level of exports, any decrease in imports is equivalent to a reduction in the amount of capital which must be borrowed from abroad. In three major industrial groups cost comparisons are likely to be unfavorable; and a policy of import substitution would be artificial and unwise: these groups are basic metals processing and finishing, some chemicals, and heavy machinery.

Foreign Trade and Assistance

Some questions are raised concerning the size of the foreign trade sector in Vietnam's future and the requirements for external aid. Obviously Vietnam cannot accept a continuing balance of payments deficit without serious consequences. The ratio of foreign trade to GNP should probably be between 15% and 20% if a satisfactory rate of growth is to be achieved. In aggregate figures, the imports needed to sustain a 5% growth in GNP will be about US \$440 to \$650 million annually. Exports are projected at about US \$200 million in five years' time and, hopefully, will rise to US \$400 to \$500 million by the end of the decade. The total trade gap will thus be about US \$3 billion over the ten-year period, mostly occurring in the first five years, and decreasing as efforts to expand exports and limit imports succeed. The earnings from services, with private capital inflows and a reasonable amount of supplier credits, must be sufficient to bring the balance of payments into equilibrium. Some foreign exchange can be acquired through services, such as a possible tourist industry, and opportunities for private investment, including foreign investment, are identified in Part III of this Report in the section dealing with industry. These opportunities represent roughly US \$500 million from abroad which might be invested over the next ten years.

Nevertheless, in this period about US \$2.5 billion in foreign aid will be needed, and if serious debt servicing problems are not to arise it will have to be given on concessionary terms. The suggestion is made that the Government of Vietnam should consider the desirability of a conference of countries to discuss postwar development needs and aid requirements. The Asian Development Bank may be the appropriate agency to initiate these proceedings.

Regional Cooperation

Opportunities for regional cooperation with other Southeast Asian countries should not be overlooked. Regional economic integration can sometimes - though not always, by any means - bring remarkable national benefits. Trade expansion in Asia, including the resumption of trade with North Vietnam, is a definite possibility. It will be very much in Vietnam's interest to continue to participate in regional projects and

programs, including the program for the development of the Mekong Basin which is of major importance.

MONETARY POLICIES

When peace returns, the need will be felt to replace direct governmental regulation of economic activities (necessary in wartime for the control of inflation) by more normal fiscal and monetary measures. The inflationary pressures generated by the war will probably persist after the war is over, and a stronger financial sector is required to mobilize savings and capital and to make monetary policies effective.

The Financial Sector

The financial sector in Vietnam is presently weak and undeveloped. The absence of adequate commercial banking facilities has had adverse effects on the growth of business and trade; credit supplies are minimal and frequently informal. Incentives must therefore be provided for the private commercial banks to expand their activities and open more branches in the provinces. The four special financial institutions which now provide credit and financial services - the Agricultural Development Bank, Vietnam Development Bank (formerly SOFIDIV), Industrial Development Center and the Caisse de Refinancement pour le developpment de l'Industrie - will continue to take the lead in supplying credit to industry and agriculture, but the commercial banks which now concentrate almost exclusively on import financing are also potential sources of credit for these sectors and should adopt more aggressive business policies.

What levels of loan funds or bank credits are required to finance investment and expand economic activity in the next ten years? Agricultural credit requirements alone have been estimated at VN \$30 billion, and the fixed capital requirements for industrial projects at about VN \$90 billion. These are but two of the sectors; housing mortgage needs will also make large demands. Assuming an average ratio of bank credit to Gross National Product of 30%, and an annual increase in GNP of from 5% to 6%, supplies of credit will need to increase by 7% to 8% annually,

and will approximate to between 5 to 15 times the amounts now available. Probably these demands cannot be fully met unless private savings can be mobilized and used.

For this purpose, the reform of interest rates is one principal condition of success. Without any increase in present rates, cash holdings are unlikely to be transferred to deposits and the monetary situation will continue to be extremely liquid. Domestic savings must be stimulated if the investment programs are to be implemented without inflationary methods of financing. An increase in interest rates may have some effects on prices (but it is believed only minimal ones) but would not have serious effects on bank profits.

The issue of three or six month certificates of deposit carrying an interest rate likely to achieve the acceptance of a significant volume of certificates is recommended. It can be followed by the issue of additional series, for which interest rates can probably be lower and maturity dates longer, and it can be accompanied by the approximate doubling of loan rates on most classes of loans given by the banks. The interest rates charged by the Agricultural Development Bank would, however, be a desirable exception to these changes. Recommendations concerning the precise rates of interest likely to induce people to transfer their cash holdings to deposits are to be submitted separately.

Expanded facilities for a money and capital market are needed, its initial purpose being the sale and distribution of government short-term securities. The heavy concentration of banks in the Saigon-Cholon area could form the nucleus for such an undertaking. A wider range of government short-term securities, with differing maturities and interest rates, would be a desirable feature of monetary policy, and ultimately it should be by way of the money market that the National Bank would eventually market a wide variety of treasury bills and bonds.

Another private, money market can be expected to develop dealing with stock issues by private companies, home mortgages and the growth of insurance and similar types of financial business. A home mortgage market and an organization to mobilize funds for this purpose is a particular requirement, for the government is unlikely to be able to provide from its own resources anything like the full extent of the funds needed for housing after the war.

The Currency Exchange Rate

The other principal condition for satisfactory growth of the economy is related to the currency exchange rate. Is the exchange rate of VN \$118 to US dollar likely to be viable in the future? The free market rate has in recent years been 50% to 70% above the official rate, and the "real" exchange rate has been deteriorating since 1966. An over-valued rate has the effect of stimulating imports and depressing exports. The net result is a substantial imbalance in the foreign trade account. However, if an adjustment is to be made in exchange rates it probably should be a once and for all adjustment that can be maintained, and will make exports competitive with those of other countries. Devaluation of the currency is a sensitive subject, and it is discussed in memoranda presented separately. At this place it is appropriate only to mention that the alternative is reliance on complicated controls and special subsidies which have not usually been effective in promoting exports so as to restore the balance in foreign trade. Wholesale deflation is out of the question. What Vietnam needs for economic growth is a stable and realistic exchange rate which will strengthen its competitive position in world markets.

Serious deflation is unlikely immediately after the war; but the transition period will be a critical one, and it is unlikely that development can be reconciled completely with price stability. Price increases, nevertheless, must be kept within bounds. It is tentatively suggested that average annual price increases should be kept within a range of 5% to 10%, with no increases in any single year more than 15%.

FISCAL POLICIES

The purposes of fiscal policy in wartime have been simple and straightforward, concerned with raising money and directing expenditures primarily for the single end of national defense. In recent years, public expenditures directly or indirectly related to defense have been absorbing up to three-quarters of the national budget. Inevitably, public expenditures on such works and services as would have been the principal components of normal, peacetime budgets have had to be postponed, and fixed capital assets have been allowed to deteriorate without repair or

replacement. It is true that some military expenditures have been directed towards apparently civilian purposes, such as the construction and maintenance of highways; but military requirements are not frequently the same as civilian ones, and in some parts of the infrastructure there is now excess capacity, which, when peace returns, will probably have to be written off.

About two-thirds of all government expenditures are devoted to the remuneration of people in public employment of one kind or another, while public investment amounts to only 5% of these expenditures and to a mere 1% to 2% of GNP. Private investment in recent years has not been significantly more than this, so it is unlikely that more than 5% of GNP is being invested in economic growth.

No economy can grow satisfactorily on these terms: in peace, Vietnam should be aiming at levels of investment twice or three times as high as these. The revival of both public and private investment, though vital to the restoration of the economy in the years after the war, will not be an easy task. Indeed, as far as public investment is concerned, this cannot be done adequately until the entire direction of budgetary expenditures changes and resources are redirected from military into development purposes. When this happens, care must still be taken to prevent recurrent operating costs of the public services from rising at a more rapid rate than total expenditures, for, if they do, then the country's ability to continue to finance programs of investment will be diminished.

In Part III of this Summary Report specific investment programs for the public and private sectors are described, and in most cases some idea of the probable magnitude of investment costs over ten years is provided. It would, however, be misleading at this time to suggest annual levels for public investment, priorities, or precise time schedules, for in the early postwar years there will be physical limitations on manpower, management and equipment which will take time to overcome. What the figures do demonstrate is simply that the demands for public investment will mount rapidly as the development program unfolds; and in addition to heavy investment requirements in such parts of the economic infrastructure as transportation, electric power, and control of water resources, there will be considerable commitments of a social nature, in education, public health and housing. These demands are

unlikely to be met unless resources can be acquired from the private sector by way of an efficient tax system.

Tax Policy

A first objective of tax policy, therefore, is simply to raise revenues from domestic sources to finance the development program - or in other words, to transfer resources which would otherwise have been devoted to private consumption into public investment. Obviously, taxation serves other purposes as well: it can be used to discourage conspicuous spending and speculative activities, and to promote savings; and it can also be used to procure the more equitable distribution of wealth. All of these purposes are relevant to the situation in which Vietnam will find itself when the war is over; and, in order to serve them, an efficient tax system, one that is easy to comply with and to enforce, is essential.

Important improvements and reforms have been introduced into the country's taxation system in recent years, and additional reforms are contemplated. Nevertheless, the present system is still unproductive, inequitable and inefficient. It is ill-prepared for peace.

In essence, what is needed is consolidation and simplification. Vietnam can more easily achieve the several purposes of tax policy with a few taxes than by the great variety of levies currently in use. We recommend an internal tax system consisting of three basic elements: it should be based on income and wealth; it should include a broadly based tax on consumption; and it should contain selective excise taxes for particular items of consumption.

The weakest feature of existing taxation is undoubtedly the taxation of income and wealth. Some of the weaknesses will be removed by the enactment of legislation now being drafted, and attention should then be given to the rehabilitation of taxes on real property and to the strengthening of death and gift taxation. As regards the tax on consumption, a start has already been made by the adoption of a value-added tax on certain items of production, and this could appropriately be extended to other kinds of economic activity. Substantial increases in revenue could be gained immediately, for instance, by applying the tax to large

enterprises in the service industries, while the "patente" should be converted to a gross income base and changed, eventually, into a value-added tax. Special excise taxes, on gasoline for example, ought to be more fully exploited.

The taxes on foreign trade are in a different category and special problems are involved. Such taxes provide a large proportion of governmental revenues, but the application and distribution of these taxes can serve other purposes as well, especially in providing the incentives needed to promote exports and the protection necessary to assist efficient local production to replace imports. Again, the essentials of any system of taxation on foreign trade if it is to serve these purposes efficiently, are simplicity in application and administration.

In 1964, customs duties accounted for almost one-third of all public revenues (excluding foreign aid and treasury advances); and customs duties, foreign exchange taxes, and the perequation tax together accounted for almost two-thirds of those revenues. The existing system of taxation on trade, therefore, can hardly be said to be failing in its role of raising revenue. But it does not fulfill its other purposes; it is certainly complex, duplicative and unwieldy, and probably extremely difficult to administer. The first thing to be done is to remove some of the complexities of the system, either by the complete integration of the austerity and perequation taxes into the tariff structure, or, in the case of the perequation taxes, by the adjustment of the exchange rates upon which they are based.

Goods imported into Vietnam are presently taxed at 139 different rates, ranging up to 555% of their landed value. The same commodity is not always treated consistently in the different types of taxes imposed; but the greatest weakness of the system lies in its failure to provide incentives and a reasonable degree of protection for domestic production. The qualification "reasonable" is emphasized. The strategy of import duties should aim at assisting the establishment of vigorous industries which will be capable of meeting and holding their own with competition. The duties imposed on raw materials or semi-finished products should not, therefore, be such as to result in prices for finished products which are continuously higher than the prices of imported goods; and although some protection is justifiable for new industries,

after a certain period of time it would be positively harmful to the economy to permit continued protection of domestic production if this can only be at high cost.

The policy chosen must therefore be a selective one which will establish an appropriate relationship between the rates of duty imposed upon raw materials, semi-finished goods and manufactured products, and which will not aim exclusively at the raising of revenue but equally at stimulating domestic production instead of taxing it. It is recommended that imports be classified into the following categories which are related to the significance of types of imported goods to economic growth and development.

- a) Industrial raw materials, capital goods, and inputs for the export industries: the duties imposed should be minimal ones, in order to avoid disguised taxation on exports and to facilitate the importation of capital equipment for the development of the economy.
- b) Unprocessed or processed components for those intermediate industries which are capable of attracting investment from overseas and of providing considerable employment: in this category, and depending on the extent of the incentives and protection desired, tariffs at generally low rates are indicated.
- c) Components for final assembly in industries in which there is high value added: such goods offer excellent opportunities for the development of domestic industries, provided the basic cost structure is favorable; and the duties imposed should be reasonably low, taking account of the fact that domestic industries will require time to expand production to efficient and economic levels.
- d) Consumption goods which cannot be produced relatively efficiently in Vietnam: this class will appropriately carry higher rates of duty than the first three, though exceptions may have to be made for commodities not obtainable inside the country and necessary for the maintenance of living standards.
- e) Luxury and semi-luxury goods: these should bear increasingly high rates of duty, and in some instances prohibitive rates might well be applied.

What would be the effect of such changes on revenues? Probably not very great. Reasonable assumptions are that after the war imported goods will continue to enter Vietnam on a scale of US \$500 to US \$600 million annually, and that capital goods will constitute half of this total. At tariff rates averaging from 10% to 20% on capital goods and 50% on consumer goods, receipts of duty would be in the order of US \$160 to US \$210 million a year, which is approximately what they are now.

Budgetary Policy

It is appropriate at this point to ask whether the budget is providing an effective tool for evaluating governmental expenditures programs. It does not appear to do so: the principal shortcomings of the budgetary system are inherent in its traditional line-item presentation of expenditures - that is to say, it is concerned almost exclusively with the development and presentation of information intended for day-to-day administration and control, to the neglect of forward planning, program selection, the establishment of priorities between programs, and the assessment of cost-effectiveness. The procedures by which the budget is compiled, as well as its format, detract from its potential usefulness as a means of allocating resources to the maximum advantage in terms of economic growth and social progress.

A variety of improvements are suggested in the principal Report. They include the merging of the US counterpart fund section of the national budget with individual title estimates (so that the complete expenditures proposed for a particular project or service may more readily be seen); rather greater flexibility in the administration of the budget after approval, by appropriate delegations of authority; a grant-in-aid formula for local authorities based upon their own performance in revenue collection, so as to control and limit the present system of subsidies; a clearer definition of the functions of the provincial and village governments, with a view to further delegation and decentralization of the national government's development functions; as a corollary of this, greater independence from central government regulations in matters which are primarily of local interest; and, finally, uniform budget, accounting and audit procedures for the state-owned enterprises.

While these measures would be helpful in increasing the usefulness of the budget as an instrument of day-to-day administration and control, they would not repair its principal defect: its inability to reflect and assist in planning and program selection. Gradual steps should now be taken in the direction of program budgeting. It would be impractical to suggest that program budgeting could be introduced throughout the government in the immediate future; but it could be initiated in one selected area of government activity as a pilot scheme capable of being extended as experience is gained and trained staff becomes available. Such a system would have great potential usefulness in Vietnam for arriving at approximations of cost of future development programs, and for determining, in the light of overall needs, a reasonable allocation of public investment resources between economic development and the social services.

POSTWAR EMPLOYMENT PROBLEMS

The potential problems are of two kinds. First there is a problem of immediate urgency, that of finding gainful work for all the people who have been displaced from their previous occupations, or attracted into new ones, by the circumstances of war. These include a majority of the men serving in the Armed Forces; very large, but fluctuating, numbers of farm families who have been compelled by the fighting to leave their villages and seek safety in the more populated and better protected areas; and all the men and women, including some of the refugees, who have found profitable, but impermanent, employment in construction, service and other industries which serve or are related to the war effort. The second type of problem is a long-term and basically a more difficult one: it concerns the maintenance of high levels of employment in an economy in which the labor force may expand more rapidly than the work opportunities. In the next ten years the economically active portion of the population will grow rapidly under the double influences of a high rate of population growth and an increasing percentage of the population participating in production. If present tendencies continue, the labor force will grow by about 300,000 a year in the next ten years, and it is possible that after ten years serious unemployment or underemployment problems will result.

The Redeployment of Labor

The task of redeployment of the labor force in the first years of peace will be less formidable. Demobilization on a significant scale shortly after the war ends, before the investment programs described in Part III have had time to take effect, would create difficult problems for the economy. However, it seems reasonable to assume that Vietnam's military establishment will be maintained at at least something like its present levels for some time, and there may even be some increase in this establishment as and when the strength of the Allied Forces in Vietnam is reduced. The early release of servicemen possessing the skills and qualifications which will be useful to the economy in reconstruction and development is not merely desirable but necessary; but these are not in such numbers as to suggest that they cannot be readily absorbed by economic activities. Indeed, as the investment programs described in Part III are implemented, there will be a shortage rather than a super-abundance of skills, and very large training programs - for other sections of the population as well as for servicemen - will have to be undertaken.

If the assumption is correct that for the present, at least, a large standing army will be maintained, the problem does arise of finding economically productive uses for it when it will not be engaged in military operations. It would be economically wasteful and socially undesirable for the army not to be so used, and there are, in fact, several types of public works, in particular localities, on which its construction capacity ought to be used in the first years after the war. However, these uses should be selected with care: obviously the Armed Forces should not compete with the civilian labor force in such a way as to make it more difficult to maintain high levels of employment, and it should not undertake works which the civilian sector has the capacity to carry out.

Refugees

Numerically, and in point of urgency, it is the refugees who represent the most serious of the immediate manpower problems. The great majority are originally farm families, but some have acquired new skills and have found profitable war-related employment in the urban areas. The latter will probably show little inclination to return to their villages.

In terms of employment, the refugee population represents something like 480,000 people who will be looking for work when the war is over; but probably about three-quarters of these are awaiting the opportunity to resume farming, either in the villages from which they originally came (and to which most will desire to return) or in other rural areas, to the extent that new and better opportunities for a decent living can be created for them. Some of the programs described elsewhere in this Report - for the development of land and water resources and for the resettlement of abandoned village lands - are designed to help them to do this. Possibly 300,000 hectares of once productive farm land is waiting to be brought back into cultivation, while the development of Vietnam's forest potential will require the work of 60,000 men, exclusive of the numbers who will find work in the timber processing industries.

Industrial Employment

In the period immediately following the war, industry is unlikely to provide very great opportunities for the residue of the refugees who prefer to stay in the towns, or for the men and women presently engaged in the industries which support the war effort. It will take time to get factories into operation, even if private investment is readily forthcoming. By 1978, the industrial labor force is expected to rise to between 250,000 and 300,000 persons, but in the first five years industry is unlikely to achieve more than half of the 1978 figure, barely 30,000 more than its existing labor force. However, no serious problem in absorbing these workers is expected. With a continuing large military establishment, some residual employment will be perpetuated; and the majority of workers leaving the military - certainly all those who have learned useful skills - should find ready employment in the domestic and service industries and in the public works which will be initiated in the period of reconstruction.

Public Service

On various occasions questions have been raised concerning the future of the public service. It is large, and in some sectors it appears to be underemployed. Measures to improve its efficiency and productive capacity are obviously desirable, but it is doubtful whether any significant

reduction in numbers is practicable. The responsibilities of government will be greater after the war, not less than they are now; in many areas of public service - agricultural extension, for example - activities ought to expand, not contract; and if any kind of reduction in numbers occurs - through the decentralization of government activities for instance - alternative employment can be found for capable men in regional development agencies and in provincial and local governments.

Employment Conclusions

Generally speaking, the investment programs set out in the following part of this Summary Report suggest that as long as the financial resources are forthcoming - from domestic as well as external sources - there is enough work to be done to occupy all those who will be in need of work when the war comes to an end. Problems may arise in particular localities; but labor has become more mobile than it was before the war, and an efficient job placement service (which ought to be put in place now, before the need arises) would largely resolve these difficulties. In some cases it may well be necessary to initiate special labor-intensive types of public works, in the context of the overall development program, and not necessarily of the highest priority from an economic point of view, to provide for any residual unemployment that may remain. It is vastly preferable to employ people on productive works, of however low a priority, than to provide relief.

The general conclusion is that, on the assumption that large military establishments will continue to be maintained and sufficient financial resources are provided for rural rehabilitation and resettlement, serious unemployment is unlikely to occur in the immediate postwar years. The forecast for the long run is less optimistic. Should the potential workforce continue to grow at the rate of 300,000 a year, it may not be possible to provide employment for all. With manufacturing industries estimated to absorb no more than 300,000 workers in 1978, agriculture will still be the principal source of employment. Over the next twenty years, programs of water control, irrigation and land reclamation should make more intensive agriculture possible on land already cultivated and could bring an additional million or more hectares of farm land into cultivation. This, of course, will make a substantial contribution to the long-term employment problem, but it will not solve it. In the long run, although Vietnam,

well endowed with resources in land and water, will be able to feed its rapidly growing population, unless effective measures are taken to limit the rate of population growth it will do so only at the cost of lower standards of living than its citizens ought to enjoy. In one sense the ten-year period of postwar reconstruction and development, in which radical but beneficial changes in the society will take place, also offer a period of grace in which the population can be taught the necessity for such measures.

PART III

SPECIFIC DEVELOPMENT PROGRAMS

This part is concerned with the work to be done, and, to some extent, with how it may best be done, and what it is likely to cost. At this stage, the recommended programs are not presented in detail but rather in outline, and they do not yet constitute operational plans fully ready for implementation. All require elaboration and refinement; projects of significant scope will have to be subjected to careful feasibility studies before they are submitted for financing; and priorities have yet to be established. However, while the items and details of these programs are susceptible to correction, the total volume of the activities described in this part is likely to be a reasonably accurate estimate of what Vietnam can accomplish in the first ten years of peace - and of what it ought to accomplish if the objective of economic independence is to be brought within reach at the end of that time.

Our view of the prospects is optimistic, but not overly so. It is taken from the standpoint of what is actually known about the resources of the country, and not of what has yet to be discovered. Vietnam's known resources consist essentially of its soil, the water of its rivers and coasts, its forests, and the skills its people have or have the capacity to acquire. These are, in fact, substantial assets, and it would be unwise to predict growth on the strength of others which have yet to be discovered. Thus, there is no discussion in this part of the possibility of any mining development: a careful program of geological survey and minerals exploration ought to be initiated in the postwar period, but its results, whatever they may be, are unlikely to contribute to economic growth in the first decade after peace is negotiated, though they might conceivably do so in the second one.

As far as natural and human resources are concerned, Vietnam is a relatively fortunate country. There is no doubt that it can feed itself, and there is no doubt that it can produce surpluses of food and

fiber for sale to other countries. It has the capacity to manufacture for itself a variety of goods which it now purchases from abroad. The beneficial exploitation of these resources, as recommended in the sections of the report which follow, can result in a viable economy and in self-sustaining growth in the not too distant future.

Will this actually happen? We are convinced that it can, provided certain essential conditions are satisfied. The first is that there shall be a firm and lasting peace; another is that appropriate economic policies, as described in Part II, are applied, so that private as well as public investment, from inside Vietnam as well as from overseas, will be made available for the development effort; and a third, certainly not less important than the others, is that the mass of the Vietnamese people can be brought to believe that these developments will provide better lives for them and their children, and that they will spontaneously participate in them.

THE DEVELOPMENT OF AGRICULTURE

This is and will continue for the foreseeable future to be the most important sector of the Vietnamese economy, providing livings for from 70% to 80% of the population and contributing the greater part of the gross national product. But it is not a sector of the economy which flourishes under present conditions. It consists for the most part of a very large number of very small farms which operate on a subsistence or semi-subsistence basis. In spite of rising prices for most farm produce in recent years, production, with some exceptions, has declined or has been stagnant. Vietnam no longer produces sufficient rice to feed its population, and production of rubber, once its principal export crop, fell by almost half between 1964 and 1968. Exports of tea have also declined. Vietnamese farmers, about three-quarters of the total population, receive only one-third of national incomes and must be regarded generally as an economically disadvantaged group.

In a previous section of this report it was asserted that a satisfactory growth rate for the economy as a whole implies the doubling

of the production of the nation's agriculture within the first ten years after peace returns. Some increases in production can certainly be achieved by the development of new lands under projects included in the regional development programs, notably in the Dong Nai basin, in the Se San and Sre Pok valleys of the Central Highlands, in the coastal plains of the five northern provinces, and in the valleys of the Central Lowlands. But there are large areas of presently unexploited land which do not readily lend themselves to development in these early years. These include, for instance, no less than two million hectares in the Mekong Delta consisting mostly of acid sulphate, saline, and acid peat soils, the exploitation of which will be expensive, will yield uncertain benefits, and ought therefore to be approached with caution. In such areas we recommend comprehensive soil and hydraulic investigations, but any extensive development in the next ten years would represent an extravagant use of resources which can be more profitably employed elsewhere.

For the most part, accordingly, it is suggested that the desired increase in overall production will come from the intensification and diversification of agriculture on existing crop land, including both 2 million hectares of highly productive soils in the Mekong Delta, and extensive areas of cultivable land which have been temporarily abandoned by farmers during the fighting, and the lands in all other regions which have continued to produce during the war, but in which yields per hectare can be dramatically improved by water-control, new crop varieties, increased use of fertilizers and pesticides, and better methods of cultivation. However, programs of both types are contemplated.

The objective in these ten years will be to produce enough food and fiber to meet domestic requirements - which will increase rapidly under the influence of a high rate of population growth and an expanding industrial sector - and to provide surpluses for export to earn foreign exchange to pay for necessary imports.

Agricultural Priorities

In the strategy of agricultural development it seems clear that the highest priority should be given to the crops grown primarily for domestic consumption and now in insufficient supply. Rice is obviously

the most important of these; pork, poultry and animal feeds are others. In-country requirements for rice are expected to rise to almost 6 million tons (paddy) by 1970, and by 1990 they will be almost 10 million tons. There should be no great difficulty in meeting these long-term requirements as water control projects in the Mekong Delta and other regions are progressively implemented: and the short-term requirements can probably be satisfied fairly easily within a year or two of the end of the war, permitting Vietnam to dispense with imports and even to resume export of the crop in a few years. For the next ten years surpluses should be disposed of without difficulty, but the long-run world market prospects for rice are uncertain, so it is not an export which Vietnam can rely upon indefinitely.

The next priority ought to go to commodities which formerly entered substantially into the export trade but no longer do so: rubber for instance, tea, cinnamon and copra. The future of rubber exports (like that of rice) is obscure. But Vietnam does have some established markets for its crop. Although exports have diminished, they have by no means disappeared; the country's rubber plantations represent a substantial investment which ought not to be wasted; and some rubber is going to be needed for domestic industry. The revival and even the expansion of rubber cultivation therefore deserve careful attention. Tea, peanuts, cinnamon and copra are all crops with which Vietnamese farmers are already familiar, and the prospects for increased production and exports in the next ten to twenty years are good. A third group of crops deserving early attention are those now imported in volume but which can probably be produced in the country, such as kenaf, feed grains, cotton, and silk, some of which have, in fact, been cultivated previously in Vietnam. Finally there should be continuing investigation of and search for entirely new products which, on the basis of experience in other South-east Asian countries, may have potential either for export or for domestic use or for both. This might include crops such as palm oil, processed cassava, cocoa and milk.

An evaluation of the potential for agricultural production by commodity and by area is now being carried out: the prospects for intensified, diversified and increased output of crops is good, and Vietnam also has the potential to become an important producer of animal protein and fish.

The strategy for development, then, aims first at the rapid restoration of Vietnam's ability to feed itself and supply at least some of its industries from its own resources, and then at the promotion of exports. By what means is this to be accomplished?

The answer is by a whole range of diverse but related programs, some of them appropriate responsibilities for the public sector, some appropriate for the private sector, and several in which the public and private sectors ought to cooperate. They embrace such matters as research, extension and training; mechanization; agricultural credit; the marketing processes: supply and distribution of such inputs as fertilizers and pesticides; land tenure; and land capability studies. Recommendations concerning the most significant of these are presented briefly below; all are discussed at greater length in the principal report.

Research

Initially, at least, it seems desirable to concentrate upon those types of research that will give rapid results, rather than upon basic, or "pure," research, which Vietnam does not, in fact, yet have sufficiently specialized scientists to carry out. Suitable and practical matters for investigation in the early postwar period are soils capability and distribution (soil surveys, as yet preliminary and incomplete in Vietnam, are an obvious prerequisite for the proper exploitation of new lands), fertilizer and variety trials, the control of plant diseases and pests, station and field tests of new crop introductions, the adaptability of various breeds and cross-breeds of livestock and poultry to different climatic conditions, methods of fish culture, and the testing of new feedstuffs and forages. Whatever effort is given to this kind of research program, at least as much, and probably much more, should be given to seeing that the results are reported to and understood and applied by the country's farmers. At the present time the research and extension services of the Ministry of Agriculture, weakened by the mobilization of a very large proportion of their technical staffs, are not capable of the extension effort required. As their employees are released by the Armed Forces, they will have to be retrained, but large numbers of additional extension and research workers will have to be recruited and trained as well. This will be a priority task for the years immediately following the war, if an expanded extension program is to have effects on production in the early 1970's.

Financing Agricultural Development

Much more generous provision for agricultural credit is another requirement, not merely for the simple task of helping farmers to purchase their supplies of fertilizers, the principal purpose of credit at the present time, but also to finance and expand the commercial operations of suppliers of farm machinery, fertilizers, seeds and other inputs, to strengthen the marketing structure, and to promote the growth of agri-businesses aimed at the integration of the production, processing and marketing functions.

The loan financing required to support agricultural production is assumed to be the equivalent of 10% of the value of production: on that basis, credit requirements in 1980 will be about VN \$30 billion, approximately ten times the amount of funds available for the purpose in recent years. Up to half of the total supply of credit should originate in the private sector, but the rest is expected to be provided by the Government through the Agricultural Development Bank and similar agencies, and, with a carry-over of some loans for longer terms than one year, this will represent a public commitment of about VN \$20 billions, equal to US \$165 million in ten years' time.

The use of some credit for the development of "agri-business" has been mentioned. Although agriculture in Vietnam is not likely to shift quickly from its present semi-subsistence character towards general commercialization, there are indications that some producers are beginning to develop large integrated farm enterprises concerned with more than merely cultivating and harvesting the crop. In the rubber industry, this pattern is already well established, and several proposals have recently been made for the establishment of poultry and hog enterprises involving integration of production and marketing in varying degrees. As a rule such integration not only increases output but does so with greater efficiency and at lower costs. In Vietnam, at the start, agri-business enterprises might be suitable, particularly in livestock and fisheries, and a number of such enterprises should be assisted to establish themselves in the postwar decade.

Distribution of Supplies

Two important aspects of the development of agriculture should remain, in our view, the concern primarily of private business. The first is the distribution and sale to the public of the supplies which modern agriculture demands - fertilizers, pesticides, farm machinery, improved seeds, etc. Although there are a few cooperatives and semi-public associations which now operate in this commerce, their role is a minor one, and the bulk of the trade is in the hands of private dealers. No radical changes are recommended. Contrary to popular belief, supplies are readily available, the trade is reasonably competitive, and profit margins are low. In this field the private sector should be encouraged to expand its activities; and as long as undue restrictions on the trade and on prices are avoided, it is sure to do so and no problems of distribution should arise. Credit, however, is vital in making inputs available whenever and wherever they are wanted, and it is here that the Government can and should provide more assistance to farmers and dealers.

Marketing and Prices

The second aspect of agricultural development which concerns the private sector is marketing. Generally, the existing marketing structure, erected and operated almost entirely by private enterprise, appears to be well adapted to present patterns of agricultural production; and there is no reason to suppose that it cannot adjust itself to fit future changes in this pattern as readily as indigenous marketing systems in other developing countries have done. As long as restrictive controls are not imposed on it, and provided that credit is readily available and the long-range outlook for investment becomes more favorable, it will probably adjust without any difficulty at all.

Prices, needless to say, will exert strong influences on both production and marketing. Innumerable examples can be cited, in Vietnam and in nearby countries, of the promptness with which so-called unsophisticated farmers respond to price incentives; and there are as many examples of the adverse effects on production when prices are depressed.

At the same time price levels are vitally important in exports. In Vietnam, continuing inflation of prices would lead to a situation in which, under existing official exchange rates, the country's potential exports will be priced out of international markets. Exports of tea, for instance, which have fallen considerably, are maintained at all only by grace of substantial subsidies. But subsidization is not likely to be a permanent or satisfactory solution for the entire range of Vietnamese commodities capable of entering the export trade. In some cases it might be preferable to liberate the trade and allow prices to find their natural levels; but in others direct intervention may be indicated, by support prices, purchase programs, export and import restrictions, or even price controls. The point we wish to make is that none of these alternatives should be adopted without careful consideration of the peculiarities of each situation. The price mechanism is a very delicate one; and, without care, the effects of intervention upon production may easily be the reverse of what is intended.

Land Policy

A principal objective of any agricultural development program is to raise farm incomes and improve rural standards of living. The scale of farm operations is obviously relevant to this objective. The average size of a farm in Vietnam is estimated to be only 1.35 hectares, and it has to be admitted that there are relatively few crops of sufficient value, and sufficiently in demand in domestic or external markets, to provide a good living for a family from so limited an area. Certain crops, oil palm, for example, which might have considerable potential for Vietnam, cannot be grown economically and competitively except in large, estate-sized holdings.

The question of farm size is important both to the programs for land settlement suggested earlier in this section and to land reform policies. However desirable, from a social or political point of view, the redistribution of large holdings may be, the fragmentation of farm holdings for its own sake and without regard to possible consequences on production and farm incomes would be unwise. Land reform should not, it is felt, be carried so far as to make all profitable large enterprises impossible. They are potential employers of farm labor, as well as potential contributors to national wealth; and in many cases the solution to

rural poverty may be found in an efficient well organized farm labor force earning more in wages than they could possibly have in the surpluses to be won from uneconomically-sized small holdings, no matter whether these are operated by tenants or by proprietors. The solutions, of course, will vary from place to place and from crop to crop, and where it is essential to reduce or abolish large land-ownerships it may sometimes be possible to achieve efficiencies in production by the formation of producers cooperatives. Perhaps the point to be made is that in the country's future there will be room for plantation enterprises as well as peasant farms; hopefully both types can be made to thrive.

THE DEVELOPMENT OF FOREST RESOURCES

All the regions of Vietnam, with the single exception of the Mekong Delta, possess sufficient, probably ample, forest resources to supply the needs of domestic industry and support exports to overseas customers. About 6 million hectares of the country's total land area are covered by mixed hardwood forests, containing valuable species in considerable demand in world markets. In one region, the southern provinces of the Central Highlands, there are sizeable and unusual stands of pine which would supply ideal material for the development of a sulphate pulp industry. In Quang Ngai province there are stands of cinnamon which formerly supplied bark of unsurpassed quality to markets in Europe and the United States.

These resources are presently sadly underexploited, and Vietnam is even importing timber from overseas to satisfy its construction needs. This situation arises partly from the insecure state of the forest areas, but partly also because Vietnam has inherited, and has never had time to revise, forest management policies and procedures which are out-moded and conservative and ill-suited to its economic needs. The country's interest in its forest resources lies in their capacity to support vigorous wood-based industries, supplying domestic and export markets and providing remunerative employment for its workers and profitable investment opportunities for its businessmen. Existing forest policies and management, especially the procedures for licensing and taxing log production, are complicated and cumbersome and subject to abuse. By raising prices of wood to uneconomic levels they militate against the country's

interest instead of advancing it; and unless they are reformed they will continue to do so even when peace returns and the forests are once more safe to work in.

Policy Requirements

As a start, there is a need to reconsider and revise the premises upon which forest policy is based so that they will conform to economic realities. In fact, a request has recently been addressed to the United Nations for specialized assistance for this purpose. (As far as is known, however, this assistance has not yet been given.) We suggest that when this task is undertaken it should not be considered the exclusive preserve of professional foresters; economists and representatives of the timber industry are equally concerned with the beneficial exploitation of publicly-owned forest resources, and their views should be taken into account before recommendations for a new forest law are presented to the legislature.

Taxation of the logging industry could, of course, be simplified (it is believed without loss of revenue) in advance of these basic reforms. A recommendation has been made that the great variety of charges levied upon the industry (at a variety of different points in the logging and marketing process) should be consolidated into a single production tax levied at the saw-mills. This has not yet been done; but restrictions on logging activities have at least been loosened - by reducing the number of check-points at which logs are inspected, for instance, and by improving the procedures under which standing timber is sold to logging enterprises. Nevertheless, the logging industry is still depressed, and it operates only at a very small fraction of its capacity.

In addition to these questions of forest policy and taxation, there are other areas in which fuller exploitation of forest resources could be achieved, even in present conditions, by relatively simple measures.

The export of cinnamon bark is presently prohibited, for reasons said to be related to security. It is worth asking whether this restriction is really necessary and whether the good it does to the war effort compensates adequately for the harm it does to the economy. The

traditional trade was small and specialized, but it was a flourishing one; and if it can be resumed, within a year exports could reach 1,500 tons, worth US \$3 million in foreign exchange earnings. Within ten years the trade in cinnamon bark might be worth as much as US \$10 million, a not inconsiderable item in the country's exports, and substantial added values might be gained by processing the bark in Vietnam. What is essential at the present time, however, is to resume the trade on whatever scale is feasible; for with no exports at all Vietnam is in fact losing its traditional customers to its competitors.

Sawmilling

The Mekong Delta is the only region of Vietnam which is not heavily forested and cannot satisfy its needs for industrial wood from its own resources. Yet a considerable sawmilling industry has established itself in the Delta, with 60 mills and a combined capacity of 240,000 cubic meters of sawn lumber a year. At full capacity, the Delta's sawmilling industry should be able to keep 1,200 men in full employment and add VN \$960 million to the gross national product. In fact, in present circumstances, the industry is operating at only 5% of its capacity.

The origins of this sawmilling industry in the Delta appear to lie in the availability of low cost logs transported from Cambodia by the Mekong and Bassac Rivers. Some logs still reach the Delta in this way, but only in limited quantities and for a few favored provinces. The authorization of increased imports from Cambodia is recommended. If the Delta's requirements for industrial wood (at present about 160,000 cubic meters a year, and likely to increase rapidly) are to be met, this is essential at a time when domestic supplies are not available. There may also be advantages in continuing to import even when the domestic logging industry revives, for it would help to keep lumber prices to reasonable levels, promote increased use of wood, and result in increased employment. Moreover, any opportunity to promote international commerce in Southeast Asia should be taken: Cambodia can be a present supplier of some raw materials for Vietnam's industries, but it is also a potential market for some of its manufactured products. There is a sensible mutual interest to be served.

Throughout Vietnam the program of reconstruction and development is going to demand greatly increased production of lumber at significantly lower prices than those now prevailing. This probably cannot be done without reorganization of the sawmilling industry as a whole. A review of the legislation which regulates logging and sawmilling is basic to such a reorganization: some activities which the law presently prohibits appear to be harmless, and might well be made legitimate; but the principal objective of reorganization would be a reduction in the numbers of saw-milling enterprises (there are 500 licensed sawmills alone, and many others which are not licensed) so as to ensure that those which do operate do so at full capacity. Another objective would be to assist the establishment of sawmills outside of Saigon, where there is an unnatural and uneconomic concentration of these enterprises. The industry is well suited to operate in provincial capitals and smaller towns, and will be a useful source of employment in these places.

Wood-Based Industries

Recommendations for the promotion of specific wood-based industries, including wood-pulp, plywood and veneer, are submitted in the section immediately following, and other aspects of the development of forest resources are treated in those regional development programs to which they are appropriate. Work now being undertaken has important long-term implications: it includes an assessment of the capacity of the forests of the northern provinces to support a plywood and veneer industry in Da Nang; preparation of a plan to rehabilitate the national forests after the neglect and damage of war; forest reserves and national parks; and reafforestation projects in Tuyen Duc and Phan Rang to serve a wood-pulp industry.

THE DEVELOPMENT OF INDUSTRY

The effects of the war on industry have been diverse. Some industries, beverages, tobacco and canned foods, for instance, have benefitted considerably from it, in part owing to the presence of Allied Forces, but mostly by the movement of country people into the towns and

the increased purchasing power of the population in a period of full employment. In other industries, including textiles, rubber products, glass and ceramics, progress has been slow or non-existent because these enterprises have been unable to reach all of their markets. On certain branches of industry, the effect of the war has been positively depressing. The most important of these are producers of ethyl alcohol, cane sugar, pulp and paper, vegetable oils, natural silk and coal. They have encountered a variety of difficulties - shortages of raw materials, lack of credit, the loss of skilled workers, and the usual problems of marketing and distribution to be expected in conditions of insecurity. In the last year, moreover, certain industries have suffered actual physical damage, and some loss, consequently, of their production capacity.

Initial Tasks

In the immediate postwar years, the tasks of industrial reconstruction are readily identified: the restoration and repair of physical facilities which have been lost or damaged; the completion of plants, such as the Quang Ngai sugar mill and refinery, construction of which has been held up by the circumstances of the war; and the revival of depressed industries. Where depression is the result principally of shortages of raw materials, as it is in the cases of cane sugar and natural silk, then revival should occur quite naturally as the countryside becomes secure and the flow of these materials is resumed.

Some new developments may occur in these early years. Partly because of lack of confidence, partly because of the devaluation of the currency in 1966, a good many private investment decisions which might have been made in the last three years have been deferred. This has not, in fact, been altogether disadvantageous, for it has prevented at least some investments which would not have been wise and would not have resulted in economic and competitive industrial enterprises. An opportunity is thus provided to re-assess previous plans in the light of new forecasts for the postwar period and a new definition of investment objectives. A good many of these investment decisions will be renewed as soon as the war comes to an end; suitable credit policies and the use of other incentives will be helpful in ensuring that the decisions implemented are those which best meet the objectives.

Alternative Industrial Strategies and Priorities

Essentially, Vietnamese industry can move in one of two directions. It can either embark on a wholesale and indiscriminating course of import substitution, relying on high protection and resulting in high production costs, the inefficient use of resources, stationary markets, and, ultimately, stagnation; or it can concentrate upon the development in selected sectors of efficient, relatively capital-intensive enterprises, with low input costs and high labor productivity, which will be able to hold their own in international competition. In the short run, the first of these alternatives may appear to offer some attractions, but they are specious ones; in the long run there can be no doubt whatever that it is the second alternative which offers the best prospects for the economy.

It will imply some discipline for development and some adherence to the general principles which follow. First, the highest priority must be put on production at the lowest possible costs of the inputs required by the agricultural sector of the economy - such supplies, for example, as fertilizers and pesticides. Low cost production is important; in rare cases it may even be advisable to subsidize production to keep down the eventual costs to the consumers; but almost always it will be preferable to delay domestic production until markets have developed to a point at which economies of scale will operate and consumers can be supplied at prices equal to or less than the c. i. f. prices of imported commodities before duty. Some markets in Vietnam have already developed to that point, but not all. Secondly, a similar rule should be applied to the production of most other basic commodities: production should be encouraged only when there is an expectation that within a reasonable period of time it will be at costs which will at least approach levels competitive with prices in other countries. Third, in the manufacturing sector of industry the first priority and the greatest encouragement should be given to types of production for which costs can be reduced so as to make it possible for the products to be exported. Fourth, as a corollary of the above, industrial promotion and financial assistance for industry should be selective and discriminating. And finally, entrepreneurship should be encouraged, provided with technical assistance, and enabled to establish joint ventures with foreign firms.

The predominant characteristic of industry in Vietnam has been a proliferation of small plants, many of which, if faced with the free entry of competing imports, would be most unlikely to survive. The profitability of these small plants is dependent on high tariff protection. Far from reducing demands for the expenditure of foreign exchange, as is sometimes argued, in many countries the small plant philosophy has actually increased those demands in the long run. The small-plant philosophy is therefore at variance with one of the prime objectives of industrial development: the growth of foreign exchange earnings, which can only be achieved by the promotion of exports supported by efficient import-substitution.

An example of the uneconomic proliferation of small plants in Vietnam is found in the large number of workshops which manufacture parts and accessories for machinery of various types. They may be expected to increase rapidly in number after the war, and they could develop into a substantial and efficient mechanical industry. However, this is unlikely to happen until these small family businesses regroup themselves into larger and better organized enterprises. At that point it would be desirable to consider restricting the importation of machines (particularly motor scooters) to a limited number of brand names, and to make arrangements with foreign manufacturers for technical assistance for Vietnamese plants in both assembly and the manufacture of a progressively increasing number of parts. In this way, instead of a proliferation of workshops, the capacity of which is inherently limited, Vietnam would acquire a substantial assembly industry capable of expanding into the manufacture of a whole variety of consumer durables.

A Ten-Year Investment Program

Taking into account the existing structure of the country's industry, comparable experience in neighboring countries, the availability of raw materials, the requirements of agriculture, probable developments in world markets and other relevant factors, an attempt has been made to predict the shape and size of industry in Vietnam in 1978. The population at that time is expected to be about 24 million, and value added in manufacturing might approximate the equivalent of US \$500 millions, or twice what it is now. The fixed investment necessary to reach this

level of value added is estimated at the equivalent of US \$759 million in an eight-year period, starting, conservatively, with about US \$108 million in the two-year period, 1970-1971, and increasing to US \$304 million in the two-year period 1976-1977.

In order to meet such objectives, each branch of industry needs its own development strategy based on the particular criteria appropriate to it. In manufactured food products, for example, substantial exports may be achieved in the late 1970's; but in this branch economies of scale are particularly important, and development is seen in terms of relatively large units with high labor productivity and low production costs. Thus, investment in sugar, flour, dairy products and meat processing should probably occur in units of approximately US \$10 millions at a time, though it is not yet possible to predict exactly when agricultural production and market demand will together warrant any one specific development; detailed feasibility studies will be required for each product. The future of the food processing industry in Vietnam is considered promising, and investments over the entire eight-year period at a level of about US \$117 million might be warranted. Obviously, the growth of the industry will have to be coordinated closely with agricultural planning and development; and the potential for an export trade in processed foods will depend substantially on the structure of farm prices. At the present time, and at present exchange rates, the level of farm prices is so high that the country probably could not compete in world markets in any of the possible product areas. In addition, a successful export-oriented food-processing industry will require considerable technical assistance from overseas, so some joint ventures with foreign companies would be most desirable.

The beverage industry is already developing well, and no special assistance or incentives appear to be required for it. The major issues here concern the practicability and the timing of the substitution of domestically produced inputs for those inputs now imported (malt, soft drink concentrates, hops, barley, tin cans and cork) and the establishment of an appropriate long-range tax policy. The tobacco industry is also well developed and serves as a major tax base. The principal problem is essentially an agricultural one, the need to develop adequate and acceptable supplies of domestic tobacco to replace the imports on which the industry is now heavily dependent.

In the textile industries, substantial expansion and modernization have occurred in recent years. The emphasis after the war would best be put on ensuring standards of high quality, greater productivity and competitive input costs, particularly in the production of synthetics. Domestic production of synthetics should be delayed until market growth is sufficient to justify efficient plant sizes and thus economies of scale. Capital costs per unit of output are high in synthetics; and current plans to install two separate nylon plants, each of 2.5 tons per day capacity, really ought to be deferred until the market indicates the desirability of investment in one plant of twice the capacity of the two smaller plants combined.

The wood products branch is one of great potential growth, because of the abundance in Vietnam of raw materials, both coniferous and hardwood. In present conditions of security, expansion on a broad front is unlikely; although, as indicated in the previous section of the report, some measures could be taken immediately to rationalize and increase production in the saw-milling industry. Planning ought to be started now for important wood products, the development of which might occur rather rapidly when the war is over - hardboard (particularly particle board), plywood and veneers, and sawn wood. In the pulp and paper products industry, the planning strategy suggested is to tie down export markets, possibly by equity investment, to avoid installing mills of uneconomic size, and to provide for the eventual integration of pulp production with the manufacture of paper and paper products. The production of long-fiber bleached sulphate pulp, primarily for export, is a particularly promising possibility which is mentioned subsequently in this summary and discussed at greater length in the principal report.

There are, of course, other branches of industry in which investment is expected and growth will occur in the period of reconstruction and development, provided appropriate policies and strategies are applied - apparel and footwear, rubber and rubber products, manufacture of chemicals, petroleum products, non-metallic minerals (including cement) and machinery. There are still others in which better progress will be made (eventually) with less haste. In the manufacture of base metals - such as steel, aluminum and copper - economies of scale are enormously important. Development should not be forced but allowed to come naturally, and the prudent course at present would be to postpone investment at least for several years. Backward integration from

aluminum and copper products should ultimately develop, but it will do so slowly; a direct reduction furnace for steel, using imported iron or pellets, might be justifiable about 1978, and a review of the situation and an investment decision may be possible two or three years before that date.

Three Initial Projects

Three substantial investments are recommended for immediate consideration: nitrogenous fertilizers, mostly for the domestic market, long-fiber bleached sulphate pulp, mostly for export, and the manufacture of veneers and plywood both for domestic markets and for export.

The case for an ammonia-urea fertilizer complex in the Mekong Delta is already a very strong one; and we recommend the undertaking, in the immediate future, of a feasibility study on the lines recommended by the Tennessee Valley Authority in the report it prepared for Vietnam in 1967. Final decisions on plant size need not be taken until present consumption trends are confirmed, for a considerably greater production capacity than has hitherto been suggested may well be justifiable. In this connection, it must be admitted that it is impossible to find any economic justification for pursuing the production of fertilizer as originally planned at An Hoa-Nong Son. Factors other than economic ones may well have to be taken into consideration before a decision to abandon this already obsolete project is taken, and obviously an attempt should be made to salvage as much as economically possible of the investment already committed. But it is our reluctant conclusion that the production of fertilizer at An Hoa is bound to result either in high costs to the farmers or in high costs (in the form of subsidies) to the general public, and it would be a mistake to persevere in it.

With foreign technical assistance, and, desirably, some foreign investment, an excellent opportunity exists to promote an efficient and competitive industry for the production of bleached sulphate pulp. The best location for the industry might be at Da Nhim in Tuyen Duc province, where it would have the advantage of proximity to water and power supplies and to the source of its raw material, the coniferous

forests of the southern provinces of the Central Highlands. A full feasibility study, followed by engineering design, should be carried out as soon as possible. Among the attractions of the industry for Vietnam are the high gross value of output for each unit of material used, and dependable markets, both domestic and overseas, for the product.

This is equally true of the third industrial development recommended for early initiation, a veneer and plywood factory, which could be located with equal convenience at either Saigon, Nha Trang, or Da Nang. The desire to disperse industry, now over-concentrated in the Saigon-Bien Hoa area, and the even more imperative need to provide industrial employment in the five northern provinces, suggest to us that Da Nang would be the best choice. A plywood and veneer industry offers high employment and high value added for a moderate investment cost. The establishment of such an industry does not have to wait upon the resumption of domestic log supplies; it can at least start to operate with imported logs. This would not prejudice the subsequent exploitation of Vietnam's own forest resources whenever that may be possible. For an investment of approximately US \$2 million, there would be an initial output of 20,000 cubic meters of plywood and veneers, and the plant should be so designed as to permit expansion as markets develop and the domestic logging industry revives.

The Role of Government Policy

The next ten years may be expected to show a steady but substantial increase in industrial expansion, with industry contributing a larger relative proportion of gross national product, though it will still, at the end of the period, be a smaller share, in absolute terms, than that of agriculture. What can the public authorities do to encourage and support this healthy development?

Obviously the Government is properly concerned with a great many aspects of industrial development: with the establishment of investment priorities, for instance; with the creation of a physical environment in which industry can grow; with the dissemination of information about investment opportunities; with the creation of incentives for the attraction of domestic and foreign capital; and with providing such institutional

support as may be necessary to stimulate exports. Some financial intervention by the Government may be desirable in particular cases: for vital industries in which adequate private investment is not forthcoming; to encourage the growth of capital markets; and even to provide initial support for privately owned and operated development banking institutions. The Government should be the prime mover in guiding the industrial development process in any or all of the above ways. But it is suggested that the Government should not seek to intervene more than this; control and regulation of industry, as a deliberate government purpose, would only result in the loss of the incentives which induce the private sector, whether it is Vietnamese or foreign, to invest.

Government regulation of industry is not, of course, the only reason, or even the principal one for slow industrial growth in the last few years; but it certainly has had its affect. The complicated procedures of the official Investment Commission have made it extremely difficult to invest in industry. It is recommended as a start that the Investment Commission should be abolished; for the public interest in industrial development would be better served (and private industry less disconcerted) by the establishment, instead, of a simple list of priority industries, all of which would qualify for investment privileges. The function of the Industrial Development Center, which in great part has inevitably grown into a regulatory agency, would then be simply to satisfy itself whether a project meets or does not meet the requirements of the list. It would, thereafter, concern itself only with the business of those projects which have applied to it, as an agency of the Central Government, for direct financial assistance.

Support to the private sector should normally be channeled through a private development bank. An agency of this type, though it is still in its early stage of development, already exists in Vietnam, the Vietnam Development Bank, the successor of SOFIDIV. With, at the start, some assistance from overseas, a low-cost loan, and government guarantees for its bond issues, a private development bank of this sort should aim at self-sufficiency within a few years and should be capable of achieving it.

THE REPAIR AND DEVELOPMENT OF THE INFRASTRUCTURE

The damage done to the infrastructure by war, and by the neglect of maintenance during the war, needs no description. It has been estimated to amount to VN \$30.4 billion, or US \$250 million. The transportation system (including the highways, the railroad, and the inland waterways) has suffered more than other parts of the infrastructure; but there have also been losses in the telecommunications system, in electric power generating and distribution plant, and, above all, in housing. Moreover, mere repair of these facilities, to restore them to the state in which they were in 1960, would fall far short of what the economy will need in a period of vigorous growth. Consequently, the task and the cost of equipping Vietnam with the infrastructure it will need to serve an expanding economy, in 1978 and in following years, might be expected to be formidable.

The actual magnitude of the task and its cost will, in fact, be less than might be expected at first glance, for there have been gains and compensations as well as losses during the war. Under a program initiated by allied military forces in 1967, over 2,700 kilometers of highways will have been reconstructed to Class A or Class B standards by the end of 1969; the railroad will probably have been rehabilitated by the same date, through the combined efforts of the National Railroad System and the Vietnamese and American Armed Forces; marine port capacity has been very considerably expanded during the war and, with only minor improvements and additions, will be adequate to serve peacetime needs throughout the first decade after peace; military telecommunications systems exist, which, though they may not be entirely suitable for civilian use, may substantially reduce the cost of new civilian installations; airfields exist in abundance, certainly in excess of any foreseeable needs; and though the Republic has temporarily lost the use of its only large hydro-electric facility, the damage done to this can easily be repaired. Some additional generating capacity is being provided for Saigon, and a useful start has been made in supplying electric power to certain rural areas.

Public investment in the infrastructure in the next ten years will therefore be less than might have been expected. It will amount to about the equivalent of US \$667 million. The works recommended are described below.

Transportation

The highway reconstruction already being undertaken by MACV is a comprehensive one, which, with a few minor additions and improvements, will provide adequately for the country's national and interprovincial highway routes through 1985. The changes we recommend are the construction of additional traffic lanes on the heavily travelled roads converging on to Saigon, and a new road linking route QL-14 at Doa Thong with route QL-13 at An Loc. It is assumed that, whatever progress is made in peace negotiations, the MACV highway construction program will be continued at least until the end of 1969; and if the work is on schedule at that time, 2,704 kilometers of national and interprovincial roads will have been reconstructed and improved for an expenditure by the U. S. Department of Defense of US \$312 million.

The works required to complete the highway network after 1969 will be the reconstruction of part of road QL-1 between Phan Thiet and Xuan Loc, the reconstruction of interprovincial roads in the Mekong Delta and the III Corps Tactical Zone, and the reconstruction of most of road QL-14 serving the Central Highlands; the construction of certain highway links in the country's northern provinces; and the completion of the Saigon by-passes. Together with the minor additions referred to in the previous paragraph and the cost of re-establishing communications with areas which have been cut off by the deliberate destruction of roads and bridges, these works can be accomplished at a cost of approximately US \$175 million.

This estimate of needs does not include the cost of building simple farm-to-market and other minor roads, such as can be appropriately undertaken under the regional development programs, described later in this report, or by local authorities. Expenditures of this sort will not be very great, and will not add appreciably to the indicated investment costs. On the other hand, the annual recurrent cost of maintaining the highway system will be a more significant burden to the national budget.

Even assuming that much of the construction equipment already in Vietnam will be inherited by the Ministry of Public Works at the end of the war, the annual cost of highway maintenance will be about VN \$659 million (US \$5.5 million) in 1971 and will rise to VN \$818 million (US \$6.8 million) by 1978. Elsewhere in this report there is emphasis on the need to take into account operational costs, as well as capital investment, and on the need for fiscal reforms in order to provide resources for both these purposes.

Reconstruction of the railroad will be completed by the end of this year, and the railroad should be able to operate immediately after the war without any additional capital expenditure. Our concern here is whether it can do so profitably. It will have to compete for traffic with a reconstructed and improved National Route 1, and also with coastal shipping which has been developing rather rapidly in the last few years. The possible reopening of communications and trade with North Vietnam in the postwar period might conceivably help the railroad to operate economically, but railroad operations and the financial returns will have to be closely watched. Possibly competitive and specialized services can be developed for this particular feature of the transportation system; but it would be unwise to persist in the operation of the railroad if this can only be done by providing it with large and unproductive subsidies at the public expense - especially in a time when many more productive uses for the money can be found.

Port capacity, as stated previously, is now generally adequate to serve Vietnam in peace, and the cost of such additional facilities and improvements as are desirable will not be very high. These include some additional capacity at Saigon, believed likely to cost about US \$6.0 million; steady and regular improvements in shore facilities and in the channel of the Saigon River, which will involve expenditures of about US \$0.5 million a year; and repair, replacement and possible extension of the berthing facilities for coastal vessels at Da Nang and other secondary ports. The ability of Da Nang to attract a substantial share of marine traffic in competition with Saigon is considered to be doubtful; and though its business will develop - with the development of agriculture, forestry and industry in the five northern provinces - it will not develop so fast as to render inadequate the deep draft facilities already constructed for military purposes. Similarly, no further public investment appears to be required in deep draft cargo facilities at Cam Ranh.

There will, on the other hand, be a requirement after the war, and possibly quite early in the postwar period, for the development of a new river port in the Mekong Delta. Possible sites have not yet been compared, but it is thought that Can Tho is likely to afford the best prospects. Development of a river port, including terminal and shore access facilities, navigational aids, and the dredging of the Bassac River will involve an expenditure of the order of magnitude of US \$8 to \$10 million. This will be the principal item in a program for postwar port development which, over a period of ten years, will cost the equivalent of about US \$24 million, of which more than half will be in Vietnamese currency.

Road transportation seems likely to capture an increasing share of the traffic between Saigon and the Mekong Delta; but there will still be a substantial movement of cargos by barge, and the inland waterways, neglected during the war, will have to be restored to usable depths to accommodate it. A likely order of magnitude of costs is about US \$5 million. A similar sum can probably be spent on improved facilities for the principal airports. The war will, of course, leave the country with more airfields than it can possibly use for normal peacetime purposes and study is required of the alternative uses to which some of these might be put.

Sanitation and Water Supplies

Relatively little consideration has been given thus far to the complex of physical improvements, organization and personnel required for a sanitation program after the war. There have as yet been no comprehensive studies made of sanitary sewage and storm drainage anywhere in the country, but it is believed that the U. S. Agency for International Development is about to undertake such a study in Saigon, and similar investigations are certainly desirable in all other major cities.

The large scale development of water-borne sewage and sewage treatment plants is not considered to be feasible in the first ten years after the war. A very preliminary estimate has been made that for major cities alone, the cost would be of the order of US \$500 million, a disproportionate figure in terms both of the total resources likely to be available for development and of the need to distribute the benefits of development so that they will reach the mass of the people. Although the

cities have grown considerably during the war - and will continue to grow after it, though hopefully not so fast - the population of Vietnam is still predominantly a rural one.

It is, in any case, premature to contemplate the installation of sophisticated sewage systems in any of the principal cities until there has been better development of water supplies in all of them. A more modest program, one involving, perhaps, the investment of about US \$40 million, will better answer the realities of the situation in the next ten years.

The capital has been provided with a new water supply during the war, fully adequate for its present needs and capable of accommodating some increase in the urban population if that occurs. (Elsewhere in this report it is suggested that any further growth in Saigon should be discouraged.) The water distribution system in Saigon is obviously not adequate; but there are current programs for this, financed by the U. S. Agency for International Development, as there are for some of the larger provincial towns and for rural water supplies as well. A modern water supply system has been provided for Bien Hoa by the Australian government, and it is understood that Australian assistance has also been offered for a supply at Can Tho. In these circumstances we are inclined to believe that the sensible course is that proposed by the Ministry of Public Works: to provide potable water for the six principal towns of the country which have not yet benefitted from previous or existing programs. The Directorate of Water Supplies has estimated that this work will cost about US \$36 million. It will, of course, be only a first step in supplying water to a great many other places, but this level of investment appears to be a realistic target for the first ten years.

Water supplies and sewage obviously do not comprehend the totality of the sanitary improvements of which Vietnam is in need. Nor does the total investment suggested (US \$77.5 million, for sewage development water supplies, and the study of sewage and storm drainage requirements of the principal cities) comprehend the totality of the funds likely to be spent for this purpose in the first ten years of peace. Some of the regional development programs described subsequently contain additional provision for works of this type, and substantial improvements can be made in rural water supplies through the intervention of local authorities with central government assistance. The most important

developments will come from public education and the enforcement of the sanitary code; and this implies the employment of trained and qualified men in sufficient number by the Ministry of Health and by City Councils and other local authorities. The costs of this work will be reflected in annual budgets, not in the ten-year investment program.

Telecommunications

A program for the re-establishment and development of telephone and telegraphic services throughout Vietnam has already been prepared by the planning services of the P. T. T. It is estimated to cost the equivalent of US \$74 million. The contents of the program have been described in a separate publication by the Joint Development Group (Working Paper No. 34) and neither content nor cost appear to differ greatly from similar recommendations by specialist services of the Agency for International Development.

It is probable, however, that a substantial proportion of the investment required will be met by the conversion of equipment installed for military purposes by the armed forces of Vietnam and its allies. An examination is already being made (by ARVN, MACV, and USAID) of the extent to which this sophisticated and costly equipment can be adapted to civilian purposes and of its ultimate disposition. In these circumstances, any estimate of the cost of providing the country with an adequate and efficient system of telecommunications is bound to be a tentative one, but there is a good probability that it will be substantially less than the figure advanced by the P. T. T. For planning purposes, we have assumed, at this stage, that an additional investment of the equivalent of US \$30 million, with the plant and equipment likely to be made available, will be sufficient to accomplish the purposes of the program.

Housing

The requirements in the cities now run into many hundreds of thousands of dwellings - partly because of the considerable and uncontrolled influx of people into the towns in recent years, partly because the housing created to meet this abnormal demand has generally been substandard, and partly, though to a lesser extent, because of war damage.

Damage to housing in the villages of the countryside is undoubtedly much more severe; but assistance to refugees in repairing the deterioration and loss they encounter when they return to their villages can be provided more appropriately under the projects for resettlement which have been included in the regional development programs.

Even so, the housing problem in the cities is a formidable one. It would be quite unrealistic to suppose that the answers can be found entirely in the public sector of the economy or from public resources. One estimate of needs that has been advanced indicates that, of the Government were to assume complete responsibility for this part of the postwar development program, it would need to commit as much money to it as to all other sectors of the economy combined. This would satisfy a social need, but it would not be productive of economic growth.

Hopefully, as mentioned previously in this report, a home mortgage bank can be established and, with attractive rates of interest, private investment in housing will be forthcoming. Our consideration of the problem has been concerned with what it is reasonable to expect the public authorities to do in a sector of the infrastructure which, though it is important, is not more important than any of the others. Government might, for instance, make it attractive for the private sector to finance and construct housing by providing and developing the sites and by meeting the cost of extending water and power supplies to them. It might also participate in the financing of a home mortgage bank or building societies to the extent of the cost of up to 100,000 houses. This would at least prime the pump and allow the bank and the societies to get into operation. On a very rough estimate, this limited involvement by the Government would imply the commitment of the equivalent of approximately US \$170 million in the first ten years after the war. For the Government of Vietnam to attempt more than this for housing in the cities would be at the cost of more productive and profitable activities in the countryside. The main burden of responsibility for housing falls clearly upon the private sector.

Electric Power

This responsibility, it seems to us, is bound, in the circumstances of Vietnam, to be carried by the public sector. Some long-

term forecasts of potential power demand have been prepared, and the country has been divided for this purpose into three convenient areas.

The capital city, including Bien Hoa, Vung Tau and Gia Dinh provinces is obviously a special case, in that it contains most of the urban population, and, at present, most of the country's industry. (Decentralization and a wider distribution of industrial production is, of course, most desirable, and this is one of the objectives of the development program). Existing electric power generating capacity in Saigon is only 130 megawatts, substantially below present requirements; and future demand will require a capacity of 500 mw in 1975 and 1,000 mw in 1980.

In all the provinces north of Saigon, existing installed generating capacity amounts to only 38 mw. It is estimated that power requirements for the area will be 100 mw in 1975 and 200 mw in 1980. In this area the market for electric power can be supplied by the progressive development of low-cost hydro-electric plants in conjunction with multi-purpose water control projects in the Central Highlands and the five northern provinces. These are described subsequently in this part of the Report. In the provinces south of Saigon, where a greater proportion of the population is living in farm villages, ordinary domestic demand will probably expand at a somewhat less rapid rate, but there will be some development of small agriculture-based industries, and it is thought that, from a present 15 mw installed capacity will have to be raised to 40 mw in 1975 and 85 mw in 1980. This, however, will provide only for domestic and for minor industrial demand. It takes no account of the possibility that at least one major industry may be established in the southern region, nor does it include the power requirements for pumping when water control projects are implemented in the Mekong Delta. In the provinces south of Saigon, the demand for power may be met most conveniently by the installation of diesel electric and thermal plants.

Various programs prepared in recent years have been reviewed in order to reach some conclusions concerning the scale of developments which will be appropriate for the first ten years of peace. Saigon, for instance, will need a peaking capacity of 1,000 mw by 1980, but this will be partially satisfied under an existing Agency for International Development program which will raise installed capacity to 386 mw by 1972. Installation of an additional 300 mw in the following eight

years will call for an investment in the order of magnitude of US \$100 million. North and south of Saigon the investments needed will be less, US \$60 million and US \$25 million respectively, though the latter figure does not take account of the power requirements for pumping. Total investment in electric power development in the first ten years after the war should thus amount to about US \$185 million.

THE SOCIAL SERVICES: EDUCATION AND PUBLIC HEALTH

The social services, especially Education and Public Health, are sure to assert strong demands upon available resources after the war, and it is desirable to draw attention to recent and continuing developments in these services which have implications for the future.

It is also desirable to ensure that the programs and policies advanced by professional experts in education and public health are applied in the context of the economy and of its probable pattern of growth, not in isolation from it. Objectives are commonly identified in the social services which are eminently desirable, and may even, in the short term, with all the resources which become available in abnormal circumstances, appear to be practicable as well. They do not, however, necessarily represent the services which it will be feasible for the economy to support in a somewhat longer run. In this chapter we do not attempt to state what objectives are practicable, we merely suggest a more balanced and better integrated approach to these questions.

In the last ten years there has, on the whole, been a considerable quantitative expansion in the social services, though they do not yet serve anything like one hundred percent of the population. On the other hand, the quality of existing services frequently leaves a good deal to be desired. In primary education for instance, where, probably the most rapid expansion of facilities has been taking place, the teaching staff is clearly inadequate in number, inadequately trained, and inadequately paid. Most public health facilities are understaffed and many are completely unstaffed. The capital costs of expanding physical facilities is comparatively small, and generous external assistance has been

provided for the hamlet school program, for the construction of secondary and vocational schools, for the production of text books, for the construction of some new hospitals and for improvements to others. Consequently, the burden of costs of these improvements in physical facilities has not been a very obvious one.

The annually recurrent costs of maintaining and operating these facilities to acceptable standards are quite another matter. They already impose a severe strain upon the national budget, amounting to perhaps as much as one-third of all governmental expenditures other than defense, and they are mounting rather rapidly. The real costs are higher than the budget figures suggest, for a substantial proportion of the recurrent costs, like the capital costs, is being met from external aid or is represented by the assignment of Allied personnel. The staffing of the public hospitals, for example, is now assured at professional levels at least as much by the U.S. and Allied Armed Forces and by voluntary agencies, as it is by the Ministry of Public Health, which has, of course, supplied a very large proportion of its doctors to the Armed Forces of Vietnam. The heavy involvement of foreign doctors will not continue indefinitely, and eventually the burden of operating its improved and expanded facilities will revert entirely to the Ministry. Can it be given the budget to support this burden? In terms of postwar development the problem is not what the country can afford to build, but what, in the period when the economy is regaining its vitality, it can afford to keep up.

Education

In the ten years after the war the objectives which have been suggested for the Vietnamese educational system comprise substantial progress towards improved primary education for all the country's children, movement towards a system of comprehensive high school education (with much more emphasis on technical and vocational education) for three times as many children as it now has in its high schools, and triple the present number of students in its universities (merely to retain present ratios between university students and others). Since in all three branches of the educational system quality is now unacceptably low, and many more teachers will be required, there must obviously be a great deal of emphasis on teacher training. The emphasis on technical education is also

welcome; it is now sadly deficient and is what the expanding economy will mostly need. But the targets are ambitious ones, and there must be a question whether the resources likely to be devoted to education, after providing for more rapidly productive investments in other sectors of the economy, will be sufficient to permit them all to be reached in so short a space of time.

What is suggested, in 1969, while there is still time, is a realistic re-examination of the needs and the possibilities. There are some fundamental questions to be asked. Does the conventional educational system of Vietnam, for instance, founded on French classical traditions, but beginning to show signs of American influences, really respond to the needs and desires of a society which is neither, but Vietnamese? What changes ought to be made in the system to provide the skills which will be essential in the years after the war, the skills necessary for good government (including the maintenance of fully adequate social services) and for the development of agriculture, industry, and commerce? If changes are required for these purposes, what will they cost and how will the costs compare with the share of public resources which education is likely to be allocated in the first ten years of peace? To what extent can costs of, for example, primary education be supported by the villages and hamlets served? It is certainly desirable that all these matters be discussed as soon as possible so that suitably revised, or confirmed, national policies can be established.

Health and Population Growth

Similar questions have to be faced concerning the future of the public health services also. Rightly or wrongly, the impression is gained that the improvements of recent years have been concerned primarily with curative medicine, and that, on the whole, preventive medicine has lost ground. In conditions of general insecurity in the countryside, it is perhaps inevitable that this should happen, for improvements have to be made where they can. But if this were to be a deliberate and lasting choice, then it might prove to be a very expensive one. As with education, the fact that developments have been made and capital sums invested in an emergency situation rather than in the context of a long-term program designed for a normal one. These capital investments in

physical facilities have been quite large, and much larger ones have been recommended, without any apparent consideration of the ability of the country to operate these facilities when it again stands on its own.

Obviously these questions have disturbed others as well as ourselves, and it is understood that serious planning for the public health services is about to begin. If the circumstances of war have, in fact, emphasized curative at the expense of preventive medicine, then a suitable balance ought to be restored, for financial as well as professional reasons. What that balance ought to be we cannot at this stage say; but one method of approach might be to assume what resources can be made available - they will be substantial but not unlimited - and to decide how these should be used for the greatest good of the greatest number of the Vietnamese people.

Clearly the needs will be many and various. There is one which is apparent to doctors and economists alike: the fruits of economic growth will not be fully reflected, they may not be reflected at all, in an improved standard of living for the ordinary citizen, unless effective programs for the control of the growth of population are introduced. Some neighboring countries have been successful in doing this; an excellent start, though still an experimental one, has been made in Vietnam. Even if the present rate of population growth is maintained for the first ten years after the war, some improvement in living standards can be achieved under the policies and programs described in this report; but such an improvement can hardly continue in the following ten years unless, by that time, existing high growth rates have been significantly reduced. This is the time to start.

REGIONAL DEVELOPMENT PROGRAMS

The economic policies and investment programs described previously in this Report reflect what we believe to be the interests of the entire Vietnamese nation, and we recommend them for acceptance and implementation by the national government. There are, of course, interests of another type to be served: regional and local ones. The

national and regional interests in economic progress are not opposed but complementary; and it is believed that substantial advantages are to be won from a policy of decentralization, under which the management of development programs concerned primarily with regional conditions and problems would be entrusted to representative regional agencies.

The regions of Vietnam to which this policy might apply identify themselves in a variety of ways - by the peculiarity of their topography, for instance, by the nature of their opportunities and problems, and by the ethnic origins of their inhabitants. In this section ideas are presented on what might be done, in the next ten to twenty years, as resources become available, to improve the conditions and exploit the opportunities peculiar to the people of the five northern provinces, the Central Highlands, the city of Saigon and its hinterland, the Mekong Delta, and the valleys of the Central Lowlands. Proposals are also made concerning the organization and management of these programs if they are approved. It is not suggested, of course, that the central government could divest itself entirely of responsibility for works which, even if their character is a regional one, cannot be implemented except with strong central government support and financing. It is suggested that genuine popular enthusiasm for development, the participation of the public in the development effort - the most important ingredient of success - will be best assured if the work is done in a regional context comprehensible to the people of the region and directed by men whom they will recognize as their representatives. The precise forms these agencies might take, and their precise functions and powers, will evidently vary from region to region as the circumstances of each dictate.

The Five Northern Provinces

In comparison with the wealthy, fertile southern areas of Vietnam, the development potential of the five northern provinces is limited, and their problems are severe. The area of arable land is relatively small and the population concentrated upon the coastal plain is relatively heavy, so that farms are small and uneconomic. With rainfall confined to a single short season, agriculture suffers either from a shortage of water, or, frequently, from an excess of it. These inherent disadvantages have been accentuated by the war; though there are forest resources in the northern provinces, they cannot be exploited or even

investigated in present conditions; marine fishing, a potential source of their livelihood for many thousands of people, has been restricted for reasons of military security; and generally there is no doubt that the northern provinces have suffered more than any others from the damage and dislocation of the war. Great numbers of people, as many as in all the other provinces of Vietnam combined, have abandoned their farms and villages and have resorted to the provincial capitals and other secure towns.

An effort to exploit available resources more fully is not only economically sensible, it is a political and social necessity. The principal opportunities in peace appear to lie in the improvement of agriculture, partly by the control and development of water resources in the exploitation of forest resources; in marine fisheries; and in as much industry as can be developed on the basis of a potential for low-cost power, some mineral resources, probably valuable timber resources, and the skills and energy of an abundant labor force. The resettlement of refugees on their abandoned lands will provide an opportunity to introduce programs aimed at improving former levels of productivity and at providing them with better standards of living than they formerly had.

There are three promising approaches to agricultural development in the five northern provinces. First, and obviously, it is important that cultivation be resumed on lands which have been left untilled because of the war. At the end of July, 1968, the refugees in the northern provinces were estimated at 650,000 persons and it is believed that three-quarters of them, that is to say about 100,000 families, will wish either to return to their old farms or to relocate themselves on farm land elsewhere - on such lands, for example, as may be developed by the water control projects discussed subsequently in this section. They will need financial assistance to do so successfully, in the form of both cash grants and credit, and the probable cost is thought likely to be about the equivalent of US \$50 million. Resettlement, and the improvement of agriculture during resettlement, is essential to political stability and also, of course, to the regional economy; the refugees represent at least 60,000 hectares of formerly productive land, which, in a region now characterized by regular and recurring food deficits, must be brought back into production with a minimum of delay. The task is a priority one for the period of reconstruction immediately following the war.

Another approach is suggested by the insignificant size of most of the region's farms: an average 0.65 hectares or only one-third the size of an average farm in the Mekong Delta. Although rice is not as preponderant in the cropping system as it is in the Delta, it is still the dominant crop, and 80% of all arable land is devoted to it. With yields generally less than those of the Mekong Delta, 0.65 hectares is simply insufficient, under a crop like rice, to provide a reasonable living for a farm family. Alternative crops and other farm enterprises (such as hogs and poultry) of higher value than rice, and appropriately mixed enterprises would probably produce superior incomes. Thorough examination of the possibilities is necessary before specific recommendations can be made.

The largest increases in production, here as elsewhere, are likely to come by increasing crop yields on existing farms, partly by improved farm practices and partly by additional inputs, some of which will require generous distribution of supervised agricultural credit. By far the most important of these inputs will be irrigation. Insufficient rainfall, insufficient base flow in rivers and streams to permit supplementary or dry season irrigation, poor drainage, flooding, and saline intrusion are undoubtedly the principal limitations on agricultural production at the present time, and the resolution of these problems in the coastal plain of the northern provinces is as important to the people of those areas as it is to the people of the Mekong Delta. The control of water resources is the most important element in the regional program because it will permit intensive, year-round agriculture and the diversification of traditional cultivation. It will absorb the greater part of the resources likely to be available to the northern provinces for development in the next ten years; and for every dollar or piaster invested it is expected to yield generous returns.

In all five provinces together there are potentially irrigable areas of 410,000 hectares. Of these irrigable areas, 150,000 hectares can be served from interconnected rivers and waterways in Quang Tri and Thua Thien provinces and 140,000 hectares by interconnected rivers in Quang Tin and Quang Nam. The remaining 120,000 hectares lie in Quang Ngai. The entire region can be served by three principal systems of irrigation from one or two storage reservoirs in each. Flood control and

salinity control can be achieved simultaneously by levees, small tributary retention dams, controlled releases of water from the storage reservoirs, or by any economic combination of these devices. For salinity control in Thua Thien, only one major structure might be required in addition: a barrage with an overflow section at the Thuan An passage. On the basis of a preliminary appraisal it is suggested that full development of 410,000 hectares by these methods might involve investments of the equivalent of US \$460 million. It would not be realistic to assume that this could be accomplished in much less than thirty years.

The principal structures required for storage of sufficient irrigation to satisfy irrigation needs in each of the three systems are as follows: in Thua Thien and Quang Tri, two dams, one on the Song Bo and the other on the Quang Tri River; in Quang Nam and Quang Tin, a single dam on the Song Vu Gia; and in Quang Ngai, a single dam on the Song Tra Khuc. Potential sites for storage reservoirs are available on other rivers as well; but, on the basis of present knowledge, those suggested appear to be the most favorable, and they appear to command all the storage capacity the three systems are likely to require. Substantial hydro-electric development is recommended only on the Song Vu Gia, where it is estimated a total capacity of 70,000 kw could be installed with a firm capacity of 35,000 kw. This is sufficient to relieve existing power shortages and to provide for power demands throughout the region. It would amply compensate for the possible loss of the 25,000 kw plant previously proposed for An Hoa. Additional hydro-electric power could probably be developed on the Song Tra Khuc, but this is unlikely to be needed for some time to come, except in modest quantities for pumping in the irrigation and drainage systems of Quang Ngai.

How much of this program can be achieved in the first ten years after the war will depend largely on the resources which can be provided for it, and on the time required to make the engineering and feasibility studies necessary to support the conclusions of this preliminary appraisal. A realistic assumption is that, by 1980, approximately 120,000 hectares could be developed, of which 50,000 hectares would be in the Quang Tri-Thua Thien system, 40,000 in Quang Nam-Quang Tin, and 30,000 in Quang Ngai. The highest priority should be on development in Quang Tri-Thua Thien, and in all three areas the costs over ten years might be of the order of magnitude of US \$140 million. The benefits would be

substantial, including a firm supply of irrigation water for year-round cropping, drainage facilities, control of floods and salinity, conditions in which improved cultural practices can be adopted, the effective use of high yielding rice varieties (thus releasing part of the area now planted in rice to crops of higher value), and the exploitation of some land which is not now under cultivation at all. When feasibility studies are carried out, favorable cost-benefit ratios are confidently expected.

Although soil and water resources, properly exploited, will certainly be the Region's chief assets for some years to come, they by no means constitute the whole of the development potential. The region's long coastline and its proximity to the Gulf of Tonkin suggest very considerable possibilities for the fishing industry. A prerequisite for spontaneous development is the establishment of a statutory organization for the landing, movement and wholesaling of the catches, so as to ensure that fishermen get reasonable returns for their produce, and, consequently an incentive to increase their production. A new marketing organization would also, appropriately, manage a Fisheries Development Loan Fund, providing fishermen with the means to modernize their craft and gear and to adopt various improvements in fishing techniques. There is also scope for intensive culture of both fresh and brackish water fish in ponds and lakes by new methods, including the use of artificial foods.

Some industrial developments should find their place in the regional program as well. Although the An Hoa-Nong Son industrial complex may disappoint the high hopes once placed in it (this has been discussed in a previous section) there are more substantial assets. There are, for example, some mineral resources, limestone and silica sand, other than the Nong Son coal; and it would be premature to write off this coal deposit before additional exploration of the nature and extent of the resource. With surplus manpower and skills, the possibility of low-cost electric power, the availability of a deep water harbor at Da Nang, the prospects for increased agricultural and fisheries production and the processing industries which can be built on them, and its timber resources, the region has rather promising prospects for substantial industrial development, especially in light manufacturing. Some specific possibilities have been suggested in previous sections: they include, for instance, the production of veneers and plywood for domestic markets and export and the increased production and processing of cinnamon. The national need

for additional cement suggests exploitation of the region's limestone; and there are possibilities of a profitable secondary industry in tourism. A policy of decentralizing industry from the Saigon-Bien Hoa area should work to the region's advantage, and a reasonable proportion of the investments in industry envisaged in the first ten years of peace will, with the proper incentives, find its way into the five northern provinces.

For some other regions of Vietnam (discussed subsequently) the establishment of regional development authorities is recommended for the management of the regional development programs. This argument does not have the same force in the five northern provinces. No central theme for a regional program is visible, unless it be the grave, but temporary, problem of the refugees; and the refugee problem is one that can be successfully resolved in the reconstruction period by an existing agency of the Central Government, the Ministry of Social Welfare and Refugees, which has a large and experienced staff already active in the area. While special agencies may be needed for special purposes (in the fishing industry for example) the need to coordinate developments in diverse fields is one that can probably be perfectly well met by the Commissioner for Development of the I Corps Zone, an official who has already been appointed.

The Central Highlands

One of the principal objectives for a special development program for this region is concerned with the people who make up a large proportion of its inhabitants. Much of the region consists of difficult topography and poor accessibility, and many of its people, of racial origins different from those of the majority of the nation, are still subsistence farmers living outside the cash economy. The objective is to offer them equal opportunities for social and economic advancement as are offered to other Vietnamese. There are, needless to say, other objectives: economic growth in Vietnam will be hampered as long as one of its principal regions is recognizably less developed, and its resources less fully exploited, than the rest.

In the absence of any known commercial deposits of minerals, the visible prospects for the Central Highlands, like those of the country as a whole, rely substantially on the exploitation of its resources in soil,

water and timber, and on such development of industry as these resources may support.

Although cultivable land areas in the Central Highlands are small in relation to the whole, they are ample in terms of the region's scanty present population and can undoubtedly sustain, at better standards of life, many more people than they do. Among the indigenous population, shifting cultivation is still common, but often surprisingly good yields are obtained; the intensive and profitable cultivation of fruit and vegetables in Tuyen Duc province shows what some of the highland soils are capable of when they are properly prepared and worked; and even in more traditional systems of agriculture there is a surprising variety of crops grown, suggesting good opportunities for diversification. Among the tree crops, tea and rubber grown in the Highlands still contribute usefully to the country's exports; cocoa has been grown successfully in the past, though not in commercial quantities; coffee grows well, though the state of world markets casts some doubt upon its future.

Water is the principal limiting factor. There is practically no irrigated agriculture at the present time, and opportunities for irrigated agriculture do not exist on the scale of other regions. Yet existing opportunities are too sizeable to be ignored. Over 21,000 hectares in the Upper Se San basin and nearly 80,000 hectares in the upper Sre Pok have already been identified as potentially suitable for irrigated agriculture, sufficient to accommodate from 35,000 to 40,000 families (a considerable fraction of the total population of the region) and to provide them with farm incomes vastly superior to their present ones. Major progress can therefore be made in the Central Highlands by the undertaking of a series of small to medium-sized water control projects in their two valleys. There are other similar possibilities, not yet examined, in the basins of the Song Ba and the upper Danhim River.

In the peculiar conditions of the Highlands - where no previous tradition of irrigated agriculture exists, and farmers need to be carefully prepared and trained to take advantage of such opportunities - full development of the Se San and Sre Pok valleys may take a generation, and would probably cost between US \$80 and US \$100 million. A limited objective, the development of 40,000 hectares, and the settlement of about 16,000 farm families in irrigated agriculture, is recommended for the

first ten years. The capital cost of these initial developments will be of the order of magnitude of US \$40 to US \$50 million.

These irrigation developments are seen as features of multi-purpose water control projects which will also embrace flood control and the progressive development (in accordance with the growth of power markets in Vietnam) of hydro-electric power generating facilities. On the upper Se San an installed capacity of about 800 megawatts appears to be possible, and on the upper Sre Pok another 300 mw. While we regard the irrigation and flood control features as subjects primarily of regional interest, power developments of this order would, of course, have to be implemented in the context of a national power program.

There are other promising prospects in the Highlands. Thus, 100,000 hectares of natural grassland on the Darlac Plateau may be the basis for a beef cattle industry, though it is not suggested that this will develop rapidly or without careful experimentation. The prospects for forestry are more certain. There are, of course, very large areas of mixed hardwood forest in the six provinces which constitute the region (Kontum, Pleiku, Darlac, Quang Duc, Tuyen Duc, and Phu Bon), about 3 million hectares in all, and they contain desirable species held in esteem in domestic and export markets. A particularly valuable asset is an area of 180,000 hectares of natural pine forest covering parts of Tuyen Duc and neighboring provinces which will supply not only lumber and poles but also the material for the production of high-grade bleached sulphate pulp. The prospects for this industry were referred to in the industry chapter of the Report. The recommended location for the industry is at Da Nhim. While the natural pine forests are expected to support the pulp industry for from ten to twelve years, as exploitation proceeds, a program of reforestation will be needed, offering steady part-time employment to about 15,000 workers.

This is important in the Central Highlands. The objective stated at the start of this chapter was to persuade the indigenous inhabitants to enter the cash economy and share in the benefits of economic development. It can be done by introducing cash crops into the peasant farming system; and it can also be done by offering people paid employment.

Theoretically, the potential of the Highlands cannot be efficiently exploited by its present population. Yet a program for the assisted resettlement of people from other regions of Vietnam, some of them, like the five northern provinces, overpopulated and therefore in need of land elsewhere, has to be approached with caution. Previous experience of resettlement programs in Vietnam is discouraging, especially in the Highlands. In part, this is due to the insecurity of the countryside in recent years; but in part it is also due to an impulse to procure resettlement at all costs, regardless of the feelings of the settlers or of those among whom they were to be settled.

The natural reaction of the people already living in an area chosen for a resettlement project cannot be disregarded. If land has to be acquired it should be by negotiation and subject to compensation for loss of traditional rights of occupation. Certainly in the first instance, the objective of resettlement in the Central Highlands should be to provide better homes and lives for people already living in the region, and if there is any movement from other regions then it should be entirely voluntary. In fact, in the first years after the peace, large voluntary movements from the Central Lowlands and the northern provinces are not likely to occur, though there may be a movement of individuals into the highland towns and eventually some movement into rural areas and occupations as well.

We therefore suggest a modest beginning for the resettlement program, embracing one or two thousand families a year coming entirely from the Highland communities who already inhabit the region but are not yet practising settled agriculture. Costs will vary from place to place, but average figures of US \$3,500 a family, including, where appropriate, the capital costs of irrigation systems, would seem to be appropriate. A program aimed at the resettlement of 40,000 families (as many as it is realistic to contemplate in a ten-year period if the work is to be done well) would require a capital investment of the equivalent of US \$140 million. This would, of course, be reduced by the costs of irrigation previously given, on the assumption that some of this resettlement would occur in the irrigated areas.

Principal capital expenditures in a regional development program for the Central Highlands would therefore be: irrigation development, US \$45 million; resettlement, less the costs of irrigation, US \$95

million; and reforestation (the establishment of pine forests) US \$10 million, or about US \$150 million in all. This estimate omits private investment, which, in the case of the pulp mill alone might be US \$50 to \$60 million; and it omits investments of social capital in education and public health.

Provision for the steady expansion and improvement of the primary school system should certainly be included in the Central Highlands program, with at least a commensurate effort to promote more secondary education, more teacher training, and more technical training in agriculture, forestry, and the engineering skills.

Heavy investments in the infrastructure in the Central Highlands, especially on roads, have been included in the Infrastructure Chapter, as these are not projects of purely regional significance. But some infrastructural development can appropriately be included in the regional program - the construction of possibly 1,000 kilometers of local and farm-to-market roads (for which a tentative provision of US \$1 million is suggested in the program), and the installation of public services such as power, water and markets in a number of small highland towns, which might cost from US \$10 to \$20 million in a ten-year period.

In the case of the Central Highlands, the establishment of a special agency to manage these programs, a Central Highlands Development Board, is strongly recommended. Its functions would be to manage the forests of the region (subject to national forest policy), including the reforestation project proposed for the pine-growing areas of Tuyen Duc; to undertake all programs of land development, including resettlement throughout the region and irrigation projects in the Se San and Sre Pok valleys; and to provide assistance and direction to local authorities in the carrying out of works of local significance, such as farm-to-market roads and public services in the towns. Since agricultural development in the region will depend, among other factors, on providing Highland farmers with security of tenure, it is also suggested that the Board should act as the trustee of the extensive areas of unoccupied land, titles to which are unclear or in dispute. At the start, the Board might investigate, record, and acknowledge all communal interests in land, so that a basis will be created for negotiating the acquisition of any land that may be required for settlement and development projects. A Development Board truly representative of the people of the Highlands and visibly acting in their

interests in this way will affect profoundly their response to the development program. As trustee, the Board will be able to continue and accelerate the process begun by the Government of awarding documented titles wherever ownership or effective occupation can be demonstrated; and we believe that this would be a major step towards stability and progress in the Highlands.

A program of these dimensions calls for important public investments by the central government; but a regional development authority should, in addition, command some resources of its own originating from within the region. Management of the region's forests may provide the solution in the Highlands, for one appropriate source of financing would be the royalties charged to those enterprises which exploit the public forests for private profit.

Saigon and Its Hinterland

Only a cursory, preliminary examination has so far been made of the problems of the Saigon urban area and its relations with the ten rural provinces surrounding it. This area produces a substantial portion of the country's rice, most of its present supply of domestic timber, most of its sugar, and practically all of its plantation rubber; it contains about one-third of the country's total population; it is responsible, in the factories of Saigon and Bien Hoa, for a disproportionate share of Vietnam's industrial production; and, in the city of Saigon, it possesses potentially the country's most serious problem, a capital city which has outgrown its amenities and is beginning to outgrow the country as a whole.

If Saigon does not put too great a strain upon their resources, the surrounding ten rural provinces are capable of flourishing. They have a rich variety of opportunities for future development: in agriculture, in fisheries, and in forestry. The potential of the Dong Nai basin, in addition to the possibilities it offers for the development of hydro-electric power, also offers potential for the successful resettlement of farmers from those regions of Vietnam in which the pressure of population is excessively heavy. In the five outer provinces, 1.5 million hectares of excellent mixed hardwood forest provide the Republic with its most accessible supplies of timber and its most favorable opportunity for the exploitation of forest resources immediately after the war. Places like

Tay Ninh and Vung Tau are already substantial and growing towns, which, with the necessary amenities, would provide a home for industry and attract population away from Saigon.

The extremely rapid growth of Saigon will be one of the principal problems of Vietnam when peace returns. Naturally it has been accentuated by the war, but it is by no means entirely due to the war. It is, in fact, a fairly typical example of the attractions which cities exert upon rural populations in almost all the developing countries of East Asia. In addition to the influx of people from the countryside, looking for refuge or for work, the natural rate of population increase is thought to be substantially higher in Saigon than in the rest of Vietnam. Over 16% of the Vietnamese people are now living in the Saigon area; its services and amenities, probably adequate for a population of 500,000 in 1943, are totally inadequate for a population estimated at 2,800,000 twenty-five years later. Housing alone is notoriously deficient.

At its present rate of growth, if it is not checked, Saigon will have a population of 4.8 million in 1980, and 9.2 million, 25% of total projected population, in the year 2000. Even at the present time no other city in the country begins to compare with it in size and importance; but a conglomeration of the dimensions probable by 1980, a bare ten years from now, and the costs of supplying such a conglomeration with even minimum infrastructural requirements, will drain national resources and technical energies away from other parts of Vietnam where they could be more profitably employed. The natural antagonism between city and the countryside will feed upon these circumstances.

New infrastructure is already required if the capital, even at its present size, is to repair existing deficiencies; and massive and most costly renewal, possibly equal to twice the total investments presently planned for postwar development throughout Vietnam, will be required if the city continues to grow and achieves the populations projected for 1980 and 2000. The rest of the country would strain under such a burden; the immediate hinterland of Saigon simply could not support it.

The purpose of this section is not to provide answers to the problem (for they have still to be sought), but only to emphasize its urgency. If it can be prevented it would be wrong to permit a 25% of Vietnam's

population to reside in a single center, a city of 9.2 million people established on lands which are inherently difficult to urbanize and develop. A careful examination of the relationship between Saigon and its hinterland and, indeed, between Saigon and the whole of Vietnam, will hopefully suggest measures and policies by which the Government can prevent, divert, slow down or transfer to other places some of the expected growth of the capital. Incentives to industry to locate itself elsewhere have been suggested previously in this Report, and they would help to do this; the development of the amenities of nearby secondary towns, inside the region like Tay Ninh and Vung Tau, or outside it like My Tho, would also help; but probably a whole variety of policies and programs will have to be designed and applied if effective control is to be exerted over the expansion of Saigon.

Obviously Saigon must be expected to remain as the seat of Government and of the financial and business activities of the country, and its infrastructure must be restored and improved to allow it to serve these purposes efficiently and with dignity. The city does not need to grow beyond reasonable limits to serve these purposes, and will not, in fact, be able to serve them as well if it does.

The Mekong Delta

In the opening passages of this summary Report, we suggested some objectives for a ten-year program of reconstruction and development - an increase by 52% in gross national product and an improvement of about one-fifth in average incomes. Elsewhere we pointed out that, whatever the developments in other sectors of the economy, present agricultural production would have to be doubled if these objectives were to be realized.

In the next ten years, it can be confidently predicted that crop production will increase in all the regions of Vietnam: but because of environmental conditions it will increase rather slowly in the Central Highlands; and it will be limited, in the northern provinces and the Central Lowlands, by the limits on the arable land available. The bulk of the projected increase in production can come only from the Mekong Delta, and the development program for the Delta described in this section, is, therefore, a good illustration of the essentially complementary nature of regional and national interests.

The facts are as follows. The Delta has a total land area of 3.7 million hectares, and, from the point of view of soil fertility, 2.1 million hectares of the total are suitable for cultivation. On the figures supplied for 1967, only 1.7 million hectares are actually cultivated, 1.56 million hectares under rice, and the rest under other crops and orchards. For the most part, rice cultivation consists of a single crop a year, and three distinctive cultural systems are used to conform with varying water conditions. In the upper provinces of the Delta, widespread regular annual floods dictate the use of floating rice; in the middle Delta, though flooding is not a problem, drainage is, and double transplanted rice is grown in order to develop plants tall enough to survive under high water levels; flooding and drainage create less serious problems in the lower Delta, where single transplanted rice is grown, but farming is adversely affected by saline tidal intrusions into rivers and canals.

The introduction of new, high-yielding rice varieties is recent and their use is not yet extensive. Rice production in 1967 was about 3.3 million tons, averaging slightly more than 2 tons per hectare, high by Vietnamese standards, but low compared with those of certain other countries and much lower than it need be. If strict conditions of water control could be assured, rice could be a most productive crop, with 2.1 million hectares of fertile soils supporting the double cropping of high-yielding varieties. But rice is taken only as an example; with water control the Delta could also produce a wide variety of other crops, some of them of potentially higher value, which without water control cannot be grown at all.

The control and use of water in the Delta has four facets: protection against flood; improved drainage; control of saline intrusion; and the supply of water for irrigation during the dry season and for occasional supplementary irrigation during the wet season. Studies of the effect on the Delta of large upstream storage reservoirs have been carried out using the computerized mathematical model of the Mekong basin constructed by the International Mekong Committee. These analyses made it clear that none of these installations, in their presently planned capacities, would result in full control of the Delta's floods, though they will, of course, be essential eventually for adequate supplies of irrigation water. Even if their capacities could be increased sufficiently to have

significant effects on flooding, it is most improbable that this would happen for some decades. A comparison of costs indicates that alternative methods of flood control in the Delta would be far less expensive than any reasonable allocation of the costs of the upstream reservoirs to flood control.

The alternative recommended is a system of inter-connected levees, sited close to the major rivers and their distributories, and extending from the frontier with Cambodia as far as the downstream limits of overbank flooding. Primary levees would also have to be built between the Bassac, at a point near the frontier, and the Gulf of Thailand, and from the Mekong along the southern boundary of the Plain of Reeds, to create flood bypasses into the Gulf, the Plain of Reeds and the West Vaico River. The studies made with the mathematical model demonstrate that the construction of levee systems will have no unduly adverse effects on unprotected areas, provided proper attention is given to upstream levee alignments and the flood bypasses are constructed.

The program also includes provision for improving drainage and controlling saline intrusion; the former by a system of collector laterals and major conveyance canals, existing canals being used to the maximum possible extent; and the latter by control structures or earth barriers in canals and rivers, by the repair of existing dikes along the sea coast, and by the construction of new dikes where required.

The Delta development program is a comprehensive one, and it would not be realistic to suppose that it can be completely carried out in the first ten years after the war - it will probably take two or three times as long. Implementation in four phases is recommended. In the first phase, flood protection and initial drainage facilities would be provided for those areas which are subject to annual inundation in sufficient degree to permit the substitution of a crop of single transplanted rice for the floating rice varieties now grown. In a second phase the effort would be directed to the control of saline intrusion and initial drainage improvements in the rest of the Delta, and the start, in selected areas, of irrigation works. These improvements will create conditions in which, by careful scheduling of seed bed planting in the dry season, double cropping of single transplanted rice will be possible, with annual yields of about 5.5 tons per hectare, 3.0 tons from the first crop and 2.5 tons from the

second. A third phase of Delta development will be initiated when, with the completion of upstream storage facilities and the resulting augmentation of dry season flow in the rivers, sufficient irrigation water will be available to cultivate one crop of a high-yielding rice variety during the dry season and one crop of single transplanted rice in the wet season, raising annual yields per hectare to an estimated 7.0 tons. In a final phase there will be full development of drainage and irrigation facilities, so that at least two crops of the high-yielding varieties can be cultivated each year, producing as much as 8.0 tons per hectare.

Thus, on completion of this program, the Delta, using rice as an example and a measure, will be four times as productive as it is today. But it is again emphasized that the long-term benefits to the economy will be much more important than increased production of this particular crop, desirable though that may be in the short run. The long-term significance of water control in the Delta is that it will create conditions in which a vast diversification of agricultural production can take place, permitting large areas of land to be taken out of rice and put under crops of higher value.

In the first ten years after the war we recommended priority for works in two zones. The first is the northern part of the Nam Phan area, approximately 425,000 hectares, now subject to severe annual flood and the least productive of all the Delta lands in terms of yields per hectare. In this area the costs of the principal levee system and drainage works envisaged for the first phase of the program would be about US \$70 million.

The second area meriting early attention is the eastern portion of Cao Lanh, an area of 189,000 hectares, some of which is already being double cropped. Except in the upstream portion of the area there is no flood problem, so it will be possible to proceed directly with the works appropriate for the second phase of the program - flood protection where it is necessary, of course, but also salinity control, improved drainage, and irrigation, providing conditions in which some diversification of agriculture would be possible. The costs of the principal works are estimated at US \$68 million.

Together, the northern Nam Phan and eastern Cao Lanh works will call for an investment of the equivalent of US \$138 million for principal works in the ten-year period. Though they are recommended for priority, they do not represent the entire magnitude of the works which can be carried out under the Delta development program in the first ten years after the war. They could probably be accomplished in the first seven, so that it is likely that first and second phase work in other areas of the Delta could be initiated by 1975 and carried substantially forward by 1978. Total investments in the Delta in the full ten-year period might approximate to about US \$400 million.

Precisely how these important works can best be undertaken requires some consideration, and, hopefully, will be the subject of decisions in the near future. In the cases of the Nam Phan and Cao Lanh areas, we have differentiated between major works - the principal levees and other structures - and minor or local works, the kind which individuals or communities will have to undertake for themselves to turn the advantages of water control into increased farm production, such as tertiary canals, local drainage and land levelling. We have suggested already that the principal works be entrusted to the charge of a Mekong Delta Development Authority, a body capable of ensuring the coordination and integration of the development efforts of the numerous governmental and non-governmental agencies who will be involved, in one way or the other, in the comprehensive development of the Mekong Delta. The specific function of the Authority would be the investigation, planning, design, and implementation of projects and programs for the control and utilization of the region's water resources on the lines suggested in this Report.

Successful development in the Delta depends ultimately on the understanding and support of the farmers this program is intended to benefit, and upon their ability to organize themselves to put to local advantage the regional system of water control which the Authority is to install. The formation of private Local Development Associations is recommended for this purpose, groups of citizens, generally based on villages - though in some cases it will be convenient for two or more villages to combine in a single association - implementing local works of water control within their areas, applying appropriate regulations for the use of water in the interests of the community, and, with the assistance of

the Authority and the Ministry of Agriculture, providing within their villages for agricultural demonstrations and extension services. Eventually, as the Associations grow, they can provide other essential services - the distribution of farm supplies, especially in places where the private sector is unable to do this, the marketing of the village surpluses, and the supply of credit. We envisage a contractual relationship between the Authority and the Local Development Association under which each will make undertakings to the other concerning the work to be done and the assistance and services to be provided. Six places have been identified in which it is suggested that Local Development Associations should be set up in the immediate future, the forerunners, it is hoped, of many hundreds of such associations which will eventually cover the entire Delta.

The Basins of the Central Lowlands

Almost two million people live in the small deltaic coastal basins of Binh Dinh, Phu Yen, Khanh Hoa, Ninh Thuan, and Binh Thuan provinces. These areas are discontinuous, and the Lowlands as a whole do not suggest a theme for an integrated program of regional development. They suggest rather a series of independent and mostly unrelated projects; but the size of the population involved and the nature and extent of its needs entitle the region to a proper share of the development effort in the next ten years.

Their most evident needs are very similar to those of the five northern provinces. The people of these provinces are principally dependent on agriculture: there are only 200,000 hectares of presently cultivable lands; farm sizes are small, averaging 0.7 hectares, so most families live at little more than a subsistence level; yields of rice, as usual the dominant crop, are low; and there is insufficient water to permit the improvement of living standards by intensive year-round cropping. The lack of water is most severe in the southern provinces where rainfall is least abundant; but all of the provinces suffer from it, and others in addition encounter problems of flooding, poor drainage, and saline intrusion. As in other regions, the most obvious ingredient of a development program is the control of water and the fuller exploitation of land and water resources.

Ten principal rivers serve the coastal areas of the five provinces, and an examination of topography and run-off records suggests that they have together a gross irrigable area of 400,000 hectares, twice as much arable land as is now at their disposal. Comprehensive and detailed investigations of a number of possible coastal basin projects will have to be carried out; but, if a net irrigable area of only 320,000 hectares is assumed, it still represents an increase of over 50% in cultivable land. This is undoubtedly the most important development possibility presently visible in the five provinces.

Of the ten principal river basins, only one, that of the Song Ba, serving the Tuy Hoa area, has sufficient run-off to supply irrigation water without seasonal storage. However, there appear to be suitable sites for storage dams in some of the other basins, and it is possible that storage on the Song Ba would permit the diversion of water to neighboring areas which lack capacity of their own. Project development in any area would include provision for flood and salinity control (particularly serious problems in Tuy Hoa and Qui Nhon) by allocations of stored water, flood retention dams, dikes and tide gates, or by whatever combination of these methods is found to be conomic. Except, possibly, on the Song Ba, there do not appear to be any opportunities for the development of large amounts of hydro-electric power in conjunction with these projects, though in some basins small installations may be feasible to supply irrigation and drainage pumping requirements.

It must be stressed that so far only a very preliminary appraisal has been made of these water control projects. Because of existing facilities, which it should not be difficult to incorporate into new systems, areas such as Phan Rang, Tuy Hoa, and Qui Nhon will demand generally lower capital expenditures per hectare than others, but no attempt has yet been made to estimate costs project by project. On a general order of magnitude of US \$1,300 a hectare the development of the full 400,000 hectares of potentially irrigable land would call for investments over, possibly, 30 years of US \$520 million; in the first ten years, allowing for the studies and investigations which have first to be carried out, a realistic target would be the development of an initial 100,000 hectares at a cost approximating to a quarter of that sum.

Naturally, the mere creation of physical works will not achieve the objectives of expanding and diversifying farm production and increasing farm incomes to satisfactory levels. Other necessary ingredients in the development program are efficient agricultural extension services, farm credit, the introduction of diversified cropping (as suggested by land capability and market studies), improved planting material and the better use of fertilizers; and one essential ingredient is the formation of effective farmers organizations to promote these improvements. Priorities have still to be determined between projects and areas: if need is to be the only criterion, then it would be right to start in the southern provinces of Ninh Thuan and Binh Thuan and then to proceed in an orderly fashion northwards.

Much more study is also required of other elements besides water control which it would be appropriate to introduce into a development program for the Central Lowlands. The organizational advantages of planning development in the context of regional problems and opportunities has been emphasized in this Report, but this is not to be taken as implying that any region can become self-sufficient or that interdependence and exchanges between regions should not be encouraged. In this particular case there is a clear interdependence between the Central Lowlands and the Central Highlands, and the transportation and other infrastructural developments described in Section I of this part should make beneficial mutual exchanges possible: Central Highlands timber resources can be the basis for wood-products industries in the Central Lowlands towns, while the development of eucalyptus plantations in the Phan Rang plain would provide an additional source of raw material for a pulp mill at Da Nhim. Fisheries, including fish processing industries, have an evident potential for development in the Central Lowlands, for local markets, for markets in the hinterland, and for export. There are undoubtedly other possibilities to be examined before a comprehensive regional program can be prepared.

PART IV

INSTITUTIONAL DEVELOPMENT

The purpose of this Report is to take a broad view of what may happen (or rather can be made to happen) to the economy of Vietnam in the first ten years after peace returns. It identifies the sectors in which progress is most probable and most necessary; it describes the types of programs which ought to be pursued in each of these sectors; it suggests the policies and strategies which will help the economy to grow; and it states the overall objective of future development. The objective, in simple terms, is an economy capable of healthy and continuing growth, without recourse to concessionary external aid, and capable of affording the ordinary citizens of the country living standards commensurate with their skills and the wealth of the country's natural resources.

None of this can happen without good management, and good management cannot function except in the context of organizations and institutions adapted to the nation's needs and to the tasks which will confront it after the war. There is not much doubt about what can be done; there is, however, some doubt about the machinery by which it will be done: the institutional resources of Vietnam, confused and weakened by past history and by the pressures of the war, are not yet capable of meeting the requirements of peace.

In one sense the whole of this report is concerned with institutional development; it is replete with references to the organizational, administrative, and procedural reforms which are basic to economic development. These include matters as diverse as the reform of the direct and indirect taxation systems; the expansion of the banking business and the development of a money market; the national budget; the procedures of the Investment Commission; public and private institutions for the development of industry, including the Industrial Development Center and the Vietnamese Development Bank; agricultural credit; forest law and policy; the organization of a job placement service; the development of an

educational system which will satisfy Vietnamese needs and aspirations rather than foreign ones; regional development authorities to manage regional development programs; the functions of local governments; and the multitude of organizations, public and private, which actually make the economy work: local development associations, trades unions, cooperative societies, chambers of commerce and the like.

In this Summary we merely emphasize three principles which are relevant to the establishment of institutions which will carry Vietnam through the first decade of reconstruction and development and beyond it.

First, the problem is essentially a Vietnamese one and the solutions must be Vietnamese too. The experience of other countries can provide useful analogies (and deserve study on that account) but they do not offer ready made answers to what is essentially a Vietnamese problem. There are surely some Vietnamese institutions which do not work efficiently in present conditions in Vietnam, and which will not respond to the needs of a new society emerging from a long time of trouble; but institutions which are not Vietnamese, or are not very carefully adapted to Vietnamese requirements, will not work at all. The search for the solutions must therefore begin at home; and any suggestions made in this Report of that nature are to be construed simply as tentative ones, intended to promote discussion and, hopefully, early decision concerning the management of the development programs of the postwar period.

Secondly, there must be clear and unmistakable direction of the development effort at the center. Development in the 1970's will be every bit as vital to the survival and prosperity of Vietnam as defense has been in the 1960's. It cannot take place under an uncertain or divided command. The organizational, administrative and procedural reforms described in this Report as basic to the development effort, simply will not happen of themselves: they will happen only if a single, recognizable, and authoritative body within the Government decrees that they shall happen.

It is assumed that the National Planning Council, already, already constituted, will perform the decision-making function. It has not yet, however, been provided with a planning secretariat capable of providing the advice on which its decisions will be made, or with an executive arm capable of seeing that its decisions are carried out. At a time

when so little development is going on, these deficiencies may not be noticeable; but when the war is over they will be very obvious, and they should be corrected while there is yet time.

The planning and advisory function is distributed among a good many different agencies at the present time - among the Ministries, obviously, but also among the Directorate General of Plan, the Presidential staff of economic advisors, the research services of the National Bank, and the Joint Development Group, the last an extra-governmental and private body which has a limited life and purpose. There is obviously some overlapping and some discordance. Alternative solutions have from time to time been proposed - possibly a revived and strengthened Directorate General of Plan, possibly a new Commissariat General of Plan, possibly a semi-private Institute of Development, possibly a Ministry of Development. Whatever the right solution, the need is clear for a permanent body serving the National Planning Council, continuously revising and adapting operational development plans in the light of emerging needs, providing the Council with objective advice on matters of economic policy, and seeing that what the Council decides is done.

Third, and finally, clear and unmistakable direction from the center does not imply that the entire multitude of activities which constitute a development program have to be carried out by the Government. The importance of the role of the private sector in industrial development has been sufficiently stressed, but in one sense the whole of development belongs to the private sector. No matter how wise or right the decisions of the National Planning Council, or how correct the strategies and policies recommended in this Report, development will not occur unless the mass of the people of Vietnam understand what it is for, embrace its objectives, accept the sacrifices it implies, and strive to bring it about. The success of postwar development depends ultimately upon the work of millions of people, on their readiness to experiment with new techniques, their capacity to acquire new skills, and their confidence that they are capable of shaping their own future.

There is no reason why development should be any less democratic than any other aspect of the nation's existence. In this context it is suggested that democracy means decentralization. That is why,

at various places in this Report, an appropriate sharing of responsibility for development is advocated between the central government and representative regional authorities, village councils, and other popular associations, public or private, wherever they exist or can be created. People are most likely to understand and support what they can see. Local allegiances are strong but they are not necessarily a source of weakness; properly exploited in a national movement of development they will, on the contrary, be a considerable source of strength.